



SOUTHEASTERN WIND COALITION

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Re: Call for Information and Nominations-Commercial Leasing for Wind Power Development on the Outer Continental Shelf in the Gulf of Mexico Docket No. BOEM-2021-0041

Submitted via regulations.gov

The American Clean Power Association ("ACP") welcomes the opportunity to provide comments on the U.S. Bureau of Ocean Energy Management's ("BOEM") Call for Information and Nominations-Commercial Leasing for Wind Power Development on the Outer Continental Shelf in the Gulf of Mexico ("Call"). We support BOEM moving forward expeditiously with the commercial leasing process in the Gulf of Mexico ("Gulf") in order to meet its Offshore Wind Leasing Path Forward 2021-2025,[1] hold a lease sale in the third quarter of 2023, and helpmeet the Biden Administration's goal of 30 gigawatts of offshore wind by 2030.

A. Offshore wind in the Gulf of Mexico can be economically viable.

The Gulf of Mexico has a vast offshore wind energy resource with a technical potential of more than 500 GW of clean energy generation from offshore wind.[2] Once tapped, this resource will create millions in revenue for federal, state, and local governments and help create thousands of jobs. A National Renewable Energy Laboratories (NREL) analysis of offshore wind development in the Gulf of Mexico found that a single 600 MW offshore wind facility "could

[1] https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/OSW-Proposed-Leasing-Schedule.pdf.
[2] According to NREL, the Gulf of Mexico has potential for 508 GW.

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."[3] If BOEM were to issue a large lease sale accommodating even a small fraction of the technical capacity of the Gulf—for instance, 5-10 GW—it would provide the opportunity to create tens of thousands of jobs and generate billions of dollars annually for the economies of the Gulf states. ACP encourages BOEM to issue lease sales that would generate this range of energy generation, as it is necessary to sustain supply chains and encourage further offshore development.

The Gulf region has been an energy hub in recent decades, and it has seen a steady increase in demands for electricity consumption. The Biden Administration has made clear through its Offshore Wind Leasing Path Forward that the deployment of clean offshore wind energy in the Gulf is paramount to reaching the nation's climate goals. Many Gulf states have also moved toward commitments to deploying renewable energy or have a proven track record for doing so. For example, Louisiana's climate task force is calling for 5GW of offshore wind procurement by 2035.[4] Texas is the leading state in the country for onshore wind generation, with more than 37 GW of energy online in 2020.[5]

We urge BOEM not to underestimate the beneficial impact that electricity from offshore wind generation may have in the Gulf region. The reliability that offshore wind provides is an especially key benefit, especially in Texas and Louisiana where climate-fueled extreme weather events have recently caused catastrophic blackouts.[6] According to an IEA study, the high-capacity factors and seasonality of offshore wind means that 30% or more of its capacity can be counted towards reliability requirements, which is a higher percentage than for onshore wind and

[3] https://www.nrel.gov/news/program/2020/studies-find-gulf-of-mexico-well-positioned-for-offshore-wind-development.html
[4] *See* Louisiana Climate Initiatives Task Force, Revised Draft Portfolio of Climate Strategies and Actions (Dec. 3, 2021) available at https://gov.louisiana.gov/assets/docs/CCI-Task-force/October21/CTFRevisedPortfolio12032021.pdf.
[5] ACP 2020 Clean Power Annual, at 16.
[6] For Texas, *see* https://www.washingtonpost.com/weather/2021/09/03/climate-change-arctic-texas-cold/; for Louisiana, *see* https://www.nytimes.com/2021/09/17/business/energy-environment/hurricane-ida-entergy-power-outage-new-orleans.html.

solar PV.[7] And due to factors particular to the Gulf region, the current cost of offshore wind generation should fall significantly in the coming years, .

Based on economic modeling from NREL in late 2020, the Texas coast would provide the lowest LCOE within the Gulf, due to a combination of higher wind speeds and shallow water. While none of the potential sites are projected to have a lower LCOE than the local avoided cost of energy, the Port Arthur and Port Isabel areas are estimated to come the closest and have LCOEs within $5-10/MWh of the local cost of energy.[8] When examining LCOE from offshore wind in the Gulf as a value-adjusted LCOE that takes into account bulk energy supply, adequacy of the system, and flexibility of the system, the price of offshore wind is quite competitive. Lease areas providing the optionality to connect into multiple states (notably along the TX/LA border area) would also have the benefit to potential investors of maximizing a future project's ability to secure an offtake contract if any of the local states were to move forward with setting offshore wind procurement targets. From a value perspective, offshore wind has already closed the competitiveness gap with coal and gas in some European markets, and is predicted to close this gap by 2040 in the U.S.[9]

While offshore wind in the Gulf currently does not benefit from local state procurement goals needed to spark investments in local supply chains, this should not be a barrier to BOEM continuing the leasing process. First, and as noted above, offshore wind procurement may be on the horizon in Louisiana. Second, and as discussed further below, the Gulf's significant oil and gas supply chain can be repurposed for offshore wind; the region is not starting from scratch. Third, offshore wind energy markets in the Gulf may not be limited to state-run procurements. The federal government could become a major purchaser of offshore wind in areas without state targets as it complies with to the Biden Administration's recent Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability.[10]

[7] IEA, Offshore Wind Outlook 2019, at 44-45, https://iea.blob.core.windows.net/assets/495ab264-4ddf-4b68-b9c0-514295ff40a7/Offshore_Wind_Outlook_2019.pdf
[8] A Spatial-Economic Cost-Reduction Pathway Analysis for U.S. Offshore Wind Energy Development from 2015-2030, https://www.nrel.gov/docs/fy16osti/66579.pdf
[9] IEA Offshore Wind Outlook at 47.
[10] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/.

