

December 16, 2022

Bridgette Duplantis Bureau of Ocean Energy Management Office of Leasing and Plans 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123 Bridgette.Duplantis@boem.gov

RE: Draft Wind Energy Areas on the Central Atlantic Outer Continental Shelf

Submitted via email: www.regulations.gov; Docket No. BOEM-2022-0072

Dear Ms. Duplantis:

The American Clean Power Association (ACP),¹ MAREC Action (MAREC informally stands for "Mid-Atlantic Renewable Energy Coalition"),² the Southeastern Wind Coalition (SEWC),³ and the Carolina Clean Energy Business Association (CCEBA),⁴ (collectively, "offshore wind advocates"), appreciate the opportunity to submit comments on Bureau of Ocean Energy Management's (BOEM) proposed Draft Wind Energy Areas on the Central Atlantic Outer Continental Shelf (BOEM-2022-0072, Proposed WEAs).

A robust sale of leases in the Central Atlantic is vital to enable the states of Maryland, Delaware, Virginia, and North Carolina—and even states outside the region—to meet their current and anticipated future offshore wind and decarbonization goals, create a project pipeline that can help grow and sustain a durable onshore supply chain with tens of thousands of wellpaying clean energy jobs, and support our national goal of deploying 30 gigawatts (GW) of offshore wind energy by 2030.⁵ As stated in ACP and MAREC Action's June 28, 2022

¹ ACP is the national trade association representing the renewable energy industry in the United States, including in all aspects of offshore wind energy, bringing together over 1,000 member companies, 120,000 members, 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, solar, storage, and transmission companies and their allied industries, ACP seeks to enable the transformation of the U.S. power grid to a low-cost, reliable, and renewable power system. The views and opinions expressed in this filing do not necessarily reflect the official position of each of ACP's individual members.

² MAREC Action is a nonprofit organization formed to advance utility-scale renewable energy development within the PJM Interconnection and adjacent areas. MAREC Action's footprint includes ten jurisdictions within PJM (nine states and Washington, D.C.). MAREC Action members include utility scale wind, offshore wind, solar and battery storage developers, wind turbine manufacturers and non-profit organizations dedicated to the growth of renewable energy technologies.

³ SEWC is a 501(c)3 nonprofit organization that works to advance wind energy throughout the Southeastern United States in ways that bring about net economic benefits to residents, utilities, and ratepayers. Based in Raleigh, NC, SEWC focuses on education and outreach to reduce barriers to deployment across the organization's 11-state footprint.

⁴ CCEBA is a 501(c)(6) organization located in Durham, North Carolina, representing all types of businesses in the clean energy sector, including developers, manufacturing, engineering, construction, professional and financial services, and non-energy businesses wishing to purchase clean energy. With over 50 members, including most of the utility-scale solar developers in North and South Carolina, CCEBA monitors and participates in energy policymaking in both Carolinas. ⁵ See https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-

energy-projects-to-create-jobs/.



comments on the Central Atlantic Call Areas,⁶ we urge BOEM to proceed with the objective of identifying sufficient seaspace to auction at least 10 shallow-water leases of 100,000 acres apiece. We also request that BOEM fully lease the deep water draft WEAs within Call Areas E and expand the draft WEA in Call Area F to help build an East Coast floating wind project pipeline that will put us on a path to meet the national goal of deployment of 15 GW of floating wind by 2035.⁷

We are glad that BOEM has preserved acreage similar to the amount the offshore wind industry needs to meet state and federal goals and build a regional supply chain, especially in shallow water areas.⁸ While both shallow water and deep water lease areas are important, they are not interchangeable, and BOEM should refrain from constricting one to expand the other. However, we recognize that the Draft WEAs were designated based on incomplete information; we therefore urge BOEM to work with the National Centers for Coastal Ocean Science to rerun its deconfliction model (the NCCOS model) between now and issuance of the final WEAs to ensure BOEM can meet the country's leasing needs using the best available data.

