



New England Fishery Management Council

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Eric Reid, *Chair* | Thomas A. Nies, *Executive Director*

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Zachary Jylkka
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, Mail Stop VAM-OREP
Sterling, VA 20166

Dear Mr. Jylkka:

Please accept these comments from the New England Fishery Management Council (Council) on the Call for Information and Nominations for possible commercial wind energy leasing in the Gulf of Maine.

The Council has primary management jurisdiction for 28 marine fishery species under nine Fishery Management Plans (FMPs) in federal waters and is composed of members from Connecticut to Maine. In addition to managing these fisheries, the Council has developed measures to identify and conserve essential fish habitats, protect deep sea corals, and manage forage fisheries sustainably. The Council supports policies for U.S. wind energy development and operations that will sustain the health of marine ecosystems and fisheries resources. While the Council recognizes the importance of domestic energy development to U.S. economic security, it recognizes that the marine fisheries in the Gulf of Maine are profoundly important to the social and economic well-being of coastal communities in the Northeast US and provide numerous benefits to the nation, including domestic food security. A key concern of ours is safe and efficient vessel operations. We are also concerned with the potential for wind energy development to negatively affect managed fishery species and their habitats. Areas with complex, structured seafloor features including deep-sea coral habitats are an area of particular concern for the Council.

Overarching concerns

We have significant concerns about the timing of this leasing process relative to development of the Maine research array, the U.S. Coast Guard's Maine, New Hampshire, and Massachusetts Port Access Route Study (MNMPARS) rulemaking efforts, and upcoming scientific studies of the region that could better inform siting (seafloor mapping, coral research, and an integrated ecosystem assessment). Also, substantial uncertainties exist around the specific floating technology that might be deployed making it difficult to comment on possible conflicts with fishing. Spatial modeling to allow for evaluation of tradeoffs will be released at the same time as

the draft Wind Energy Areas (WEAs), which means that different viewpoints on which parts of the region are less conflicted cannot be considered as these areas are created. Finally, the overall goal for leasing is currently unclear. These concerns, taken together, suggest that the most prudent course of action would be to delay leasing until these initiatives progress further and uncertainties are reduced.

BOEM continues to say that leasing (research or commercial) is not a guarantee that a project will be developed, and that it merely conveys the right to survey the site and submit a COP. Clearly, the project planning experience in Southern New England and the Mid-Atlantic Bight suggests that this is disingenuous. Developers are proposing projects that fully utilize lease areas, with turbine locations rarely taken off the table, except for when geological conditions preclude foundation installation. With floating wind there may be fewer constraints in terms of seabed conditions, since anchors have a smaller footprint compared to fixed foundations. Purpose and need statements in draft EIS documents reference developer goals and state procurements, which in general rely on full utilization of lease areas. It is essential to develop lease areas that reduce conflicts with other ocean users and resources from the start.

Suitability modeling considerations (Item A in CFI notice)

The RFI states that BOEM will partner with NOAA's National Centers for Coastal Ocean Science (NCCOS) to develop the Gulf of Maine Offshore Wind Suitability Model to analyze entire marine ecosystems to inform wind energy siting.

We remain unclear about the goals of the models as stated in our 2022 RFI letter. Is the purpose of these models to prioritize competing uses, identify ecologically important areas for one or more species, document oceanographic features, or something else? If certain data and/or areas are prioritized and weighted differently than other areas, we recommend making the weighting scheme publicly available, transparent, and open for public comment. The weighting of these various data layers and sub-models is also important as these weights directly influence the suitability score of a particular area relative to another area.

All NCCOS modeling results should be shared and BOEM should clearly articulate how the results influenced the delineation of WEAs. The results should include an uncertainty or sensitivity analysis for each sub-model, and BOEM should explain why and how the sensitivity analysis will inform final WEA delineation. This report should be published when the draft WEAs are published, which is anticipated late summer. Ideally, NCCOS' analyses should be peer reviewed.

For the Council to make specific suggestions for final WEA development, it would be helpful if BOEM explained the NCCOS spatial analysis methodology including the data sets being used, the model constraints, and site suitability. We acknowledge the draft data source list provided by NCCOS but understand that the data inventory process remains underway. We also recommend explaining the similarities and differences between the NCCOS modeling approach being used for the West Coast and the Central Atlantic given stakeholders may be familiar with these other regions. It is unclear how NCCOS can evaluate areas without knowing the wind energy targets.

Regarding specific datasets to include in the spatial models, we recommend incorporating fishery independent surveys and species distribution models given fishing effort is indicative of times and areas where fishermen are permitted to fish based on federal fishing regulations and management measures. Fishing effort distributions, which are already being used in the models, are related to but not necessarily the same as fish and shellfish distributions. If these types of data are not included in the suitability models, BOEM should clearly explain why not.

It will also be important to make sure any data inputs to models are updated and compiled in a transparent manner given the model outputs rely heavily on the data inputs. A particular concern of ours is how the modeling will handle areas of uncertainty in the underlying data. We want to reiterate earlier concerns about the data quality and lack of certainty about seafloor habitat in parts of the Gulf of Maine. It will be difficult to site lease areas without knowing the extent of complex seabed habitats throughout the region. The wind energy area development process must acknowledge areas of uncertainty in habitat and fisheries data. For example, outside of coastal areas, some shallower features offshore, and selected areas surveyed for deep-sea corals, sediment data in the Gulf of Maine are sparse. It is desirable, given scarce habitat data, to conduct surveys that identify less complex habitat areas before issuing leases. This may require multiple leasing opportunities that are sequenced to follow such surveys.

Areas to exclude from WEAs, including feedback on Areas Requiring Further Analysis (Item B in CFI notice)

We recommend excluding the following areas from draft wind energy areas. At minimum, these areas should be identified as lower suitability in the spatial modeling due to overlap with sensitive habitats and important fishing grounds. We believe BOEM and NCCOS have spatial data for all of these areas, but if not, we are happy to provide them.

We appreciate the exclusion of the Council's designated Habitat Management Areas from the Call Area, specifically Cashes Ledge and Ammen Rock, Fippennies Ledge, Jeffreys Bank, Western Gulf of Maine, and Closed Area II. We also appreciate exclusion of our Groundfish Closure Areas, specifically Cashes Ledge, Western Gulf of Maine, and Closed Area II. We suggest excluding a spatial buffer of 20 km around each of these areas to ensure that hydrodynamic, acoustic, and sedimentary impacts do not affect these important fish habitats. A 20 km distance is likely sufficient to mitigate acoustic, hydrodynamic, and sedimentary effects. Precaution is appropriate given that the effects of structures on the circulation of the Gulf of Maine has not been modeled, to our knowledge.

We want to reiterate an earlier recommendation to exclude Platts Bank from the WEAs given its habitat characteristics and its importance as a fishing ground. The top of the bank includes cobble and boulder sediments which would be disturbed by anchoring or installation of cables. Types of fishing that occur on and around Platts Bank include Northeast multispecies groundfish, Atlantic herring, monkfish, whiting (represented in Vessel Monitoring System data as 'declared out of fishery'), and intermittently, scallops (Northeast Ocean Data Portal). The Council appreciates BOEM defining the Platts Bank feature for further consideration using the 100-m contour, as informed by our consideration of this area for Habitat Management Area designation. More specifically, the feature was identified based on coarse sediment habitats, which are more

vulnerable to anthropogenic impacts, and are most prevalent shallower than 100 meters. The bank rises 100 meters from the surrounding seafloor, with the top of the bank (areas shallower than 100 meters) encompassing a relatively small area of approximately 145 km²/36,000 acres.

The Council appreciates the removal of portions of Georges Bank from the Call Area, and we also recommend that wind energy areas not include aliquots within the 10-km buffer around Georges Bank that begins at the 140-meter isobath. This area should not be developed to avoid impacting a sensitive and productive habitat area on Georges Bank. The 10-km buffer from the edge of the bank is needed to help minimize any acoustic or hydrodynamic effects of development on the species that occupy the northern flank of Georges Bank, including Atlantic cod and sea scallops. In particular, the [Northern Edge of Georges Bank](#) is important to protect from hydrodynamic, acoustic, and sedimentary effects of offshore wind. The area is roughly defined as the area encompassed within the Closed Area II Habitat Management Area and the adjacent portion of the Northern Flank of Georges Bank. This is an important habitat area for scallops and lobsters. The Council is also considering potential future access for the scallop fishery in this area via a Council action; work is already underway with an expectation for a final action in spring 2024.

We appreciate the exclusion of the Council's Mount Desert Rock and Outer Schoodic Ridge Coral Protection Areas and Jordan Basin Dedicated Habitat Research Area from the Call area. In addition to these designated areas, the Council's coral amendment process developed and vetted boundaries for additional deep-sea coral habitat sites. These areas are described in detail in the Council's [Deep-Sea Coral Amendment](#) and include 118 Fathom Bump and 96 Fathom Bump in Western Jordan Basin, a site along the EEZ in Central Jordan Basin, and Lindenkohl Knoll in Georges Basin. We recommend setting a 20 km buffer around coral management areas designated by the Council, and around coral areas that were considered and vetted by the Council, to ensure that development activities do not impact the features of these sites.

