September 13, 2021

Ms. Jean Thurston-Keller
BOEM California Intergovernmental Renewable Energy Task Force Coordinator
Bureau of Ocean Energy Management
Office of Strategic Resources
760 Paseo Camarillo (Suite 102)
Camarillo, California 93010

Re: BOEM 2021-0044, Call for Information and Nominations for Commercial Leasing for Wind Power Development on the Outer Continental Shelf Offshore Morro Bay, California, East and West Extensions

Submitted via www.regulations.gov

Dear Ms. Thurston-Keller:

The American Clean Power Association[1] (ACP) appreciates this opportunity to comment on the Call for Information and Nominations for Commercial Leasing for Wind Power Development on the Outer Continental Shelf Offshore Morro Bay, California, East and West Extensions (part of the broader Morro Bay 399 Area).[2]

In summary, ACP strongly supports moving forward with lease area designations and commercial leasing in the Morro Bay 399 area, including the East and West Extensions. Doing so is essential to helping meet President Biden's offshore wind target[3] to deploy 30 gigawatts by 2030 and his broader agenda to address the climate crisis.[4] It is also critical to assist the State of California in meeting its aggressive carbon emissions reduction targets. ACP believes the evidence collected to date demonstrates that offshore wind in Morro Bay is compatible with various other ocean uses and will provide significant economic and environmental benefits to the residents of California. The comments that follow provide additional details on these points.

[1] American Clean Power Association (ACP) is the national trade association representing the renewable energy industry in the United States, bringing together hundreds of 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. In California, ACP represents several developers interested in building commercial-scale offshore wind projects.
[2] https://www.federalregister.gov/documents/2021/07/29/2021-16134/commercial-leasing-for-wind-power-development-on-the-outer-continental-shelf-ocs-offshore-morro-bay
[3] https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/
[4] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

Support for Morro Bay Extension Areas

ACP supports the Morro Bay East and West Extensions proposed by the Department of the Interior (DOI), Bureau of Ocean Energy Management (BOEM) and the Department of Defense (DOD). These changes from the original Morro Bay Call Area address some of the prior concerns of the DOD[5] in the Central Coast region while also providing space for three commercially viable offshore wind projects in Morro Bay. In combination with the sea-space being assessed for auction in the Humboldt Wind Energy Area,[6] these areas provide for sufficient scale to stimulate a competitive first phase of the offshore wind market in California.

We are confident in the BOEM site identification and permitting processes, articulated in the *Federal Register* notice, which in combination with California Coastal Commission and other state agency responsibilities, will allow for thorough assessment and mitigation for any significant adverse impacts to natural and cultural resources. Offshore wind off the coast of California can be compatible with multiple human-uses and will be developed in a responsible manner that makes use of best existing science to protect wildlife and habitats.

The Importance of Offshore Wind to California, the Nation, and Global Climate

To mitigate climate change, we must decarbonize the economy, sector by sector, while still ensuring an affordable and equitable lower carbon transition. To this end, the International Renewable Energy Agency (IRENA) calls for 2,000 gigawatts (GW) of offshore wind globally, including 360 GW in North America, in order to keep global warming to within a 1.5 degree pathway.[7]

We applaud President Biden for making 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

[5] https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/25/fact-sheet-biden-administration-opens-pacific-coast-to-new-jobs-and-clean-energy-production-with-offshore-wind-development/
[6] https://www.boem.gov/HumboldtEA
[7] IRENA (2021), World Energy Transitions Outlook: 1.5°C Pathway, International Renewable Energy Agency, Abu Dhabi.

manner."[8] 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, reflecing the industry's critical importance in hitting this 100% clean energy goal. As a zero-emission energy generation source, offshore wind energy will play an important role in combatting climate change and is central to achieving the President's climate goals.

California is acutely aware of the effects of climate change and has been at the forefront of climate change policy for decades, implementing some of the most aggressive clean energy goals in the nation. Most recently, California Senate Bill (SB) 100 established a policy for the state of California that renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045.

A California Joint Agency Study published by the California Energy Commission, California Public Utilities Commission, and California Air Resources Board in March of 2021 concluded that California needs to develop an estimated 145 GW of renewables and energy storage by 2045to achieve 100% clean energy. [9] The study also concluded that California needs to design and develop a diverse renewable portfolio that includes not only solar and battery storage, but also regional wind, long-duration storage, and offshore wind. The study selected all 10 GW of offshore wind made available to the study model as part of the ideal portfolio in a "SB 100 Core Scenario." The report also confirmed the value of resource diversity and offshore wind specifically, finding that a portfolio that achieved SB 100 but excluded 10 GW of offshore wind would increase total annual resource costs by $1 Billion annually. A 2019 study from E3 arrived at a similar conclusion: a resource portfolio that includes between 7 and 9 GW of offshore wind could save California customers between $1 billion and $2 billion (net present value) between now and 2040 when compared to a less diverse energy portfolio.[10] The right portfolio of resources, including large-scale offshore wind, will enable and ensure reliability at the least cost to all consumers. Indeed, costs and system reliability are imperative to all ratepayers alike.