First and foremost, the Draft WEAs did not include input from the Department of Defense (DoD), which we are concerned could significantly reorder the prioritization of areas under consideration for leasing—particularly within Call Areas B and D. We urge BOEM to rerun its NCCOS model once it receives DoD input so that such input does not unnecessarily winnow down the draft WEAs. Second, the Draft WEAs give deference to United States Coast Guard (USCG) fairways maps that are still under discussion. We recommend that BOEM work with USCG to base its final WEAs on the supplemental Atlantic Coast Port Access Route Study (ACPARS) maps that were crafted using significant data and stakeholder input and create much fewer conflicts with the Central Atlantic Call Areas than the more recent Consolidated ACPARS maps.

Third, we hope BOEM will recalibrate the NCCOS model on several other bases, including weighting more heavily the commercial developability sub-model of the area for wind energy in addition to altering the sub-model itself. Also, BOEM should reconsider whether renormalization of data adequately captures the level of deconfliction that occurred in the designation of the original Call Areas, including properly distinguishing between irresolvable environmental conflicts and potential impacts that can be mitigated at the Construction and Operations Plan (COP) stage of the development process. Fourth, we ask BOEM to consider wake effects on existing leases in designating final WEAs.

Lastly, we urge BOEM to go big on floating wind by issuing as much of those draft WEAs as possible (and expanding draft WEA F to commercial scale) on the same timeline as the shallow water lease sale. Rapidly developing floating wind technology multiplies the technical

⁶ Available at https://www.regulations.gov/comment/BOEM-2022-0023-0048.

 $^{^{7}} See \ https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/#:~:text=New%20Goal%20to%20Reach%2015,met%20using%20fixed%2Dbottom%20technology.$

⁸ Available at <u>https://www.regulations.gov/document/BOEM-2022-0023-0001/comment</u>



potential for wind energy generation on the Outer Continental Shelf,⁹ and its full deployment will present major commercial, security, and environmental benefits in addition to helping meet our national goal of 15 GW by 2035. Although floating wind in the Central Atlantic will be developed on a somewhat later timeline, we ask that BOEM get the development process started as soon as possible by leasing the floating areas at the same time it leases fixed-bottom areas. An early pipeline of deep water leases in the Atlantic will also spark investments in research and development, ports, and factories that will help meet our further national goal of 15 GW of floating offshore wind by 2035.

We acknowledge that there are many more steps in the leasing process, and we request that BOEM take the time to preserve as much leasable area as possible at the next stage. Ultimately, it is far more important for BOEM to take the time to get the right result in the Central Atlantic than to rush an inadequate amount of acreage to market.

COMMENTS

I. State Goals and Supply Chain Considerations Necessitate Leasing At Least As Much Acreage as is in the Primary and Secondary Areas of the Draft WEAs

BOEM should aim to issue 10 leases of 100,000 acres each within Call Areas A-D—as well as all of the draft WEAs in Call Areas E and an expanded WEA in Call Area F—as this is the amount of leasing necessary to not just meet current and anticipated state goals and ensure a robust regional supply chain that will facilitate the achievement of our ambitious national offshore wind goals. Existing leases are far from sufficient to meet the anticipated future goals of Maryland and Delaware and the current goals of Virginia and North Carolina. We also note that in anticipation of the eventual development of an offshore mesh or backbone grid, projects in the Central Atlantic may eventually be able to supply energy throughout the region and beyond—including to help satisfy a recent increase in demand in New Jersey. Finally, more leases are needed to create projects that will sustain and expand supply chain investments in the Central Atlantic region for decades to come.

• Maryland

 In the last decade, Maryland has passed two bills into law, the Maryland Offshore Wind Energy Act of 2013¹⁰ and the Clean Energy Jobs Act of 2019¹¹, mandating that Maryland purchase half of its electricity from renewable energy sources by 2030 and authorizing 2 GW of offshore wind energy generation.¹²

⁹ Available at <u>https://www.nrel.gov/wind/offshore-market-</u>

assessment.html#:~:text=The%20researchers'%20key%20findings%20of,about%2013%20million%20American%20homes

¹⁰ Available at <u>https://energy.maryland.gov/Pages/Info/renewable/offshorewind.aspx</u>

¹¹ Available at <u>https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/SB0516?ys=2019rs</u>

¹² SENATE BILL 516 available at https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/SB0516?ys=2019rs



