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By E-Mail

Chair Aaron Michlewitz House Committee on Ways and Means Massachusetts House of Representatives 24 Beacon Street, Room 243 Boston, MA 02133

Subject: H.4348, An Act Advancing Offshore Wind and Clean Energy

Chairperson Michlewitz:

On behalf of RENEW Northeast, I offer my support for your committee's approval of H.4348, *An Act advancing offshore wind and clean energy*. Offshore wind and energy storage development are pivotal for the Commonwealth to meet its greenhouse gas reduction obligations, maintain power system reliability, and realize significant in-state economic benefits. Enactment of this bill would represent another in a string of legislative triumphs, most recent of which was last year's enactment of Chapter 8 of the Acts of 2021, *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy* (Roadmap Act).

RENEW is an association uniting environmental advocates and developers and operators of the region's largest clean energy projects, which include hydro, offshore wind, land-based wind, solar and energy storage. RENEW's mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in New England from the region's abundant renewable energy resources.¹

RENEW offers this feedback with the goal of maximizing the benefits that can be achieved through this legislation. The recommendations in this letter seek to enable responsible development of offshore wind and energy storage facilities on a schedule and at a scale to meet the Commonwealth's environmental and economic development objectives.

¹ The positions in this letter represent the views of RENEW and not necessarily those of any particular member of RENEW.

I. Offshore Wind: Establish a Second Phase of Procurements

Under Section 83C(b), the Commonwealth is required to procure 5,600 megawatts of offshore wind by June 20, 2027. While the 3,200 megawatts completed to date have kickstarted development, adding an additional 4,400 megawatts of procurement authority would see Massachusetts realize one-third of President Biden's 30-gigawatt offshore wind goal as has been observed by Speaker Mariano. A 10-gigawatt long-term offshore wind requirement will:

- Send a signal to developers to invest at a pace that will help meet the Roadmap Act's interim requirement of 50 percent reductions in greenhouse gas emissions below 1990 levels by 2030;
- