May 20, 2024

Ms. Renee Bigner Office of Leasing and Plans Bureau of Ocean Energy Management 1201 Elmwood Park Boulevard New Orleans, LA 70123

Re: Gulf of Mexico Proposed Sale Notice

The American Clean Power Association (ACP)¹ appreciates the opportunity to comment on the Bureau of Ocean Energy Management's proposed sale notice (PSN) for the Gulf of Mexico Wind Lease Sale (GOMW-2).

I. <u>Introduction</u>

ACP supports BOEM's work to move forward expeditiously with the commercial leasing process in the Gulf of Mexico (Gulf). The leases will create a project pipeline that can help grow and sustain a durable onshore supply chain with tens of thousands of well-paying clean energy jobs, support our national goal of deploying 30 gigawatts (GW) of offshore wind energy by 2030², and improve energy security in the Gulf states and nationwide. Below ACP provides input and responds to BOEM's request for comments regarding the PSN.

II. <u>Background</u>

The Gulf presents a unique opportunity for offshore wind development, as this carbon-neutral technology can help to both reduce the worsening impacts of climate change on the region and provide a transition pathway to low-carbon energy for the offshore oil and gas supply chain and workforce.³ First, the region presents a unique opportunity for development beyond traditional grid interconnection – specifically, green hydrogen. Pairing green hydrogen production with offshore wind development will increase market viability of offshore wind, help to further mitigate climate impacts, and help to meet state and regional renewable energy goals.

The Gulf has a significant offshore wind energy generation potential of more than 500 GW.⁴ Louisiana is the fourth highest state in the nation for offshore wind generation potential and the

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 See <u>https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-windenergy-projects-to-create-jobs/</u>.

³ See ACP and the Southeastern Wind Energy Coalition (hereinafter "SEWC") comments regarding the Draft Wind Energy Areas in the Gulf of Mexico, available at: <u>https://www.regulations.gov/comment/BOEM-2021-0092-0124.</u>

⁴ Walter Musial et al., Survey and Assessment of the Ocean Renewable Energy Resources in the US Gulf of Mexico, BOEM, page x (Feb. 2020), <u>https://espis.boem.gov/final%20reports/BOEM_2020-017.pdf</u>.

state's climate action plan calls for 5 GW of offshore wind procurement by 2035.⁵ Similarly, Texas' offshore wind potential is sufficient to produce 166% of the state's electricity needs, according to a 2020 report by the Environment Texas Research & Policy Center.⁶

Offshore wind in the Gulf would create jobs, spur economic development and enhance the existing domestic supply chain. The National Renewable Energy Laboratories ("NREL") found that a single 600-MW offshore wind project "could support approximately 4,470 jobs and \$445 million in GDP during construction and an ongoing 150 jobs and \$14 million annually from operation and maintenance labor, materials, and services."⁷

The significant potential for offshore wind in the Gulf provides a notable opportunity for federal procurement to comply with the Administration's Executive Order (EO) 14057 "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability."⁸ In the same vein, offshore wind could provide increased energy reliability in the Gulf, which has been affected by catastrophic blackouts caused by severe climate change related weather events.⁹ An International Energy Agency ("IEA") study found that offshore wind's high-capacity factors and seasonality means that 30% or more of its capacity can be counted towards reliability requirements—higher than onshore wind and solar.¹⁰

The unique position of the Gulf's existing industry knowledge of offshore construction and infrastructure can be applied to the construction and maintenance of offshore wind facilities. The Gulf has been the center of significant oil and gas exploration and development for decades, which has resulted in considerable institutional knowledge and maritime experience in the surrounding communities that can be harnessed by offshore developers to reduce use-conflicts and to construct offshore structures quickly and effectively. Existing facilities in the Gulf could potentially be repurposed for offshore wind use (*e.g.*, Gulf ports are equipped to serve larger construction vessels). Additionally, the existing supply chain and logistical construction expertise (*e.g.*, Outer Continental Shelf ["OCS"] surveys, structure development) can be used to efficiently construct offshore structures and to reduce the environmental impacts

⁵ Offshore Wind in Louisiana, SEWC, <u>http://www.sewind.org/images/fact_sheets/LaFactSheet_Final.pdf</u> (last visited Mar. 22, 2023); Louisiana Climate Action Plan (Feb. 1, 2022), available at <u>https://gov.louisiana.gov/assets/docs/CCI-Task-force/CAP/Climate Action Plan FINAL 3.pdf.</u>

