Vice Admiral, Kevin E. Lunday
U.S. Coast Guard, Commander, Atlantic Area
431 Crawford Street
Portsmouth, Virginia 23704

February 13, 2023

Re: Port Access Route Study; Gulf of Maine

Submitted via regulations.gov Document ID: USCG-2022-0047-0043

The American Clean Power Association (ACP)[1] and RENEW Northeast, Inc. (RENEW)[2] appreciate this opportunity to provide comments in response to the Draft Report Approaches to Maine New, Hampshire, and Massachusetts Port Access Route Study (MNMPARS) published by the U.S. Coast Guard (USCG) on December 21, 2022 (the Draft Report).[3]

I. Executive Summary

We urge USCG to revise its recommendations in the Draft Report to better balance navigational concerns with other significant waterway uses like offshore wind energy. The Draft Report relies on a methodology that does not achieve such a balance, but rather puts a thumb on the scale of wider and more numerous fairways that reduce the amount of ocean available for offshore wind energy without appreciably improving maritime safety.

As the Draft Report notes, the "primary purpose" of the coordination leading to a port access route study (PARS) 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 waters within the study area."[4] We are concerned that

[1] ACP is the national trade association representing the renewable energy industry in the United States, bringing together over 1,000 member companies and a national workforce located across all 50 states with a common interest in encouraging the deployment and expansion of renewable energy resources in the United States. By uniting the power of wind (both land-based and offshore), solar, storage, and transmission companies and their allied industries, we are enabling the transformation of the U.S. power grid to a low-cost, reliable, and renewable power system. The American Wind Energy Association (AWEA) merged into ACP on January 1, 2021. Additional information is available at http://www.cleanpower.org.

[2] RENEW Northeast, Inc. ("RENEW") is a non-profit association uniting environmental advocates and the renewable energy industry whose mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in the Northeast from the region's abundant, indigenous renewable resources. RENEW members own and/or are developing large-scale renewable energy projects, energy storage resources and high-voltage transmission facilities across the Northeast. They are supported by members providing engineering, procurement and construction services in the development of these projects and members that supply them with multi-megawatt class wind turbines. RENEW seeks to promote policies that will increase energy diversity, promote economic development, and achieve state policy goals including those found in Renewable Portfolio Standards and Global Warming Solutions Acts.

[3] Available at https://www.regulations.gov/document/USCG-2022-0047-0044

[4] Draft Report p. 12.

vessel traffic records and exploratory vessel traffic models do not justify the width and location of proposed fairways described in the Draft Report, and site specific concerns are best addressed at the Construction and Operations Plan (COP) stage when a project has been proposed. The draft routes, if finalized, would unnecessarily constrain offshore wind development in the Gulf of Maine Region (GoME) and make it more difficult for states in the region and the entire country to achieve their offshore wind and clean energy deployment goals.

II. The Importance of Offshore Wind to Federal and State Goals

a. Federal Initiatives

President Biden has made climate change mitigation a central priority of his administration. In the climate executive order (EO), signed on January 27, 2021, President Biden called deployment of clean energy technologies, such as offshore wind, "critical for climate protection" and established that "[i]t is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy… especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure."

The EO further called on the Administration to "accelerate the deployment of clean energy and transmission projects in an environmentally stable manner." President Biden has announced an intent to achieve a 100% clean electric system by 2035, and an executive order directing federal departments and agencies to prioritize offshore wind, reflecting the industry's critical importance in hitting this 100% clean energy goal. Offshore wind deployment in GoME is essential to help meet President Biden's offshore wind target to deploy 30 gigawatts by 2030 and his broader agenda to address the climate crisis.[5] President Biden's national goal of deploying 30 GW of offshore wind by 2030 will power over 10 million homes with clean energy, support 77,000 jobs, and spur private investment up and down the supply chain.[6]

GoME also represents one of the best early opportunities to become a leader in floating offshore wind technologies, and it is therefore pivotal to the Biden Administration's more recent goal of 15 GW of floating offshore wind deployed by 2035.[7] The Gulf of Maine has some of the strongest winds in the country.[8] This abundant wind resource, coupled with the region's close proximity to large population centers, makes the Gulf of Maine ideally situated to become an offshore wind energy hub. With only a few floating offshore wind projects currently deployed

[5] Available at https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden- harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/#:~:text=New%20Goal%20to%20Reach%2015,met%20using%20fixed%2Dbottom%20technology

[6] Id.

[7] Available at https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/

[8] *Offshore Wind Resource, Cost, and Economic Potential in the State of Maine* at 2, by Walter Musial of National Renewable Energy Laboratory.

globally, robust leasing in the Gulf of Maine will help position the U.S. to be a global leader in floating offshore wind and reap the benefits of thousands of jobs in the new energy economy.

b. State Initiatives

Offshore wind power is essential to enable local states to achieve climate change goals, revitalize their maritime and manufacturing sectors, and provide wide-reaching economic benefits to local communities. Massachusetts legislatively required decarbonization roadmap makes it clear that 15-25 GW of offshore wind will be required to hit net zero by 2050.[9] Massachusetts lawmakers recently passed supportive climate legislation that sets a statewide net zero limit on greenhouse gas emissions by 2050.[10] The bill also requires the development of an additional 2,400 megawatts ("MW") of offshore wind, bringing Massachusetts' total target to 5,600 MW, and increases the state's Renewable Portfolio Standard ("RPS") to 40% by 2030.[11] Maine has made a commitment to become carbon-neutral by 2045 and has announced a goal of 30,000 clean energy jobs in Maine by 2030.[12] Maine is also on the cusp considering offshore wind legislation that will require the state to procure of 2,800 MW of offshore wind by 2035.[13]

c. Regional Economic and Supply Chain Considerations

The GoME has the technical potential to produce more than 156 GW of offshore wind energy.[14] A NREL analysis of offshore wind development found that a single 600 MW offshore wind facility "could support approximately 4,470 jobs and $445 million in GDP during construction and an ongoing 150 jobs and $14 million annually from operation and maintenance labor, materials, and services."[15] Due to the factors in the NREL report, such as constant high wind speeds, cost of generation can scale incredibly well, making GoME viable for developers to make the substantial upfront investments required to develop a local supply chain and quickly adapt technical solutions to local conditions.[16]

Based on economic modeling from NREL in late 2018, the Maine coast would provide an excellent Levelized Cost of Energy ("LCOE") due to a combination of higher wind speeds and moderately shallow water.[17] It is critical that proposed vessel routes preserve as much of the

---

[9] Available at https://www.mass.gov/doc/ma-decarbonization-roadmap-lower-resolution/download

[10] Available at https://www.mass.gov/news/governor-baker-signs-climate-legislation-to-reduce-greenhouse-gas-emissions-protect-environmental-justice-communities

[11] Id at 2.

[12] Available at https://www.maine.gov/governor/mills/issues/energy-environment-climate-change

13 https://www.mainepublic.org/politics/2023-01-24/bill-aims-to-encourage-development-of-offshore-wind-in-maine.

[14] The University of Maine, available at https://composites.umaine.edu/wp-content/uploads/sites/20/2016/12/UMaineCompositesCenter_OffshoreWind_12122016.pdf ; Also Available at https://www.newenglandforoffshorewind.org/states/maine/

[15] NREL Study available at https://www.nrel.gov/docs/fy18osti/70907.pdf

[16] Id.

[17] Offshore Wind Resource, Cost, and Economic Potential in the State of Maine at 8-11.

lease areas as possible, which in turn will continue to support developer portfolio diversity to encourage competition, regional economic investments, and produce the necessary supply chain to accelerate the offshore wind industry.

III. The Proposed Fairways Do Not Strike the Required Balance Between Navigational Needs and Other Ocean Uses Such as Renewable Energy

A "primary purpose" of the PARS process is "to the extent practicable, to reconcile the need for safe access routes with other reasonable water uses such as construction and operation of renewable energy facilities."[18] Getting this balance correct is critical for the offshore wind industry because under the PWSA, once the USCG designates a fairway, "no artificial island or fixed structure," whether temporary or permanent, may be located therein.[19] We believe the Draft Report should better balance other uses of the waterway, such as construction and operation of renewable energy facilities. Finding this balance is a requirement of the PWSA.[20] As discussed below, the proposed fairways can be reduced in width and readjusted in location to accommodate offshore wind leases while still providing safe navigation.

AIS data on vessel traffic supports a more modest network of fairways that will yield more sea space for offshore wind energy and other uses. This PARS uses fairway width criteria from PIANC, and footnotes criteria from a USCG – American Waterways Operators (AWO) Quality Action Team.[21] The application of these two methods is not clear and does not account for the low density of the AIS traffic captured by the PARS, e.g., many of the fairway widths are over-sized. These sets of criteria were not developed in concert with the full range of stakeholders with equities in the PARS process, particularly the offshore wind industry. We recommend that these criteria be reopened for public engagement beyond their application to the MNMPARS study.

a. Fairway Estimates Use a Methodology That Is Highly Likely to Produce Overly Broad Fairways.

A methodology is only as good as the assumptions baked into it, and USCG's methodology pre-ordains overly broad fairways. We find multiple fairway widths used in this PARS, and two overly conservative fairway width methodologies used that are not reflective of the AIS traffic, with the expected outcome being oversize fairways.

One example that this PARS described is a method discussed in a 2018 report by the World Association for Waterborne Transport Infrastructure (PIANC),[22] where the Draft Report proceeds to "round up" fairway widths at several points. For example, while developing a width

[18] Draft Report p. 12.
[19] 46 U.S.C.A. § 70003.
[20] 46 U.S.C.A. § 70003(c)(3), "to the extent practicable, reconcile the need for safe access routes with the needs of all other reasonable uses of the area involved."
[21] Draft Report p.7, 53.
[22] Described on pages 68-70 of the draft Report.

of a fairway, a 4 nautical mile (NM) total width was adopted when the formula borrowed from PIANC would calculate a width of 3.33 NM, over a 20% increase. This practice of "rounding up" naturally leads to wider fairways than the data would require.

Another deficiency in the PIANC model is that all density less than 4,400 vessels per year is treated as equivalent. That means 4,200 or 100 annual vessel transit would be treated as identical in the model. This approach also has the effect of inflating the estimated fairway widths that USCG deems appropriate in a particular portion of the ocean.

Finally, this method to calculate fairway widths appears to be applied inconsistently in each of the proposed fairways, especially regarding fairway buffers. For example, 2 NM buffers are added to each side of the fairway width calculation, irrespective of low vessel traffic and mostly small vessels in the more nearshore areas considered. This PIANC model appears designed for large international shipping fairways in mind. This lack of granularity is not well suited to the PARS process, and it is only natural that it would produce overly large fairway estimates.

b. The USCG's use of "heat maps" showing AIS and VMS tracks over a 12-month period paints a misleading picture of the low number of vessels in the Gulf of Maine.