- The Climate Solutions Now Act, passed in 2022, set a statewide goal of a 60 percent reduction below 2006 emissions by 2031 and a requirement to reach netzero emissions economy wide by 2045.¹³
- In the next legislative session, Democratic Governor-elect Wes Moore and the Maryland General Assembly will have the opportunity to pursue Governor-elect Moore's campaign pledge to achieve 100 percent clean energy generation by 2035.¹⁴ To meet this goal, Maryland could nearly quadruple the state's current offshore wind procurement target, in accordance with the recommendation from a recent report produced by Gabel Associates for the Chesapeake Climate Action Network.¹⁵ Fully decarbonizing the state's economy, required by the Climate Solutions Now Act, would likely require even more offshore wind to supply large-scale electrification of buildings, transportation, and other activities. However, in order to meet this anticipated increase in demand and keep building the state's wind industry supply chain, Maryland requires a greatly increased number of commercially viable offshore wind leases off its coast.

• Delaware

- Delaware has set a target of achieving 40 percent renewable energy by 2035,¹⁶ which will need to include a mix of offshore wind to be feasible.
- A recent report from the Special Initiative on Offshore Wind at the University of Delaware outlines the offshore wind procurement options for the state and found that an 800 MW project off of Delaware's coast could generate electricity for Delaware at less than half the state's current power costs when factoring in externalities like carbon emissions and other environmental impacts.¹⁷ The report also identified several paths to offshore wind job creation in Delaware, including: port developments (operations and maintenance, marshaling), factories for wind components, job training centers, and an offshore wind visitor center.¹⁸ The report concludes that the first project off Delaware could meet the state renewable energy requirements at a price within the range of traditional power.¹⁹

• Virginia

 Governor Glenn Youngkin's 2022 Energy Plan emphasizes the need for Virginia's energy development, including offshore wind, to center competition,

at https://documents.dnrec.delaware.gov/energy/offshore-wind/SIOW-report.pdf.

¹³ Available at: https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0528?ys=2022RS
¹⁴ Available at: https://wesmoore.com/issues/climate/

¹⁵ Maryland Offshore Wind: Estimating the Costs and Benefits of Offshore Wind Energy Development (December 2022), *available at* <u>https://chesapeakeclimate.org/wp-content/uploads/2022/12/MD-Offshore-Wind-Report-Dec-2022-Gabel-Associates.pdf</u>.
¹⁶ Available at <u>https://dnrec.alpha.delaware.gov/climate-coastal-energy/renewable/offshore-</u> wind/#v_start=Tha%20ctate%20har%20ast%20ast%20dare%20dare%20dare%20dare%20dare%20charge

wind/#:~:text=The%20state%20has%20set%20a.that%20are%20driving%20climate%20change. ¹⁷ Offshore Wind Procurement Options for Delaware Report to the State of Delaware by the

Special Initiative on Offshore Wind at the University of Delaware (Kempton et al, 2022) at 18, available

 $^{^{18}}$ *Id.* at 37-40.

¹⁹ *Id.* at 5.



affordability, and innovation,²⁰ all of which are more achievable through ample leasing opportunities and economies of scale.

- In 2020, the General Assembly passed the Virginia Clean Economy Act (VCEA), which mandated a goal of 100 percent zero-carbon energy generation by 2050 and prescribed increasingly strict Renewable Portfolio Standards (RPS) for Virginia's investor-owned electric utilities, and establishes an offshore wind procurement goal of 5,200 MW by 2035. The VCEA also stipulates that services and equipment for offshore wind projects must be competitively procured, which would benefit greatly from an existing supply chain.²¹
- In 2019, Virginia's Department of Environmental Quality outlined objectives for statewide energy production and established benchmarks for future development, including aiming for 5,500 MW of wind and solar energy with at least 3,000 MW of this target should be under development by 2022, and 30 percent of Virginia's electric system powered by renewable energy resources by 2030.²² These goals are only feasible with a robust amount of offshore wind procurement.