In addition, the increased demand for green hydrogen could play an important role in developing offshore wind, especially in the Gulf region, due to the reduced cost of direct transmission. In the future, offshore wind facilities could be used to produce local hydrogen fuel, rather than sending its electricity to the grid, thereby avoiding the need for additional transmission. According to the IEA, the LCOE of offshore wind in the European Union in 2030 is projected to be in the range of $40-70/MWh including transmission to an onshore hydrogen facility (with a 4% WACC) and $130/MWh at average retail price, but just $30-50/MWh with direct transmission.[11] The industrial and shipping industries present in south Louisiana uniquely position the state to take advantage of the opportunity for producing green hydrogen with offshore wind, and has become a strategic focus for many of the energy firms and economic development organizations in the region - a coalition of which were recently awarded a Phase I grant in the Build Back Better Regional Challenge to develop a hydrogen energy cluster.[12] As these technologies develop further, the market for offshore wind is likely to expand. We encourage BOEM to provide flexibility to develop emerging technologies, including green hydrogen from offshore wind, as they gradually become cost-competitive in this area.

B. Existing industries in the Gulf can aid in offshore wind development.

The Gulf of Mexico's history, existing industries, and maritime communities also make the Gulf a unique area to develop offshore wind. Oil and gas exploration and development have been taking place in the Gulf for decades, and much of the institutional knowledge and maritime expertise to quickly and effectively construct offshore structures and harness the energy from them already exists in the Gulf and surrounding communities. These decades of successful offshore construction experience in the Gulf provide a solid foundation for offshore developers to reduce use-conflicts and to draw on the decades of experience of offshore construction in the Gulf.

In addition, the robust supply chain and existing offshore construction logistical expertise already exists to develop offshore structures efficiently and cost-effectively with minimal impacts to existing natural resources and ocean uses. This expertise, including OCS surveys, structure development, and stakeholder engagement, can provide potential commercial investors

[11] IEA at 55.
[12] https://gnoinc.org/news/build-back-better-finalist/?utm_source=organic&utm_medium=social&utm_campaign=organic&utm_content=BuildBackBetter

and offshore wind developers with more certainty during each stage of development. The offshore wind industry will benefit from decades of experience with oil and gas development in the Gulf.

Existing structures in the Gulf, with appropriate financial liability policies in place, could also be repurposed for offshore wind. For example, the wind industry can use existing platforms to base operations or store equipment during the stages of development. And the numerous subsea rights-of-way that exist in the gulf can aid developers in efficiently placing new offshore wind transmission lines. As stakeholders in the Gulf are already familiar with the process of balancing multi-uses, the engagement in later stages of any offshore wind planning will likely be robust and productive. We urge BOEM to consider optionality and flexibility with co-use and co-location of existing energy leases and renewable energy lease provisions. Given the number of existing structures in the region, we also recommend that BOEM consider issuing noncontiguous leases so as to avoid spatial conflicts while ensuring each lease contains sufficient buildable area to sustain a utility-scale project.[13]

Finally, Gulf port infrastructure is well equipped to support the renewable offshore wind industry. The ports off the coasts of Louisiana and Texas already serve the oil and gas industries and associated supply chain. According to an NREL study, these ports not only are equipped with high-capacity cranes to lift large components, but they also are equipped to serve larger vessels and barges that may be used as feeder vessels to assist in the construction process.[14] As the offshore wind industry continues to grow, existing port infrastructure will be especially important, and the technical capabilities of the Gulf ports will be an invaluable resource.

C. We encourage BOEM to move the leasing process forward as the market is still developing.

BOEM can play a pivotal role in catalyzing offshore wind development in the Gulf even before a market for offshore wind energy has developed, as it did through lease sales in Massachusetts (2013), Virginia (2013), Rhode Island (2015), and New Jersey (2015). In each of those instances, lessees were able to engage in the difficult but necessary work (surveys, engineering, permitting, and stakeholder engagement) to prepare their leases for development

[13] BOEM has previously issued noncontiguous leases for oil and gas related activities in the Gulf. https://www.boem.gov/sites/default/files/documents/oil-gas-energy/GOM-LS-257.pdf.
[14] https://espis.boem.gov/final%20reports/BOEM_2020-018.pdf at 54-55.

while state and federal policies created markets for their energy. Moving forward at this stage of the process also does not over-commit agency resources. The stepped process for offshore wind energy leasing allows ample time for each of the potential challenges for a market to be resolved or evolve to attract investors and developers.

Each of the above examples where BOEM has taken early action to move forward with the offshore wind development and leasing process has successfully ended in lease sales. Commercial interest is likely to follow a similar trajectory as each of the previous wind areas that BOEM took early action on. Moving the process forward will signal to developers and investors that BOEM is doing its part to lay the groundwork for an optimal market and setting the stage for states to build their own regulatory frameworks to incentivize offshore wind development – including the enactment of offshore wind state procurement targets. We therefore urge BOEM to follow the precedent for offshore wind leasing in the Atlantic and take early action to develop the market for offshore wind in the Gulf.

D. Conclusion

We support BOEM in continuing to move the Gulf of Mexico leasing process forward in order to provide the opportunity for future growth in commercial interest in offshore wind generation in the region. We look forward to working with BOEM as it makes progress to lease the Gulf region to offshore wind development.

Respectfully,

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