According to Governor Newsom's July 30, 2021 emergency proclamation, California could face a shortfall of up to 3,500 MW this year during extreme weather events, and a 5,000 MW shortfall next summer, given the likelihood of extended drought, wildfire and heatwaves.[11] Specifically, record-breaking heat and drought conditions have caused reservoir levels to dwindle, reducing hydroelectric power capacity by nearly 1,000 MW in summer 2021 while the heat increases demand for electricity. We recognize that offshore wind projects cannot practicably come online in time to address near-term shortfalls, but these recent

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[8] Executive Order 14008, available at https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.

[9] SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future https://www.energy.ca.gov/publications/2021/2021-sb-100-joint-agency-report-achieving-100-percent-clean-electricity

[10] E3, http://castlewind.com/wp-content/uploads/2019/08/2019-08-08_E3-CastleWind-OffshoreWindValueReport_compressed.pdf

[11] Proclamation of a State of Emergency. 30 July 2021. https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf

developments show that California, as a state, is behind schedule in developing the clean energy resources needed to maintain a stable grid in the face of climate change.

Offshore wind is an essential addition to California's clean power mix because of its generation profile: it typically generates during the late afternoon and evening, when the output of California's robust solar fleet declines.[12] By 2035, California will need to dispatch more than 18 GW *per hour* to meet its maximum 3-hour net load ramp as a result of solar production declining in the afternoon.[13] To be able to replace dispatchable resources facilities with variable renewables, the system needs resources with complimentary generation profiles to provide clean generation at all hours of the day.[14]

California will also experience substantial economic benefits due to offshore wind development along its coastline, as it would create jobs and revenue in areas of the state (e.g., the Central Coast and Humboldt County) that need these economic opportunities. A recent study from the University of Southern California and the Schwarzenegger Institute found California could see a gross domestic product increase of $24 billion between 2020 and 2040 and job gains of up to 195,000 job-years in construction and 4,500 annual operation/maintenance for 40 years through development of 10 GW of offshore wind.[15] Generation of these opportunities for these regions of California would therefore also further the Biden Administration's focus on addressing socioeconomic disparities through development of high paying jobs in this quickly growing industry.

Finally, the offshore wind industry recognizes California's dedication to preserving its rich natural resources. We understand and appreciate the environmental community's concerns about the need to responsibly site and construct offshore wind projects. The renewable energy development community is also committed to stewardship of the environment and looks forward to working with BOEM, the California natural resource agencies, and stakeholders to responsibly develop offshore wind off California's shores. We applaud the work of the BOEM California Intergovernmental Renewable Energy Task Force for its hard work in identifying locations in the ocean that balance its conservation and wildlife protection goals with its climate objectives. We look forward to working with the Task Force and environmental stakeholders to responsibly develop offshore wind in California.

Commercial Considerations

Project size will determine economies of scale and profitability. ACP recommends that BOEM set three lease areas of approximately 120 sq. miles, each of which can be optimized during the development process to accommodate a commercially viable offshore wind

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[12] California Polytechnic Institute, https://doi.org/10.1088/2515-7620/ab4ee1 & E3, The Economic Value of Offshore Wind Power in California, http://castlewind.com/wp-content/uploads/2019/08/2019-08-08_E3-CastleWind-OffshoreWindValueReport_compressed.pdf

[13] Energy Strategies for Western Interstate Energy Bureau, https://westernenergyboard.org/wp-content/uploads/2019/12/12-10-19-ES-WIEB-Western-Flexibility-Assessment-Final-Report.pdf

[14] Brightline Defense Project, https://www.brightlinedefense.org/news/caoffshorewind

[15] USC Schwarzenegger Institute, "California's Offshore Wind Electricity Opportunity," 2021 http://schwarzeneggerinstitute.com/images/files/OSW_Report.pdf;

project.[16],[17] Given the limited size of the Morro Bay East Extension (23 sq miles), ACP recommends that the East Extension be combined with other portions of the Morro Bay 399 when it comes time to establish specific lease areas. It is unlikely any developer would bid on the Eastern Extension on its own, although ACP supports the inclusion of this additional area as it may provide important capacity and siting flexibility as part of a larger lease area.