• North Carolina

- On June 9, 2021, Governor Roy Cooper signed Executive Order No. 218, reaffirming North Carolina's commitment to creating clean energy jobs, increasing economic opportunities, and reducing greenhouse gas emissions through the expansion of offshore wind power.²³ The Order also establishes offshore wind development goals of 2.8 GW off the North Carolina coast by 2030 and 8 GW by 2040. North Carolina has demonstrated significant leadership through HB 951,²⁴ which set a goal of net zero emissions by 2050. Duke's Energy's transition to renewables, codified through HB951, will almost certainly require offshore wind.
- The state's coast has more offshore wind potential than any other state along the Atlantic Coast, according to a report from the U.S Department of Energy, National Renewable Energy Lab (NREL).²⁵ Building the offshore wind industry in NC will provide more than just clean energy, it will also bring an estimated 85,000 new jobs and \$140 billion in capital expenditures along the Atlantic Coast by 2035.²⁶
- According to The Southeastern Wind Coalition's Industry Supply Chain database and map, North Carolina currently has 118 registered offshore wind supply chain companies, 55 of which already exist in the land-based wind supply chain. By leveraging existing manufacturing strength, the Central Atlantic draft wind energy areas have the potential to build upon North Carolina's manufacturing strengths

²⁰ Available at <u>https://energy.virginia.gov/energy-efficiency/documents/2022_Virginia_Energy_Plan.pdf</u>.

²¹ Available at https://energy.virginia.gov/energy-efficiency/documents/2022_Virginia_Energy_Plan.pdf.

²² Available at https://www.deq.virginia.gov/air/renewable-energy

²³ Available at https://files.nc.gov/governor/documents/files/EO218-Advancing-NCs-Economic-Clean-Energy-Future-with-Offshore-Wind.pdf

²⁴ Available at <u>https://ncleg.gov/BillLookup/2021/h951</u>.

²⁵ See <u>https://www.nrel.gov/docs/fy17osti/67675.pdf</u>

²⁶ Available at <u>https://nccleantech.ncsu.edu/2022/05/27/offshore-wind-brings-opportunities-clean-energy-off-the-north-carolina-coast/#:~:text=EO%20218%20also%20establishes%20offshore,and%208.0%20GW%20by%202040.</u>



and nation-leading economic conditions for component manufacturing to supply the offshore wind market along the East Coast and beyond.²⁷

• New Jersey

- Leases in the northern part of the Central Atlantic may also be needed to help satisfy New Jersey's recently expanded offshore wind goal of 11 GW by 2040, implemented through Governor Phil Murphy's Executive Order 307.²⁸ This order also directed the New Jersey Board of Public Utilities to study the feasibility and benefits of further increasing this goal.
- We anticipate that New York will substantially increase its current 9 GW offshore wind goal in the coming years, which will have a cascading effect. New Jersey may then not be able to satisfy its goal entirely from BOEM leases in the New York Bight, which, in turn, could put increasing pressure on leases in the Central Atlantic to satisfy New Jersey demand.

• Supply Chain

- The greater the number of 100,000-acre leases, the greater the ability to create economies of scale that drive down costs and increase supply chain investments. Projects should be large enough to reduce overall development costs and drive investment in the associated supply chain.
- Fewer or smaller lease areas will require multiple projects to achieve the same installed capacity levels and come at a significantly higher cost. Permitting, development, procurement, construction, and operation costs will be streamlined with larger lease areas.
- Although some projects may be developed in phases, lease areas should be maximized to allow for 1,200 MW or more of total development per project area.
- To optimize supply chain investments in the Central Atlantic region, companies need assurances that there will be a pipeline of projects. To achieve that pipeline, we need leases in the region.
- Maryland offshore wind developer US Wind has already committed \$227 million toward a new steel monopile fabrication facility in Baltimore County to support its Marwin and Momentum Wind projects.
- In addition, Ørsted is developing Skipjack Wind, which will power more than 300,000 homes in the Delmarva region. In that pursuit, Ørsted has committed more than \$735 million across Maryland for various projects, including building America's first fully integrated array cable manufacturing facility in the Baltimore area, expanding STEM education programs, building an emissions-free offshore wind operations and maintenance port facility in Ocean City, and establishing an offshore wind steel fabrication facility Federalsburg.
- Similarly, in Virginia, Dominion Energy is building their Commercial Virginia Offshore Wind (CVOW) project, which will produce enough energy to power

²⁷ Available at <u>https://www.commerce.nc.gov/media/3640/open</u>.

²⁸ See <u>https://nj.gov/infobank/eo/056murphy/pdf/EO-307.pdf</u>.



660,000 homes in the Commonwealth.²⁹ This project has encouraged private and public investment that will support offshore wind development, namely the establishment of Siemens Gamesa's blade finishing facility in Portsmouth, Virginia,³⁰ and a \$223 million contract with Skanska to redevelop Portsmouth Marine Terminal into an offshore wind staging port.³¹ Both of these developments, coupled with Virginia's proximity to the potential lease areas, will help reduce costs for future projects in the Central Atlantic.

 Before making further investments on the Atlantic Coast, offshore wind developers and manufacturers need certainty that there will be a strong pipeline of additional and adequately sized future projects that will keep their factories humming in the many years to come. An opportunity to establish that pipeline of future projects depends on WEAs that can sustain them. This is a crucial next step to foster tens of thousands more jobs in direct and supplemental areas.

II. BOEM Should Rerun the NCCOS Model Once It Receives DoD Input to Avoid Unduly Restricting the Final WEAs

The offshore wind industry appreciates the magnitude of DoD's importance in the Central Atlantic and the national security protections that the DoD bases in the Central Atlantic provide. We recognize that DoD is an important stakeholder in this process, and we urge BOEM to ensure that there is robust engagement between DoD and the offshore wind industry in the Central Atlantic. Our industry has already proven its ability to work with DoD (i.e., in California) to identify productive and compatible solutions that allow for the important DoD missions while maximizing available offshore wind lease acreage. These solutions were identified through meaningful dialogue and understanding from all stakeholders about their specific needs. We suggest that BOEM work towards similar solutions in the Central Atlantic and if practicable, convene meetings with stakeholders and DoD to ensure that industry has a chance to understand DoD activities and their important national security activities that are specific to the region, and DoD can likewise understand concerns from a developer standpoint. ACP and its members welcome the opportunity to engage on this level even after the WEAs are finalized.

We also emphasize that it would be detrimental to the industry at this time for BOEM to leave acreage out of consideration without proper assessment and consideration of available mitigations and both DoD and industry needs. As BOEM acknowledges, the Draft WEA maps do not account for DoD's final assessment of compatibility of the Call Area with national security needs.³² Given the lack of DoD input into the Draft WEAs, we recommend that BOEM

²⁹ See <u>https://coastalvawind.com</u>/.

³⁰ See <u>https://www.siemensgamesa.com/en-int/newsroom/2021/10/offshore-blade-facility-virginia-usa.</u>

³¹ See https://group.skanska.com/media/press-releases-articles/266225/Skanska-rebuilds-Offshore-Wind-Staging-Port-in-Portsmouth%2C-Virginia%2C-USA-for-USD-223M%2C-about-SEK-2.3-billion-

²² Draft Wind Energy Areas – Commercial Leasing for Wind Power Development on the Central Atlantic Outer Continental Shelf (OCS) (Nov. 16, 2022), *available at* <u>https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Notice%20for%20Comment%20of%20Draft%20WEAs.pdf.</u>



re-run its NCCOS model once it receives such input. This recalibration is necessary in order to allow BOEM to re-consider removed areas that may turn out to be less conflicted once DoD has weighed in, therefore helping meet the high demand for offshore wind leasing in the Central Atlantic.

We are aware that portions of the Central Atlantic Call Areas are currently used for several DoD missions; while we urge DoD to be flexible and work closely with BOEM, we anticipate that DoD is likely to deem some of its activities within the Call Areas B and D incompatible with offshore wind development. However, we also expect DoD to opine that certain portions of Call Areas B and D *can* be leased for offshore wind development subject to certain lease provisions and terms and conditions of COP approval.³³

We are concerned that some of the areas that pass muster under DoD's analysis may be areas that BOEM has removed from consideration in the Draft WEAs. This could, in turn, result in a dramatic change in the DoD values used in the NCCOS model.³⁴ Given the importance of national security concerns, we urge BOEM to rerun its NCCOS model (also accounting for the other suggestions set forth below) prior to issuing final WEAs in order to account for DoD concerns. Failure to do so could result in an unwarranted reduction in the Draft WEAs and an inability to meet state and federal offshore wind and decarbonization goals and build a regional supply chain in a timely manner.

We also note that BOEM regulations do not limit the extent to which final WEAs may differ from the draft WEAs, including expanding to include areas that were previously removed, so long as the final WEAs stay within the bounds of the Call Areas. Indeed, that flexibility is a logical outgrowth of BOEM's decision to create a comment period for draft WEAs—*it should be viewed as an opportunity to consider new facts that weigh in favor of additional leasing, and not just to winnow the eligible areas.*

III. BOEM Should Work with USCG To Ensure the Final WEAs Are Based on the Supplemental ACPARS Map and Not the Consolidated ACPARS Map.