⁶ FRONTIER GROUP & ENVIRONMENT AMERICA, OFFSHORE WIND FOR AMERICA, THE PROMISE AND POTENTIAL OF CLEAN ENERGY OFF OUR COASTS (2021), <u>https://publicinterestnetwork.org/wpcontent/uploads/2021/03/TX-Offshore-Wind-Web.pdf</u>. ⁷ Two NREL Studies Find Gulf of Mexico Well Positioned for Offshore Wind Development, NREL (May 6, 2020),

⁷ Two NREL Studies Find Gulf of Mexico Well Positioned for Offshore Wind Development, NREL (May 6, 2020), https://www.nrel.gov/news/program/2020/studies-find-gulf-of-mexico-well-positioned-for-offshore-winddevelopment.html.

⁸ Exec. Order No. 14,057, 86 FR 70935 (2021), available at:

https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobsthrough-federal-sustainability (significantly, the EO instructs agencies to "achieve 100 percent carbon pollution-free electricity by 2030, including 50 percent on a 24/7 basis" and "reduce Scope 1 and Scope 2 greenhouse gas emissions by 65 percent from 2008 levels by 2030.").

⁹ For Texas, see https://www.washingtonpost.com/weather/2021/09/03/climate-change-arctic-texas-cold/; for Louisiana, 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.

¹⁰ 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.

of such construction. This existing expertise can provide developers with increased certainty during each stage of the offshore wind development process.¹¹

The Gulf can support additional leasing due to the demand for green hydrogen in the area. The U.S. Department of Energy ("DOE") noted in its recent report¹² that the green hydrogen market is on the cusp of rapid expansion, facilitated by the Infrastructure Investment and Jobs Act Regional Hydrogen Hub funding, available tax credits under the Inflation Reduction Act (IRA), and private and public decarbonization goals. Indeed, the potential production of green hydrogen in the U.S. is 50 million metric tons per year by 2050, which could result in meeting significant decarbonization goals.¹³ Importantly, pairing green hydrogen production with clean energy sources such as offshore wind will ensure that this production qualifies for the tax credits outlined in the IRA.

The Gulf is uniquely situated to facilitate and benefit from green hydrogen development and production. The region currently has a well-established hydrogen market; the region produces 50% of the country's hydrogen, and Louisiana alone consumes 90% of the country's gray hydrogen.¹⁴ The region also has extensive and well-developed hydrogen infrastructure with 48 hydrogen plants¹⁵ and over 1,600 miles of pipelines already in use for hydrogen transport,¹⁶ which could be readily converted to green hydrogen use.

Finally, the Louisiana Climate Action Plan calls for reductions in GHG emissions by switching to fuel sources like green hydrogen.¹⁷ Louisiana consumes 30% of industrial hydrogen in the United States and is one of the few states where industry is the largest contributor to pollution.¹⁸ A renewable source of hydrogen could help industry reduce emissions and reduce exposure to Louisiana residents.

¹¹ For more information, see ACP comments on Draft Wind Energy Areas in the Gulf of Mexico, available at: https://www.regulations.gov/comment/BOEM-2021-0092-0121.

¹² PATHWAYS TO COMMERCIAL LIFTOFF: CLEAN HYDROGEN, DOE 1 (2023) ("Pathways"), https://liftoff.energy.gov/wp-content/uploads/2023/03/20230320-Liftoff-Clean-H2-vPUB.pdf.

¹³ Pathways at 1.

¹⁴ BUILDING THE GULF COAST CLEAN HYDROGEN MARKET, ENERGY FUTURE INITIATIVE (2022), https://energyfuturesinitiative.org/reports/building-the-gulf-coast-clean-hydrogen-market/.; Tim Ferry, Green hydrogen could fuel Gulf of Mexico wind build as 'logical next step' in US offshore: Aegir, RECHARGENEWS (Jan 6, 2023), https://www.rechargenews.com/energy-transition/green-hydrogen-could-fuel-gulf-of-mexico-wind-buildas-logical-next-step-in-us-offshore-aegir/2-1-1384110.

¹⁵ Laura Morton & Aubrey Margason, Offshore Wind and Green Hydrogen: What Opportunities Lie Ahead, PERKINSCOIE (Mar. 23, 2023), https://www.perkinscoie.com/en/news-insights/offshore-wind-and-greenhydrogen-what-opportunities-lie-ahead.html

¹⁶ Building the Gulf Clean Hydrogen Market, *supra* note 30.