Given that the lobster fishing activities occurring at these sites are not managed by the Council, the Council opted not to designate them as Coral Protection Areas. However, this does not suggest there was insufficient evidence that there are corals at these sites, and these corals would be very vulnerable to disturbance from anchoring or cable installation. Furthermore, the existence of structure forming species at these locations in Jordan and Georges Basins indicates the existence of hard bottom, which is generally incompatible with the installation of anchors or cables.

Overall, the Council recommends that BOEM not locate wind energy areas in locations where deep-sea corals are known or likely to occur, particularly where they are found in high abundances, sometimes referred to as "coral gardens". The Council also strongly urges BOEM to develop high-resolution bathymetric maps for areas of the EEZ where seafloor terrain is poorly understood, including where corals might be located. These types of maps were fundamental to our development of coral management areas for the canyons south of Georges Bank, and similar mapping should be prioritized for the Gulf of Maine.

Conflicting uses of the Call Area (Item C in CFI notice)

In addition to Platts Bank and Georges Bank, the Council recommends excluding areas in Wilkinson Basin and around Cashes Ledge in order to avoid fisheries conflicts and impacts. Wilkinson Basin is extremely important to the groundfish fleet, particularly to bottom trawl vessels targeting abundant stocks such as redfish and pollock., in particular the western portion adjacent to the [Western Gulf of Maine Closed Area \(1997\)](#). This area is closed year-round to all fishing vessels with a few exemptions and is jointly designated as a Habitat Management Area closed to bottom trawls and dredges to minimize impacts of fishing on seafloor habitats. The eastern portion of the closed area (a vertical strip running from 69° 55' W to 70° 00' W) was only opened to fishing in April 2018, for the first time since the closure was established in 1998. Thus, the Council recommends using recent data to understand current fishing effort and the potential for future fishing effort. Gillnet activity is more prevalent in the northernmost part of the basin, in the vicinity of Platts Bank.

When considering fishing effort data, it is crucial to contextualize the data regarding fishery management measures that dictate when and where fishing effort occurs. Below includes notable Council actions that should be taken into account when evaluating changes in fishing effort over time. It is also worth noting that species are shifting their distributions, thus, current fishing effort is not necessarily indicative of future effort. In particular, short fin squid and black seabass are increasingly abundant in the Gulf of Maine.

- [Northeast Multispecies Framework 42](#) (2006): established areas in the Gulf of Maine (and Southern New England) where Days-at-Sea (DAS) were counted at the rate of 2:1 to control fishing mortality. The action predated the current sector system which most vessels now participate in but resulted in vessels fishing further offshore.
- [Northeast Multispecies Amendment 16](#) (2009): set Annual Catch Limits and Accountability Measures and established the sector program, resulting in a large shift in fishing effort.
- [Northeast Multispecies Framework 50](#) (2013): set management measures that resulted in a substantial decline in the Gulf of Maine cod stock based on the latest stock assessment. The Acceptable Biological Catch for this stock declined from 8,454 mt in FY 2011 to 6,700 mt in FY 2012, and 1,470 mt in FY 2013.
- Redfish catch increased in the early 2010's because of a project called "[REDNET](#)¹" (redfish cooperative research project), which sought to redirect fishing effort in the multispecies fishery away from stocks that are overfished to stocks that are considered rebuilt (e.g., redfish). Recent USDA purchase programs have led to increases in redfish catches. Redfish was second only to haddock in terms of groundfish catches, by weight, during fishing year 2022.
- Monkfish [Framework 8](#) (2014) and [Framework 9](#) (2016): Framework 8 implemented measures that increased monkfish DAS allocations and landing limits to better achieve optimum yield and Framework 9 eliminated the monkfish possession limit in the Northern Fishery Management Area for Category C and D vessels fishing on both a Monkfish and Northeast Multispecies DAS.

¹ Pol, Michael & He, Pingguo & Sherman, Sally & Kanwit, Kohl. (2016). REDNET - A Network to Redevelop a Sustainable Redfish (*Sebastes fasciatus*) Trawl Fishery in the Gulf of Maine. 10.13140/RG.2.2.27064.26883.