We request that BOEM work closely with USCG to ensure that the Final WEAs are designated using the Supplemental ACPARS maps created by USCG Districts 1 and 5 in June 2021³⁵ and used by BOEM as the basis for its initial Call Areas. This would entail no longer using the flawed proposed navigational fairways created by USCG's Consolidated Atlantic Coast Port Access Route Study (ACPARS), which currently eliminate significant acreage from the Call Areas.³⁶ This modified approach would unlock critical lease blocks within Call Area A and the

³³ We also urge BOEM and DoD to be as transparent as possible about what conflicts may exist between DoD activities and offshore wind in the Central Atlantic. Depending on DoD's final recommendations, the offshore wind industry would be interested in taking opportunity to meet with BOEM and DoD to figure out potential measures that may unlock additional areas for leasing. The offshore wind industry has a track record of working with DoD to identify productive and compatible solutions for DoD missions. It would be detrimental to our collective clean energy goals to leave acreage out of consideration at this time without a full consideration of available mitigation measures.

³⁴ BOEM NCCOS Joint Draft WEA Report (BOEM-NCCOS Report) at 20.

³⁵ See https://www.regulations.gov/document/USCG-2019-0862-0020.

³⁶ BOEM-NCCOS Report at 22.



northern portion of Call Area B, while still preserving navigational safety for existing and future vessel traffic.

The Consolidated ACPARS fairways were issued after the Central Atlantic Call Areas on August 31, 2022 without reflecting or seeking stakeholder input,³⁷ and they create significant conflict with Call Areas A and B as set forth in Figure 1. By contrast, the Supplemental ACPARS maps recommended by USCG Districts 1 and 5 were the result of a rigorous stakeholder engagement process and analysis of vessel traffic data, and minimize conflict with the Central Atlantic Call Areas because those areas were largely drawn to accommodate them, as portrayed in Figure 2.







Figure 2: Supplemental ACPARS Map

The USCG's proposed fairways in the Consolidated ACPARS maps are a significant departure from established spacing requirements from safe and effective measures for nearby offshore wind leases as outlined in USCG marine planning guidelines.³⁸ The AIS daily traffic data demonstrates that an average of fewer than two tug and tow vessel per day transited in the vicinity of Call Areas A and B in 2021. See Figure 3. This level of traffic does not support the need for fairways that are 9 miles wide. The data also did not support USCG's addition of a two

³⁷ See

https://www.navcen.uscg.gov/sites/default/files/pdf/PARS/Consolidated_Port_Approaches_International_Entry_Departure_Transit_Areas_PARS .<u>pdf</u>. ³⁸ COMDTINST 16003.2B, Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy.



9-mile-wide "cross-over" fairways that overlap with Call Areas A and B, as the same AIS data does not demonstrate that tug and tow traffic has historically crossed back over from offshore to inshore routes. *Id.* Additionally, AIS data indicates the towing traffic that operates offshore are articulated tug and barge units capable of unlimited ocean service. These vessels have operated in transoceanic or intercontinental service alongside other deep draft vessels for many years without separate routing measures to accommodate them.



Figure 3: 2021 AIS Tug and Tow Data

Moreover, the additional cross-over fairways in the Consolidated PARS are unnecessary and if implemented would increase traffic complexity and congestion in areas adjacent to structures. The Supplemental ACPARS maps, on the other hand, were developed using a rigorous analysis of vessel traffic and incorporated stakeholder input—and best promote safe navigation and reconcile the need for port access with offshore wind development.

We recognize that USCG is about to commence a rulemaking process regarding the ACPARS maps, but we hope that both agencies can reach agreement in the coming months that the Supplemental PARS maps are superior to the Consolidated ACPARS maps from the perspective of both navigational and offshore wind spatial planning. Using the Supplemental ACPARS map would render Call Area A and the northern portion of Call Area B much less conflicted, and could help BOEM offset losses in other portions of Call Area B due to potential DoD conflicts as set forth in Section II above.