¹⁷ Gov. Edward Celebrates First Year of Statewide Climate Action, OFF. GOVERNOR (Feb 01, 2023), https://gov.louisiana.gov/index.cfm/newsroom/detail/3973#:~:text=%2475%20million%20in%20federal%20and%2 Ostate%20dollars%20for,a%20comprehensive%20clean%20hydrogen%20energy%20hub%20in%20Louisiana. ¹⁸ Louisiana Climate Action Plan, *supra* note 18.

III. <u>Response to questions for stakeholders</u>

In the PSN, BOEM seeks feedback from stakeholders on several issues. Below, ACP provides responses to questions on bidding credits, prescribed layouts, and the removal of limits on the number of lease areas per bidder.

a. Bidding credits.

In the PSN, BOEM seeks feedback on bidding credits for workforce training or supply chain development and for a fisheries compensatory mitigation fund. Broadly speaking ACP strongly supports the use of bidding credits as part of a multi-factor auction, and, more specifically for workforce training or supply chain development and a regional fisheries compensation fund.

i. Bidding credit for work force training

BOEM proposes to allow a bidder to receive a credit of 17% credit in exchange for a commitment to make a "qualifying monetary contribution, in the same amount as the bidding credit received, to programs or initiatives that support workforce training programs for the U.S. offshore wind industry or development of a U.S. domestic supply chain for the offshore wind industry, or both." ACP supports the use of this bidding credit to ensure the creation of a strong domestic work force and domestic supply chain, both of which will be key to the success of the offshore wind industry.

ii. Bidding credit for regional fisheries compensatory mitigation fund.

BOEM proposes to allow a bidder to receive a credit of 8 % of its bid in exchange for a commitment to establish and contribute to a fisheries compensatory mitigation fund, or to contribute to a similar existing fund. ACP supports adoption of a bidding credit for the establishment of a regional compensation fund, and has advocated for, and are collaborating with states and fisheries groups to establish one in the East Coast.¹⁹ Below ACP provides several recommendations related both to the establishment of the fund, and to the bidding credits.

First, in contrast to the East Coast, the process for establishing a regional fisheries compensatory mitigation fund in the Gulf of Mexico has yet to start. As a result, much remains to be accomplished, including engagement with lessees, states, federal agencies, and fishing industries, to determine how the fund could work best given the unique characteristics of the Gulf region. Therefore, BOEM should avoid being too prescriptive in finalizing the bidding credit. While ACP generally agrees that gear loss and income loss should be prioritized in a compensation regime, fishers may have other priorities and needs. If flexibility is built into the bidding credit language, the fund could be used for other purposes such as gear upgrades and support for coastal communities. Rather than mandating that gear loss or damage and income loss be prioritized, Gulf fishers should be able to use the funds for whatever measure(s) are most useful at the time the fund is implemented.

¹⁹ BOEM Regional Fisheries Compensation Fund RFI, available at: https://offshorewindpower.org/wp-content/uploads/2022/12/FisheriesCompensationFund_RFI_FINAL.pdf.

Second, because of differences in timing of development, the fisheries compensation fund bidding credit in the Gulf may need to function differently from a similar credit for upcoming 2024 lease sales on the East Coast (Central Atlantic and Gulf of Maine). Development is already underway on the East Coast, so the need for a regional fund is more immediate than in the Gulf, where construction on leases is not likely to start for several years. Therefore, in contrast to the East Coast sale, the bidding credit for the GOM sale can be either for contributions to a future third-party regional compensation fund or to assist with the startup costs of the fund.

Third, BOEM should ensure that the bidding credit language allows for the flexibility for proceeds from each bidding credit to be pooled into a fund that covers the entire Gulf region. This would allow a regional fund to create administrative efficiencies that relieve burdens from federal and state regulators, lessees, and fishermen; and would make it easier to incorporate bidding credits from future Gulf lease sales.

Finally, ACP strongly encourages BOEM to increase the bidding for fisheries compensation from 8% to 13%. An increase in credit is essential to ensure that the fund is established with sufficient resources to cover claims.

b. Prescribed layouts.