- [Atlantic Herring Framework 8](#) (2021): reduced herring quotas for FY 2021 – 2023 relative to 2020 and previous years because the stock was determined to be overfished with overfishing not occurring.
- The [Small-Mesh Multispecies](#) fishery is prosecuted in specific exemption areas. Exempted fisheries allow vessels to fish for specific species without being subject to certain Northeast Multispecies regulations; these exemption areas are primarily designed for the whiting fishery, but fishermen can possess and land other species incidentally.

Coordinated transmission (Item H in CFI notice)

BOEM is requesting “interest by developers in constructing a backbone transmission system” and comments on “a general description of the transmission system’s proposed path, capacity, technologies proposed, and potential interconnection points.” The Council supports coordinated transmission to the extent that it results in less area impacted by cabling, and a more robust planning process for identifying cable corridors. We are very concerned about the possibility that cables could be run through complex and sensitive benthic habitats. However, coordinated transmission vs. leasing appears to be a chicken and egg problem – without knowing where the WEAs might be, how can potential transmission corridors be established? And without knowing the location of likely transmission corridors and the number and capacity of projects, which should be aligned to suitable offtake locations, how can WEAs be sited to take advantage of them? BOEM appears to be leaving coordinated transmission to the developers to figure out, and we are concerned that this process will not result in coordinated transmission through shared right of ways.

If BOEM is committed to advancing coordinated transmission in the Gulf of Maine, the Final Sale Notice stipulations for this region must be much stronger in terms of requiring developers to advance these issues. Two recent leasing opportunities offered little in the way of a firm indication that coordinated transmission would be required by BOEM. In the [New York Bight](#), a number of lease stipulations were developed for the Final Sale Notice. Regarding transmission, “BOEM is continuing a planned approach to transmission and is evaluating options including the use of cable corridors, regional transmission systems, meshed systems, and other mechanisms. Therefore, BOEM may condition COP approval on the incorporation of such methods where appropriate. BOEM encourages those who obtain leases from this sale to engage in early coordination with adjacent lessees, states, Tribal Nations, and other ocean users to identify ways to minimize impacts from transmission.” It is not clear how and when BOEM will signal they intend to make coordinated transmission a condition of COP approval in the NY Bight. Individual developers are already beginning to plan their projects and conduct surveys, including within potential cable corridors (for example, Community Offshore Wind’s recent [notice](#)). In Morro Bay, California there is no reference to coordinated transmission in the [Final Sale Notice](#), although there is a note that lessees must report on transmission planning engagement work done with Tribes and other potentially affected parties.

Size and number of WEAs (Item I in CFI notice)

The notice requests “Information regarding the size and number of Wind Energy Areas (WEAs), taking into consideration the offshore wind energy goals of the States surrounding the Call

area.” With such a large call area, it is difficult for stakeholders to provide detailed feedback. In addition, it is frustrating to be at this point in the process, with the next step being to define WEAs, without an overall leasing goal already in mind. During the May 10-11 GOM Renewable Energy Taskforce meeting, BOEM stated that the agency does not yet know the total area that might be proposed for leasing but is relying on the states to indicate their goals. At least one state – New Hampshire – has yet to establish any legally-binding sustainable energy goals and clearly will not do so this year. We are unclear as to whether the other states will articulate clear goals in response to the Call. BOEM should not move forward with WEA identification until such goals are clearly stated and BOEM has established a specific goal for this leasing opportunity.

Possible wind farm configurations (Item M in CFI notice)

The notice requests feedback on “possible offshore wind farm considerations” including “considerations for the spacing and possible clustering of turbine arrays to allow for navigation and fishing access near and through floating wind farms.” In terms of the number and size of leases, individual, non-adjacent leases, or leases separated by a substantial transit lane (at least ~5 nm) may be the best approach for the Gulf of Maine. The New York Bight leases for fixed bottom structures have a requirement to incorporate a 1 nm setback from the boundary of any neighboring leases if a design with two common lines of orientation between adjacent leases cannot be agreed upon ([87 Federal Register 2446](#)). Given that floating wind turbines will have anchoring systems and cables in the water column, wind farms that employ this technology will likely require a larger transit corridor between adjacent leases than would be considered for fixed bottom technology. It is also likely floating wind farms will be unfishable by many types of fishing gear, more so than fixed bottom wind farms. For this reason, discrete project areas, or leases with wide transit corridors between them will be most appropriate to minimize impacts to fishing operations. It is difficult to provide more specific comments on turbine array configuration at this time without knowing the total area and megawatt goal that might be planned for leasing.

