



March 7, 2023

MAREC Action comments on SB781/ HB793- SUPPORT

Chair Feldman, Vice-Chair Kagan, Members of the Senate Education, Energy, and the Environment Committee,

MAREC Action (informally, “Mid-Atlantic Renewable Energy Coalition”) **strongly supports SB781/HB793 (“POWER ACT”) and encourages its passage.** MAREC Action is a coalition of over 40 utility-scale solar, wind, and energy storage developers and manufacturers dedicated to the growth and development of renewable energy in Maryland and across the PJM grid region. We represent offshore wind developers actively considering expanding investments in Maryland.

Our industry appreciates your serious consideration of the POWER Act. We believe, if passed, this legislation will establish the foundations for a sustained and nation-leading offshore wind energy sector in Maryland. **The POWER Act provides a critical signal to the businesses in our membership that Maryland wants to lead on clean energy development, and we welcome the opportunities created by this legislation to invest in Maryland, its workforce, and its communities.**

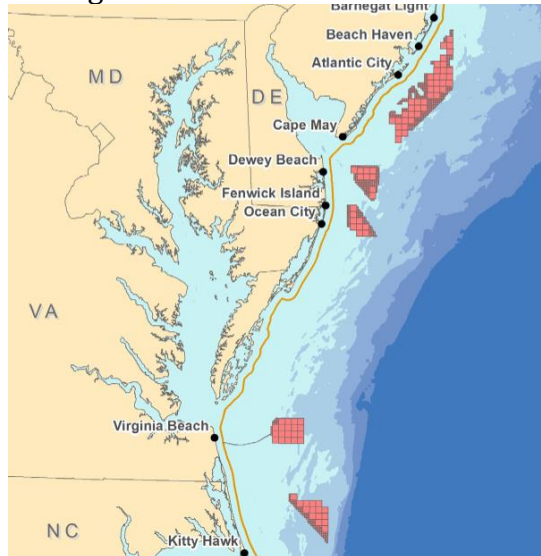
The POWER Act accomplishes three interrelated objectives that are each critical to the future of Maryland’s decarbonization and economic development goals. The bill:

1. Sets a high-level offshore wind procurement target of 8,500 megawatts (MW), in line with what Maryland needs to decarbonize the economy and what neighboring states have established.
2. Prudently and proactively starts evaluating transmission grid upgrade and expansion options necessary for a clean energy future. New transmission lines can take 10 years to plan and prepare, there’s no time to waste, and an uncoordinated approach will cost consumers.
3. Invests in and maximizes energy production from existing offshore wind lease areas off the coast of Maryland, sustaining and growing Maryland offshore wind jobs without impacting ratepayers.

Maryland’s future ability to decarbonize the economy could hinge on the General Assembly’s passage of the POWER Act. The Bureau of Ocean Energy Management (BOEM), which is a subdivision of the U.S. Department of the Interior,

manages offshore wind leasing in federal waters of the United States. To date, BOEM has designated two areas closest to Maryland that are sufficient to sustain approximately 3,500 MW of offshore wind. These are the leases held by US Wind and Orsted, seen in Figure 1 below, in which approximately 2,000 MW of capacity are already underway through OREC agreements with the state of Maryland. This leaves opportunity for approximately 1,500 MW of future development in these areas, which would be procured directly by Department of General Services through a long-term contract under the POWER Act.

FIGURE 1: Existing offshore wind lease areas in the Mid-Atlantic



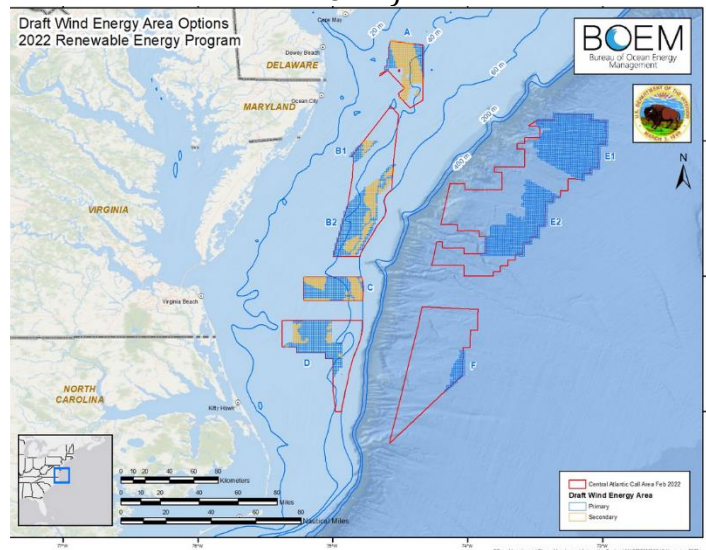
Maryland will need substantially more than 3,500 MW of offshore wind generation to decarbonize, given that fossil fuels represented 67.9 percent of the total installed capacity in Maryland in 2021 (12,416 MW) and much of the state’s electricity is currently imported from out of state.¹ **The 8,500 MW of offshore wind capacity targeted by the POWER Act would produce enough clean electricity each year to supply roughly 2 million homes (close to all the homes in Maryland).** These figures do not factor in year-over-year demand growth and widespread building/transportation electrification, so Maryland will need to continue expanding many forms of carbon-free resources.