IV. The NCCOS Model Should Be Modified to More Accurately Reflect Suitability for Development, Give Credit for Deconfliction at the Call Area Phase, Broader Context, and Account for Mitigatable Environmental Concerns.

We appreciate the detailed analysis contained in the NCCOS model, which provides much needed transparency to the WEA designation process. However, a model is only as good as the assumptions it makes, and we are concerned that some assumptions built into the model do not result in optimal identification of the most suitable areas for offshore wind leasing. We encourage BOEM to refine its model in the following ways.

a. The NCCOS Model Should Place Heavier Weight on Suitability for Wind Energy Development and Recalibrate the Sub-Model's Variables

The commercial and technical viability of future projects should be one of BOEM's paramount concerns, as the goal of BOEM's regulatory program is the "expeditious and orderly development" of the vast wind energy resources on the Outer Continental Shelf.³⁹ This cannot be accomplished if projects cannot be financed, constructed, and the energy integrated into the grid. It is therefore critical that the suitability of an area for wind energy development be appropriately determined and weighted at each stage of BOEM's leasing process—particularly Area Identification. We recommend that BOEM retool its "wind submodel" to better identify the most commercially viable areas for offshore wind development, and then adjust the overall NCCOS model to place more weight on leasing the best areas from a commercial perspective.

We recommend a lengthier conversation regarding ways the wind submodel can better align with developers' commercial considerations, but we present herein two examples of potential deficiencies. First, we suggest that the wind sub-model should be retooled such that wind speed is more strongly correlated with area suitability. The wind submodel increases suitability linearly with wind speed. However, the favorability of an area does not increase linearly with wind speed. In the equation the industry uses to calculate the amount of power created by a wind turbine, the wind speed variable is cubed, meaning power production is exponentially related to wind speed. By using a linear function to relate wind speed to area suitability, the model significantly underestimates suitability for development in areas of higher wind speeds. While area suitability does not need to be precisely correlated with potential power production, we encourage BOEM to relate area suitability and wind speed more strongly—either exponentially or with a steep linear slope, or with increased weight.

Second, BOEM should also reduce its reliance on distance to ports as a factor in the wind submodel, and consider replacing it with distance to point of interconnection. Generally, distance to port is much less likely than the other factors to materially impact the decision to develop an area. Moreover, we have concerns with the manner in which distance to port is measured— annual tonnage is not a criterion well-suited to identify a construction port. In fact, it could

³⁹ 43 U.S. Code § 1332(3).



indicate increased risk of operational conflict due to existing vessel traffic. Distance to port appears to have had a significant impact on the suitability rating for Call Area B. The northeast corner of B is orange to denote low suitability, despite consistent wind speed and bathymetry for B, which are much more important variables for buildability.⁴⁰

In sum, we support BOEM placing a greater weight on commercial buildability of a particular area, but only once the model has been adjusted to optimize its ability to identify the best areas for wind development. Once these changes to the model are made, we believe BOEM will better be able to avoid the unnecessary elimination of high value seaspace. We look forward to having further dialogue on this issue, both in the Central Atlantic and for future leasing processes.

b. The NCCOS Model Fails to Credit BOEM For Deconfliction Efforts at Earlier Stages in The Process, Thereby Making Areas Seem More Conflicted Than They Actually Are.

BOEM should give itself credit in the NCCOS model for deconfliction at earlier stages in the leasing process. Failure to do so means certain portions of the Call Areas appear more conflicted than they actually are, because they are only compared to other Call Areas and not the ocean as a whole. This, in turn, could skew the results of the NCCOS model and result in premature removal of areas from consideration for leasing.

The fisheries sub-model provides a clear example of this phenomenon. Figure 4 shows the results with respect to the "suitability" of leasing based on relative fishing effort within the Call Areas:

⁴⁰ BOEM-NCCOS Report at 47-49.





Figure 4: BOEM-NCCOS Report at 52

However, Figure 5 makes clear that when one scopes out to the entire region, BOEM did a good job in the original Call Areas of avoiding the most heavily fished areas:





Figure 5: BOEM-NCCOS Report at 51.