Many uncertainties remain in floating technology, which contributes to its higher cost relative to fixed offshore wind. For example, rising costs and viability of commercial scale technology are two primary reasons the [Trollvind floating offshore wind farm](#) project was postponed indefinitely. For the Gulf of Maine, it appears unclear at this time whether catenary or taut moorings will be used, and we are uncertain what size wind turbine generators might be feasible or available by the time these projects are developed. Both layouts and mooring systems will contribute to continued fisheries access (or lack thereof) within project areas, which is of concern to the Council. A recent study by the Department of Energy’s National Renewable Energy Laboratory² indicates that smaller mooring footprints are preferred by multiple fishing industry sectors to increase accessibility and acceptability. However, this study only addressed two types of catenary moorings, and did not compare them to taut moorings. Without information on mooring systems or turbine sizes, it is impossible to identify suitable layouts at this stage. Developers are best positioned to share what they might envision in terms of project

² Green, Rebecca, Suzanne MacDonald, Rebecca Fuchs, and Matthew Hall. 2023. *Social Acceptance of a Reduced-Footprint Synthetic Mooring System for Floating Offshore Wind Turbines in the Gulf of Maine*. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5000-85503. <https://www.nrel.gov/docs/fy23osti/85503.pdf>.

designs, but given that the technology remains under development, it is not clear to us how we will have sufficient information prior to leasing to be able to estimate what the navigational concerns might be.

Other relevant information for BOEM to consider (Item Q in CFI notice)

The coincident timing between this leasing process and the MNMPARS rulemaking is extremely problematic. The United States Coast Guard has suggested fairways to promote navigation safety for mariners transiting the Gulf of Maine. Fairways are defined as “a lane or corridor in which no artificial island or fixed structure, whether temporary or permanent, will be permitted” (33 CFR §166.105). This suggests that fairways are fully incompatible with renewable energy leasing and development. Rulemaking to implement these fairways is underway but is not likely to be completed prior to WEA identification. A large portion of the Call Area overlaps these Coast Guard recommended fairways³. BOEM should remove these areas from further consideration as WEAs.

We remain frustrated by the timing of commercial leasing relative to the timing of leasing for the research array proposed by the state of Maine. The research array has potential for increasing our knowledge about the ecosystem effects of floating offshore wind. Notwithstanding the potential location of the research array within a proposed safety fairway, we remain concerned that there will be limited time to learn from the research area before commercial projects are planned and permitting begins.

NOAA’s Deep-Sea Coral Research and Technology Program (DSCRTP) and NCCOS are partnering to map the eastern portion of the Gulf of Maine beginning in Fall/Winter 2023. These maps are likely to identify additional areas of seafloor complexity likely to contain deep-sea coral species. In addition, the DSCRTP is coordinating a 2024-2025 research initiative for the Northeast Region, which is likely to include data collection in the Gulf of Maine. There was strong interest among participants in a May 2023 workshop in doing science that will support wind energy siting that avoids coral habitats. The research planning process is challenged by the uncertainty about where leasing might occur in the Gulf of Maine. BOEM staff participated in this workshop, and we encourage BOEM to share information with the research steering committee and learn from this research as the program is implemented.

In addition to coral research being planned for the coming years, the timing of commercial leasing will likely precede the completion of an Integrated Ecosystem Assessment for the Gulf of Maine. This work (funded by BOEM’s Environmental Studies Program and NOAA Fisheries’ Integrated Ecosystem Assessment Program) would support effective spatial planning in the Gulf of Maine because complex interactions between offshore wind, fisheries, and the environment will be identified along with tools that can be used to inform opportunities, constraints, and tradeoffs for parts of the ecosystem that are most vulnerable to offshore wind development. The timing of completion of the State of the Ecosystem-like report specifically for offshore wind is in

³ Map: <https://www.northeastoceandata.org/SYSNOMja>

Slides from taskforce meeting: [USCG MNM PARS Task Force Brief \(boem.gov\)](https://www.boem.gov/USCG-MNM-PARS-Task-Force-Brief)

2024, which will most likely help inform any NEPA actions such as an EIS but cannot be used to inform WEA or lease site selection, given the planned timing for these activities.

Conclusion

There are many uncertainties in floating wind energy development related to technology and costs. In addition, we have major concerns about the timing of GOM commercial wind energy leasing with other processes including MNMPARS rulemaking, research array leasing, and near-term scientific efforts. Combining these issues, it is clearly premature for BOEM to seek nominations for Wind Energy Areas. We recommend that BOEM continue the suitability modeling work with NCCOS and share these results and solicit feedback from the public before proceeding to draft WEA identification.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in dark ink, reading "Thomas A. Nies". The signature is written in a cursive, slightly slanted style.

Thomas A. Nies
Executive Director