Heat maps were not meant to be relied upon as a standalone set of data to demonstrate vessel traffic when making safety considerations. The heat maps representing 365 days of AIS tracks are not useful to determining the safety of a waterway on a given day. We recommend that daily and or weekly data be presented, and Advanced Notice of Arrival (ANA) notification data for vessels that are required to report, be compared to gain a better sense of the level of commercial vessel traffic on a given day. Per the Draft Report, the heat map approach serves to identify popular traffic routes, but not density of traffic. It may be misleading to use heat maps beyond their intent, and they should not be used to illustrate the total number of vessels or the temporal changes in vessel movements. Heat maps also gloss over seasonal variations that are important to determine safety considerations. The following are other heat map and related vessel transit data concerns:

i. AIS equipped vessels utilizing Portland's Eastern and Southern Approaches on a given day would be 2 vessels per day.[23]
ii. The average number of AIS tracks using this alternate northern approach route to/from Portland is 1.61 vessels per day.[24]
iii. Taken together, the above "AIS equipped vessels per day" to/from Portland add to 3.61, which is less dense than other Atlantic averages.[25]

The USCG reasons that "as vessel traffic is funneled in and out of each Portland Traffic Separation Scheme (TSS), complex meeting situation can result with other cross traffic."[26] Neither 3.61 vessels per day nor unique spatial features reflect this special consideration. The

[23] Draft Report p. 60
[24] Id.
[25] *See* https://www.federalregister.gov/documents/2022/12/14/2022-27133/seventh-coast-guard-district-southeast-atlantic-coast-port-access-route-study-port-approaches-and
[26] Draft Report p. 63

commercial traffic that would actually be bound to use TSSs and fairways is low given the above AIS data above. Likewise, D1 of the Draft Report includes a proposed 4 NM fairway width which expands to 8 NM. Based on type, size and frequency of ships and routing, the USCG – AWO Quality Action Team approach of assuming three vessels abreast appears highly unlikely in this region. This would result in wider fairways than fairways that have already been designated in more congested regions.[27]

Finally, we urge USCG to not extend existing TSSs. Such extensions are not necessary given the lack of complex cross-traffic considerations, and declining to do would also preserve the integrity of the State of Maine's requested research lease, which is set to be issued following a lengthy period of stakeholder engagement.[28] At minimum, the USCG should seek an alternative route that avoids the research lease area.

c. USCG's Future-Proofing Approach Is Not Justified in the Gulf of Maine

Increasing the size and number of maritime fairways to "future proof" offshore routes without actual data presents an additional uncertainty that pushes fairways to unnecessary widths. Linear extrapolations of current vessel transit data do not indicate that vessel traffic will increase in the coming years.[29] Locations should be guided by data on actual vessel trips, not unfounded speculation on future increases in traffic. PARS must strive to be a data-driven process, tied to actual data on traffic and waterway uses.

The PIANC methodology, in addition to being inadequate in other contexts, especially does not provide a scientific basis for ***future*** vessel transit.[30] In addition, USCG should clarify what methodology was used to determine there might be an "increase in expected traffic"[31] that led to the proposed Coastal Zones, items #2 & #3 on Figure 19 of the PARS. Furthermore, even if there was evidence that vessel traffic was likely to increase, there is considerable doubt as to whether such an increase would require wider fairways as safety technologies improve.[32] In addition, there are numerous examples of the highest level of safety achieved in narrow environments over long distances, including Chesapeake Bay, Galveston Bay/Houston Ship Channel, and the Mackinaw Straits.

More than that, the very concept of future-proofing disregards that USCG has other options in the event that vessel traffic increases more than the data indicates at the time of fairways designation The US Coast Guard has the authority and has regulated and enhanced

---

[27] On page 72 of this PARS, the Massachusetts Bay Fairway (traffic to/from the Cape Cod Canal), was "assigned a fairway width of 5 NM to account for increased complexity of tug and tow transits". The fairway connection through Massachusetts Bay is proposed to narrow to 4 NM. This begs the question that if 4 NM and 5 NM widths are viable in a relatively busy route considered in this PARS, how are 8 NM and 9 NM widths justified in less dense proposed fairways. Why would a 4 NM wide fairway be an acceptably safe navigation width amongst presumably greater vessel traffic near shore, while in the lesser dense traffic through the Gulf of Maine to the Bay of Fundy where the "Gulf of Maine Fairway" is proposed is shown to be twice as wide (8 NM).