In 2022, BOEM announced plans to lease additional offshore wind areas in the Central Atlantic, including additional areas that can help Maryland achieve its decarbonization goals. Initial draft areas are available in Figure 2, though these are

¹ Page 8, <https://www.pjm.com/-/media/library/reports-notice/state-specific-reports/2021/2021-maryland-dc-state-infrastructure-report.ashx>

under revision. BOEM is required to hold a robust stakeholder process, including feedback from federal agencies, state officials, industry, ocean users, environmental organizations, and more. BOEM responds to feedback and excludes areas for offshore wind development with substantial use conflicts—however, their assessment of lease areas factors in relative need and BOEM will want to ensure demand exists to build offshore wind.

FIGURE 2: Draft lease areas in the Central Atlantic (subject to future revision by BOEM).²



The result of BOEM’s stakeholder process will be final lease area designations and an auction in coming months that defines the scope of potential offshore wind development in our region.

Maryland needs to make its voice heard through the POWER Act, and BOEM’s leadership has explicitly requested input from the states. There is a real risk that BOEM fails to lease adequate acreage for Maryland and its neighbors to reach their goals.

To give you a sense of scale, ALL of the blue and gold areas in Figure 2 would be necessary to accommodate regional offshore wind goals (including expanded goals under the POWER Act). Table 1 below illustrates Maryland’s relatively small existing goal for offshore wind in comparison to neighboring New Jersey and Virginia. The POWER Act would establish a target of 8,500 MW of offshore wind, competitively positioned ahead of Virginia and behind New Jersey. BOEM would assess Maryland’s new goal alongside its neighbors and competing ocean uses to assign adequate

² https://www.boem.gov/sites/default/files/images/draft_wea_primary_secondary3.jpg



acreage for offshore wind development. It is unlikely that the federal government will pursue future leasing in our region beyond their current initiative.

Table 1: Brattle Group³
TABLE 1: OFFSHORE WIND TARGETS AND LONG-TERM NEEDS

State	Already Procured (GW)	Current Goals		Projected 2050 Needs (GW)
		(GW)	Year	
ISO-NE	5	8		42-44
Massachusetts	3.2	5.6	2027	23
Connecticut	1.2	2	2030	9-11
Rhode Island	0.4	1-1.4	2035	5
Maine	0.01			5
NYISO	4.4	9		14-25
New York	4.4	9	2035	14-25
PJM	8.4	18.2		33-58
New Jersey	3.8	11	2040	11-26
Maryland	2	2	2030	2
Virginia	2.7	5.2	2034	20-30

In addition to offshore wind goal setting, Maryland needs to ensure it is planning today for the transmission grid of the future. **The transmission infrastructure in Maryland and the PJM region are not prepared for large-scale deployment of renewable energy, including offshore wind.** Existing offshore wind projects are already running into challenges finding cable landings and points of interconnection with the broader grid. Adding even more offshore wind will be physically impossible without proactive transmission planning to prepare Maryland for the needs of a decarbonized economy.

The POWER Act is an infrastructure bill first and foremost, representing a prudent investment in Maryland’s economic security as we face a future of climate uncertainty. Specifically, the bill orders the Maryland PSC to work with PJM and MEA to evaluate upgrades to existing transmission infrastructure and potential expansion of the grid (both onshore and offshore). After an analysis period, the PSC would be required to ask PJM to open a competitive solicitation for transmission proposals that maximize value for Maryland ratepayers and enable the buildout of 8,500 MW of offshore wind. The overall 8,500 MW target is important to give PJM something to aim for in their analysis.

³ https://www.brattle.com/wp-content/uploads/2023/01/Brattle-OSW-Transmission-Report_Jan-24-2023.pdf



After gathering proposals, the PSC will evaluate if one or more proposals make sense for Maryland to authorize. The PSC can also opt not to authorize a proposal, if circumstances change, as long as they provide a clear rationale and alternatives to meet Maryland’s goals. **The authorization of a transmission procurement is essential, both to ensure PJM factors Maryland’s policy goals into broader transmission planning AND to demonstrate to the offshore wind industry that Maryland is serious about accomplishing its offshore wind goal. Given the very real transmission bottlenecks that exist, an expanded offshore wind target without a transmission procurement would be unrealistic.**

The business-as-usual transmission planning processes at PJM primarily weighs immediate reliability needs based on the legacy power generation technologies. FERC Order 1000, issued in 2010, established that grid operators like PJM must include public policy considerations in their transmission planning process.