In the PSN, BOEM seeks comment on whether BOEM should consider prescribing uniform and aligned turbine layouts in the Lease Area. Prescribed layouts could negatively impact the ability of lessees to maximize wind resource yield, which would in turn lead to higher offtake costs to customers. First, prescribed layouts would prevent developers from creatively responding and adapting to low wind speeds and existing seabed infrastructure. Second, prescribed layouts could result in low performing turbines because of wake effects. Finaly, prescribed layouts do not account for hurricane resilient rotor technology that may call for different optimal layouts, yet to be determined. As such, BOEM should not prescribe turbine layouts in the Lease Area.

c. <u>Removal of limits on the number of lease areas per bidder</u>

In the PSN, BOEM is seeking feedback on its proposal to allow each qualified entity to bid on and potentially acquire as many Lease Areas as are offered in the GOMW-2 sale. ACP encourages BOEM to only allow one lease per bidder as this format is preferable for two primary reasons. First, it will be simpler to administer a one- lease per bidder auction, both for BOEM and for auction participants, than holding simultaneous auctions for both lease areas. Second, this approach will result in the highest number of bidders interacting simultaneously, striking the appropriate balance between competition, diversification of lease holders, and fairness to ratepayers.

d. Production of Hydrogen on lease.

In the PSN, BOEM is seeking feedback on the revisions to the lease to explicitly include the production of hydrogen or other energy products using wind turbine generators on the lease. ACP supports BOEM's work to include this language to fully accommodate hydrogen production. As noted above, the Gulf region represents a significant opportunity for the deployment of green

hydrogen. Facilitating this deployment will not only be key to decarbonizing the economy, but it will also help kickstart the green hydrogen industry which promises to drive demand for further investment in clean power and create tens of thousands of new domestic jobs.²⁰

IV. <u>Other Issues</u>

Beyond the specific feedback requested by BOEM, below ACP provides recommendations related to Department of Defense (DOD) mitigation measures, potential future restrictions to ensure navigation safety, the estimated capacity factor, and the definition of affiliate.

a. DOD mitigation measures.

In the PSN, BOEM discusses a number of potential future restrictions to mitigate potential conflicts with DOD activities. ACP appreciates that BOEM works with DoD throughout the leasing process to ensure that DoD activities and offshore wind development are not in conflict. In order to reduce uncertainty for developers, ACP requests clarity on certain measures. First, BOEM notes that lessees may need to curtail wind turbine operations for national security or defense purposes as described in the lease. Curtailment can have significant impacts to the financial viability of projects. The FSN should clarify the specific conditions under which curtailment would be required, how often curtailment would be required, and how much notice would be provided before curtailment is required. In short, the FSN should further clarify how many days or weeks in advance the DoD will begin to coordinate curtailment and it should clarify what constitutes curtailment. This information is necessary as it has implications for project economic viability and will impact the business decisions of potential lessees. BOEM and DoD should coordinate closely with leases on any curtailment timeframes to ensure technical feasibility and safety.

Another noted project approval condition is that a "lessee will contribute funds to the DOD in the amount of no less than \$80,000 toward the cost of DOD's execution of the RAM procedures for each radar system effected." The FSN should clarify the estimated number of radar systems effected per lease.

b. <u>Potential future restrictions to ensure navigation safety.</u>

In the PSN, BOEM states that "Potential bidders should note that portions of the GOM may not be available for future development (*i.e.*, installation of wind energy facilities) because of navigational safety concerns. The USCG recommends that BOEM add a 2-nautical mile (3704 meter) buffer around the shipping fairways. BOEM may require additional mitigation measures at the COP stage when the lessee's site-specific navigational safety risk assessment (NSRA) is available to inform BOEM's decision-making." NSRAs are site-specific risk assessments that allow developers to work with local stakeholders to ensure mitigation measures are appropriate.

²⁰ Energy Innovation, *Smart Design Of 45V Hydrogen Production Tax Credit Will Reduce Emissions and Grow the Industry* at 9-10 (discussing the numerous industrial applications for green hydrogen in otherwise difficult to decarbonize sectors).

This process includes consideration of navigational risks to all types of vessels in the area. It allows safety measures and mitigation be tailored to the needs of the USCG, vessel operators in the area and developers. Buffers between vessel transit and wind turbine should not be one-size-fits all but should set a threshold that may be extended if determined as necessary during the COP NSRA. Any analysis of navigation safety and any additional proposed mitigation measures should also take into account any reductions in sea space made by the USCG Port Access Route Study: Approaches to Galveston Bay and Sabine Pass, Texas and Calcasieu Pass, Louisiana. ACP encourages BOEM to provide information and clarity in the FSN on the types of additional mitigation measures that may be required and the rationale for their potential inclusion.

c. Estimated Capacity Factor.