ACP recommends moving forward toward leasing in Morro Bay in a timely manner, to enable a lease auction in 2022. This timeline is consistent with the direction of the President and is needed to ensure offshore wind can be available in the early 2030s when California Load Serving Entities will need it, as reflected in the California Public Utility Commission's (CPUC) most recent Integrated Resource Plan (IRP) analysis, which is currently subject to public comment.[18] Finally, to take advantage of federal investment tax credit (ITC) for offshore wind and the safe harbor provisions provided in Internal Revenue Service guidance, developers need to secure sea-space in 2022 to have projects advanced enough to qualify for the federal credits prior to their current expiration date.

Offshore Wind Compatibility and Co-existence

ACP is grateful for the efforts of the DOI, BOEM, DOD, the State of California, and Congressman Carbajal over the last few years to jointly assess and resolve potential conflicts over sea-space for offshore wind off the Central Coast. The previously referenced White House announcement on May 25, 2021, detailing an agreement identifying the first areas for offshore wind leases off the coast of California was a momentous step for all parties interested in offshore wind and clean energy. We acknowledge the years of hard work, collaboration and cooperation required to reach that point. ACP and individual project developers look forward to collaborating with the DOD through the Military Aviation and Installation Assurance Siting Clearinghouse and the BOEM permitting process to assess specific lease areas and proposed projects when the time comes to ensure compatibility between the military mission and deployment of offshore wind.

ACP is also confident that offshore wind will be compatible with safe vessel navigation. As demonstrated in BOEM's Humboldt Area Identification Memo,[19] navigation of various types of vessels (cargo, tug and tow, commercial and recreational fishing etc.) is a key consideration in where Wind Energy Areas are established. The Coast Guard is a

[16] The National Renewable Energy Laboratory recommends using a standard array density of 3-MW/km2, which equates to 128.9 square statute miles per 1,000 MW for planning purposes.
https://www.nrel.gov/docs/fy16osti/66599.pdf p. v.
[17] U.S. Department of Energy. Offshore Wind Market Report: 2021 Edition.
https://www.energy.gov/sites/default/files/2021-08/Offshore%20Wind%20Market%20Report%202021%20Edition_Final.pdf
[18] Administrative Law Judge's Ruling Seeking Comments on Proposed Preferred System Plan. 17 August 2021
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M399/K450/399450008.PDF
[19] https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/renewable-energy/3799_CA%20Area%20ID%20Humboldt%20County%20Memo%20Final.pdf, Pages 25-27.

"cooperating agency" during BOEM's permitting process and the accompanying environmental review under the National Environmental Policy Act (NEPA).

The Coast Guard's Navigation and Inspection Circular 01-19 describes their engagement in more detail when saying, "The Coast Guard plays and important role in assisting the LA [lead agency], whose licensing and permitting activities may affect Coast Guard missions. The Coast Guard will evaluate applications and make recommendations to the LA concerning the potential impacts of the OREI [offshore renewable energy installation]." The circular continues "…the Coast Guard's role remains that of assisting the LA as described in paragraph 2.b by providing recommendations necessary to reduce the potential impacts of an OREI on the MTS [marine transportation system], navigation safety, and Coast Guard missions."[20]

There are numerous examples off the Atlantic Coast in which BOEM has adjusted proposed lease areas to respond to Coast Guard concerns. To cite just one recent example, on March 29, 2021, BOEM published five final WEAs off the Coast of New York: Fairways North, Fairways South, Hudson North, Hudson South, and the Central Bight.[21] BOEM significantly adjusted the final areas from those originally proposed as call areas, and even from the draft WEAs proposed in November 2018, after more than three years of consideration and stakeholder input. Several of the changes made were to address vessel navigation concerns.[22]

Figure 1 below from BOEM's slide deck[23] presented during the Intergovernmental Renewable Energy Task Force Meeting for the New York Bight on April 14, 2021, shows how the areas were reduced in size from the original call areas to the draft WEAs to the final WEAs. The original call areas are outlined in black. The draft WEAs contain the diagonal lines. And the final WEAs are shaded green:

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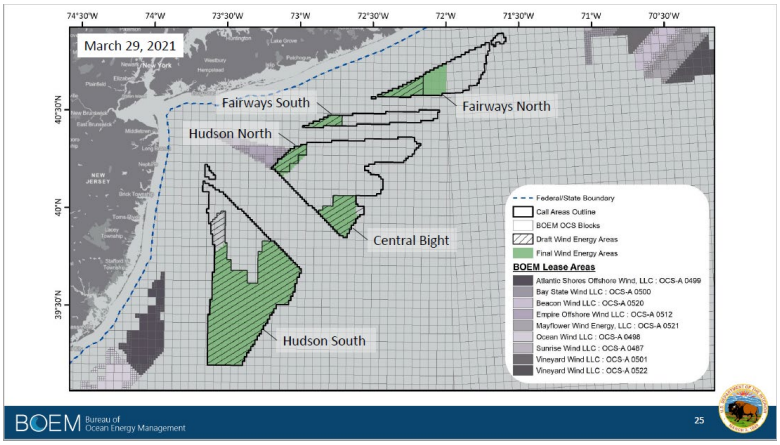
[20] Navigation and Inspection Circular 01-19, August 1, 2019, available at: https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/2019/NVIC%2001-19-COMDTPUB-P16700-4-dtd-01-Aug-2019-Signed.pdf?ver=2019-08-08-160540-483