28 https://www.boem.gov/renewable-energy/maine/state-activities/gulf-maine/state-maine-research-lease-application.

[29] Draft Report p. 68-72

[30] Draft Report p. 68

[31] Draft Report p. 57

[32] Remote sensing advancements, in particular, will offer additional safety for transiting vessels.

safety through the use of Regulated Navigation Areas, Safety and Security Zones. These navigation safety management mechanisms are available as needed, should future maritime traffic data portend the **unforeseen** use of such measures in specific areas in the future. Additionally, the lighting and marking of offshore wind structures positively identify specific geographic points, and effectively serve as private aids to navigation, thereby alleviating the need for larger buffers. We believe fairway widths need to better reflect the data, the low density of commercial traffic, the significant percentage of smaller vessels (which can maneuver more readily).

Given the apparent flaws in methodology, we urge USCG to use current data and methodologies to re-engage with stakeholders in a collaborative process to create fairways widths and arrangements that would be more proportionate to the data and would better implement the PWSA's balancing mandate. We believe this should lead to smaller sized[33] and fewer fairways, narrower TSS extensions, and preservation of the research lease.

IV. Granular Safety Recommendations Are Best Addressed in Assessments of Individual Projects

Fairway widths can be right sized for the additional reason that the USCG has another opportunity to address maritime safety concerns on a site-specific level through its review of navigation safety risk assessments (NSRAs) once an offshore wind project has been proposed. Indeed, navigation safety recommendations that impact lease areas after an auction is held are most appropriately addressed in project specific NSRAs/COP/NEPA reviews. USCG needs to preserve sea space for additional offshore wind leasing. PARS are, in part, designed to preserve navigational corridors. As the Coast Guard wrote in the draft New York Bight PARS, "There is no international standard that specifies minimum distances between shipping routes and fixed structures. However, it is widely accepted that fixed structures in the offshore environment should not interfere with navigation. The Marine Planning Guidelines (MPGs) provide general guidelines for siting of multiple structures near shipping routes and established ships routing measures. **Each project will be assessed during the BOEM NEPA process on a case-by-case basis using the MPGs**."[34] (emphasis added) MPGs only apply to lanes and TSS and not to shipping safety fairways.

A NSRA is also required during the project-specific COP development and review process managed by BOEM and in which the Coast Guard is a cooperating agency. [35] These site-specific risk assessments allow developers to work with local stakeholders to ensure mitigation measures are appropriate. This process includes consideration of navigational risks to all types of vessels in the area. It allows safety measures and mitigation to be tailored to the needs of the Coast Guard, vessel operators in the area and developers. Buffers between vessel transit and wind turbines should not be one-size-fits all but should be determined as part of COP NSRA.

---

[33] Including limiting coastal fairways to their intended purpose of channeling coastwise traffic.
[34] Draft NNYB PARS, page 56.
[35] See "Information Guidelines for a Renewable Energy Construction and Operations Plan," BOEM, Version 4.0, May 27, 2020. Available at: https://www.boem.gov/sites/default/files/documents/about-boem/COP%20Guidelines.pdf

USCG should seek the right balance at this stage when it comes to buffers between vessel transit and floating wind. It is too soon to know whether developers will select floating foundations and mooring designs that might interfere with passing vessels. NSRAs are well-tailored to provide case-by-case analysis of the on-lease buffers that might be needed. This is especially the case with floating wind, where we do not have a complete picture of floating foundation technology at this point.

VI. Conclusion

Thank you for your consideration of the issues raised in this letter. We understand the importance of the PARS process as being critical to high level marine spatial planning. However, we urge USCG to revise its methodologies to better achieve a balance of waterway uses and defer project-specific analyses until after a COP has been submitted. Please let us know if we can provide any additional information or clarifications on the points above.

Respectfully,

Josh Kaplowitz
Vice President, Offshore Wind
Jkaplowitz@cleanpower.org
American Clean Power Association