“Local and regional transmission planning processes must consider transmission needs driven by public policy requirements established by state or federal laws or regulations. Each public utility transmission provider must establish procedures to identify transmission needs driven by public policy requirements and evaluate proposed solutions to those transmission needs.” – Federal Energy Regulatory Commission⁴

Order 1000 authority is only exercised if states indicate their public policy requirements to the grid operator—PJM in Maryland’s case. While Maryland has established a zero emissions target for the 2040s through the Climate Solutions Now Act, the state must provide more specificity concerning future clean energy goals for PJM to take action through their transmission planning process. Therefore, the explicit offshore wind and transmission goals of the POWER Act are necessary. Suzanne Glatz, Director for Strategic Initiatives & Interregional Planning at PJM Interconnection, said as much during a recent webinar release of an offshore wind transmission planning report, “While PJM does not prioritize among resources, states and local authorities do have that role, and so to the extent that states do want to do [plan transmission for specific resources], PJM does stand ready to work with one state or multiple states.”⁵

⁴ <https://www.ferc.gov/electric-transmission/order-no-1000-transmission-planning-and-cost-allocation>

⁵ Timestamp 46:50, <https://vimeo.com/792350606/5ddc30dabd>



This brand-new report by Brattle Group, a respected global expert in electric system analysis, highlighted the need for proactive transmission planning.⁶ Key findings include:

- “Proactive and holistic planning for long-term transmission needs offers significant benefits, but unless these planning efforts are started now, more attractive near-term transmission solutions will not be identified and the most effective long-term grid development pathways may be foreclosed.”
- “While the most ambitious state and federal clean energy goals will not have to be attained until 2040 or 2050, we project that starting proactive planning for these long-term offshore wind generation needs now likely will save U.S. consumers at least \$20 billion and reduce environmental and community impacts by 50%.”
- “New Jersey’s recently concluded proactive planning effort with PJM for interconnecting an incremental 6,400 MW of OSW generation resulted in cost savings of over \$900 million (a 13% reduction of total OSW transmission-related costs) by reducing the cost of upgrades to the existing onshore grid by approximately two thirds.”
- “A preliminary study by PJM evaluating the grid upgrades necessary to interconnect 15,000 MW of OSW generation along with 60,000 MW of land-based renewable resources also shows the benefits of this type of proactive planning when applied to address the entire region’s clean-energy and reliability needs: it would reduce the cost of necessary upgrades to the existing grid by over 80% compared to PJM’s existing generation interconnection process.”

If Maryland is going to meet 2031 and 2045 decarbonization goals, it needs to start planning today. **New transmission facilities take at least a decade to plan, permit, and construct**—offshore wind projects will require some additional time on top of that. As the Brattle report illustrates, **there are substantial benefits to a proactive transmission planning approach, including cost savings for consumers, and minimized environmental impacts due to fewer cable landings.**

Finally, the POWER Act proposes a new procurement mechanism that would avoid ratepayer impacts by incentivizing offshore wind from Maryland’s General Fund. The legislation would empower the Maryland Department of General Services to procure up to 8 million megawatt hours (MWh) of offshore wind energy and

⁶ https://www.brattle.com/wp-content/uploads/2023/01/Brattle-OSW-Transmission-Report_Jan-24-2023.pdf



Renewable Energy Credits (RECs) each year through a competitively bid long-term contract with one or more offshore wind projects.

A procurement of this size would more than satisfy Maryland’s own government non-renewable energy usage (approximately 1.2 million MWh)⁷ and would ensure that the existing offshore wind lease areas off the coast of Maryland are maximized. We estimate that somewhere between 1,000 and 1,500 MW of offshore wind capacity could be built in the remaining lease areas off the coast of Maryland. To provide a sense of scale to this procurement, we estimate that 1,500 MW of offshore wind would supply about 5,256,000 MWh each year at 40 percent capacity factor. This is a conservative estimate on the low-end of offshore wind capacity factors, which can exceed 50 percent.

Any energy and RECs procured by DGS above the state government’s electricity consumption would be offered for sale on the wholesale market. The benefits of this provision are significant: 1. The Maryland government would secure long-term stable pricing for clean energy, 2. The State General Fund would either accrue a savings or pay the difference between offshore wind and wholesale electricity rates, depending on what happens to electricity prices over the term of the contract. Either way, it would ensure more offshore wind is built. 3. The contract between the offshore wind project and DGS would facilitate financing for additional offshore wind capacity near Maryland, spurring new job creation and helping to sustain demand for manufacturing—including Sparrow’s Point Steel—that are being developed to support Maryland’s existing offshore wind projects.

The DGS procurement of offshore wind is a critical bridge between Maryland’s existing 2,000 MW OREC procurements for offshore wind, and the long-term goal of 8,500 MW. This innovative mechanism will ensure that Maryland’s offshore wind supply chain keeps growing while federal permits and transmission planning proceed. While this concept may be new to the state, long-term bilateral contracts for clean energy are common among Fortune 500 businesses.

As a Maryland resident, I am proud to advocate for this bill, and greatly appreciate the thoughtful approach of its sponsors. Maryland will never again have such a profound opportunity to set the stage for a robust offshore wind industry to deliver family-sustaining careers in clean energy and billions of dollars in private investment. MAREC Action respectfully urges you to support the POWER Act at this critical time.

⁷ <https://dgs.maryland.gov/Pages/Energy/Purchasing.aspx>



Best regards,

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