[21] Summary of the WEAs is available on the BOEM website here: https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/NYBight-Wind-Energy-Areas-Summary.pdf. GIS shape files of the WEAs are available here: https://www.boem.gov/renewable-energy/state-activities/wind-energy-area-shape-files

[22] Available at: https://www.boem.gov/sites/default/files/documents/renewable-energy/Memorandum%20for%20Area%20ID%20in%20the%20NY%20Bight.pdf

[23] Available at: https://www.boem.gov/renewable-energy/state-activities/luke-feinberg-outer-continental-shelf-wind-energy-leasing

Figure 1. BOEM slide showing evolution of wind energy areas to leasing areas



In addition, BOEM has announced they do not plan to hold auctions for Fairways North and Fairways South at this time to allow for additional consideration of potential conflicts, including those related to navigation.[24]

With respect to California, the Coast Guard announced[25] on July 29, 2021, plans to conduct a Pacific Coast Port Access Route Study (PACPARS). As the Coast Guard notes, "A primary purpose" of a PARS and the stakeholder engagement and coordination that leads to its publication "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 Pacific Ocean in the study area." Among the possible outcomes for the PACPARS are: (1) Maintain the current vessel routing measures; (2) modify the existing traffic separation schemes; (3) create one or more precautionary areas; (4) create one or more inshore traffic zones; (5) establish area(s) to be avoided; (6) create deep-draft routes; (7) establish Regulated Navigation Areas (RNA) with specific vessel operating requirements to ensure safe navigation near shallow water; (8) identify any other appropriate ships' routing measures; (9) use this study for future decisions on routing measures or other maritime traffic considerations.

It has been ACP's experience on the Atlantic Coast that the Coast Guard and BOEM processes (area identification, PARS, fairways proceedings, and project-specific navigation safety risk assessments that are a part of construction and operation plan reviews) provide thorough analysis of potential vessel navigation issues and have resulted in balanced recommendations that provide for navigation safety while still allowing for the deployment of offshore wind.

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[24] *Federal Register,* Vol. 86, No.112, page 31526, Proposed Sale Notice for the New York Bight, June 14, 2021. Available at: https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/86-FR-31524.pdf

[25] https://www.federalregister.gov/documents/2021/07/29/2021-15923/port-access-route-study-the-pacific-coast-from-washington-to-california

ACP is also confident offshore wind and fishing industries are compatible in California. Collectively, the Morro Bay 399 and Humboldt Wind Energy Area (605 square miles) would account for only 2% of California Outer Continental Shelf out to 1,100 meter water depth. In comparison, commercial fishing occurs in wide and diverse areas near shore and farther from shore. In terms of potential effects on fish themselves, existing science suggests its unlikely offshore wind will have population-level impacts on fish, despite stakeholder concerns about avoidance, benthic habitat disturbance, EMF, or noise.[26] However, we also understand that impacts to fishing grounds, in navigation lanes, at harbors, and around cables can be localized and differentially affect participants in the industry. There are also concerns about direct impacts from offshore wind on fishing equipment and safety concerns. The BOEM permitting process, especially at the site-specific construction and operation plan phase, can effectively assess and address these concerns.

On the Atlantic Coast, BOEM and/or the offshore wind industry has adjusted plans in response to input from the fishing industry and adjustments have been made to project layouts, turbine spacing, cable routes, cable burial/landing techniques, and other project plans to better accommodate fishing interests.[27] In California, the Coastal Commission has announced its intention to develop a mitigation program related to offshore wind impacts to the fishing industry. Finally, individual developers have been in conversation with local fishing groups to understand what fishing areas are most important, identify questions and concerns, and discuss potential options for mitigation. In combination, these approaches will ensure both industries strongly contribute to California's economic future.

Conclusion

ACP appreciates the opportunity to comment on this Call for Information and looks forward to continuing engagement with BOEM and offshore wind stakeholders going forward.

Sincerely,

Tom Vinson
VP, Policy and Regulatory Affairs
American Clean Power Association (ACP)

Danielle Osborn Mills
Director
ACP - California

[26] https://cleanpower.org/wp-content/uploads/2021/06/OSW-Factsheet-Fisheries-Science-Behind-Coexistence.pdf

[27] The changes BOEM made prior to finalizing lease areas in the New York Bight were done in several cases to address fishing concerns. Offshore wind developers have used feedback from fishing interests to inform their project-specific plans for turbine spacing, orientation, and layout