By renormalizing data to only analyze cells within the Call Areas, the NCCOS model misses the larger context. As a result, areas that look heavily fished in the model are actually relatively less used in comparison to the entire region. This could have potentially major implications for the designation of WEAs. For instance, commercially desirable lease blocks in the northern part of Call Area B have been excluded from any consideration in the Draft WEAs, and we are concerned that this because potential fisheries conflicts have been layered on top of the USCG fairways concerns discussed in Section III above.⁴¹ But the figures above show that viewed broadly, those areas are less intensively fished than many areas that have been retained for consideration in the Draft WEAs or have already been leased. Assuming BOEM re-runs the NCCOS model, it should be mindful of other instances of this phenomenon—and give itself credit for the deconfliction it has already accomplished at the Call Area stage of its process.

⁴¹ The BOEM-NCCOS Report is unclear in this regard.



c. The Final WEAs Should Avoid Excluding Suitable Portions of Call Area D on the Basis of Mitigatable Biological Effects

In light of concerns over the lack of incorporation of DoD input articulated in Section II above, BOEM should reconsider areas excluded from Call Area D for biological compatibility. Similar to our argument in Section IV.b above, BOEM should credit its deconfliction efforts at the Call Area stage, including avoidance of the region's most sensitive natural areas, such as deep sea coral and hardbottom habitat.⁴² On top of that, this stage in the process, BOEM should more heavily weight mitigation—instead of removal from consideration for leasing—as an option for addressing wildlife impacts that are not location-specific.

It appears large portions of Call Area D were removed from consideration for leasing primarily due to a series of overlapping protected resources model results combining for a resulted "low suitability".⁴³ The layers depicting the least suitability include NMFS Combined Habitat,⁴⁴ Highly Migratory Species, Essential Fish Habitat, Prohibited Sharks,⁴⁵ and Natural and Cultural Resources.⁴⁶

While these are important biological resources, they collectively should not result in the elimination of significant portions of Call Area D because any effects from offshore wind can be mitigated or minimized at the COP stage. In particular, developers are subject to an intensive suite of mitigation measures relating to protected species, including lease stipulations regulating survey activities and terms and conditions imposed at COP approval and as a result of consultations with NMFS and U.S. Fish and Wildlife Service. And developers are constantly striving to leverage research and innovative technologies to make such mitigation measures even more effective and efficient. Taken together, these measures can greatly reduce the risk of harm from offshore wind development. Prospective lease areas should not be prematurely screened out of this process for possible impacts that could be effectively mitigated, minimized, or avoided by these technologies currently in development or ones that could be available by the time project construction would begin. We recommend BOEM reevaluate the biological factors used in the model and consider adding portions of Call Area D back into consideration depending on the conflicts identified by DoD.

V. BOEM Should Be Mindful of Wake Effects of Potential New Leases on Existing Leases

BOEM should carefully consider the placement of the final WEAs relative to their impact on existing lease areas in the region to allow for wake recovery. Several draft WEAs in the Central Atlantic directly abut existing lease areas. Existing lessees are likely to have already built the

⁴² See Call for Information and Nominations— Commercial Leasing for Wind Power Development on the Central Atlantic Outer Continental Shelf (OCS), 87 FR 25539, 25542

⁴³ BOEM-NCCOS Report at 35.

⁴⁴ BOEM-NCCOS Report at 36.

⁴⁵ BOEM-NCCOS Report at 38.

⁴⁶ BOEM-NCCOS Report at 40.



economic case for their projects without factoring in the impact of adjacent wind turbines from non-existent leases.⁴⁷ In addition, states may be relying on the megawatt hours that these existing projects produce for their offshore wind and decarbonization goals. We would appreciate the opportunity to discuss with BOEM potential options for ensuring that new leasing does not unreasonably interfere with activities on existing leases.

Conclusion

We view the Central Atlantic lease sale as a pivotal moment in the development of the offshore wind industry along most of the East Coast. It is truly an opportunity to lock in a pipeline of projects that will facilitate offshore wind goals in multiple states and secure a durable supply chain for decades to come. We urge BOEM to ensure that it has considered all necessary inputs before identifying final WEAs, and to keep its eye on the amount of seaspace needed to accomplish our mutual objective of standing up a new American clean energy industry.

Sincerely,

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⁴⁷ By contrast, this issue is less of a concern when BOEM issues two adjacent leases at the same time, or a new lease next to an existing lease, potential bidders can at least take potential wake effects into consideration in advance of lease acquisition.