In the PSN, BOEM proposes to set the capacity factor at 0.3 (*i.e.*, 30 percent) for the year in which the commercial operations date occurs and for the first 6 years of commercial operations on the lease. BOEM should amend its estimated capacity factor for the upcoming leases to be consistent with existing data regarding wind speed and energy generation potential in the Gulf. During the wind auction seminar in March, BOEM used 0.4 (40%) as the projected capacity factor for the Galveston and Lake Charles lease areas.²¹ However, current data from the Global Wind Atlas, Vortex, and NREL have found wind speeds of less than 8 meters per second at 150 meters above surface level.²² An internal analysis by one of our members has found that these speeds could, at maximum, result in a 40% to 42% *gross* capacity factor (only 32% to 35% net capacity), assuming Class I wind turbine generators. As the capacity factor will be used to calculate the annual operating fee for the first 6 years of the Gulf leases, this overestimation could result in auction winners overpaying for this time period. Therefore, BEOM should instead use the capacity factor recorded during the first year (*i.e.*, metered capacity factor) because it will ensure a more accurate representation of the true capacity factor for these lease areas.

d. Definition of affiliate.

The PSN notes that, among other things, BOEM considers bidding entities to be affiliated if, with respect to any lease(s) offered in this auction, they have entered into an agreement prior to the auction regarding the shared ownership, operation, or day-to-day management of such lease. BOEM should refine its definition of "affiliated" for the Gulf's pending lease sales.

BOEM's affiliate definition has consistently focused on a control test, in which an affiliate relationship is created where two entities have common ownership. However, affiliates who "have entered into an agreement prior to the auction regarding the shared ownership, operation, or day-to-day management of such lease" may not always be affiliated under this control test. Therefore, BOEM should remove this provision from the definition of "affiliate." Instead, BOEM should require disclosure of these agreements by a date specified in the FSN and exclude from the auction any person who has entered into a joint bidding agreement(s) or future share investment agreement(s) that would cause the person to be affiliated with the initial owner(s) of more than the specified number of leases offered for sale.

²¹ https://www.boem.gov/renewable-energy/state-activities/wind-auction-seminar-march-202

²² Global Wind Atlas, https://globalwindatlas.info/en/area/United%20States/Texas (last visited Apr. 5, 2023); *Vortex,* https://interface.vortexfdc.com/ (last visited Apr. 5, 2023); *U.S. Wind Speed at 160-Meter above Surface Level,* NREL (Sept. 2017), https://www.nrel.gov/gis/assets/images/wtk-160m-2017-01.jpg.

This approach would address concerns about potential "circumvention" of the one-lease-per-bidder rule and ensure robust competition. At the same time, it would acknowledge that as a rapidly growing and evolving industry that requires significant capital to bring projects online, offshore wind developers in the United States rely on consortia and partnerships to efficiently and effectively move projects from the lease stage to full operations. Often, these partnerships are a convenience for individual projects, so one developer may have a network of different partnerships as their portfolio grows. This mirrors the structure in more sophisticated markets and serves the rate-payer interests by diversifying risk. BOEM should take care not to inadvertently constrain joint bidding and the formation of such joint ventures through development of its auction rules, both for this forthcoming lease sale and in the future.

e. Communications Plans and Progress Reports

Experience in other regions shows that 120 days after lease execution is not sufficient to draft comprehensive communications plans for fisheries, Tribes, and government agencies. In addition to drafting the plans, leaseholders must host meetings, respond to feedback, and often coordinate with other leaseholders. ACP appreciates BOEM's willingness to grant extensions for final plan submission but requests that BOEM extend the initial 120-day requirement to reduce burdens for agency staff, leaseholders, Tribes, and stakeholders. ACP requests that fisheries and agency communications plans be submitted within 180 days after lease execution and that Native American Tribes Communications Plans be submitted within one year after lease execution.

V. <u>Conclusion</u>

ACP appreciates the opportunity to provide comments on this lease sale. We look forward to working with BOEM as it moves forward with this process.

Anne Reynolds

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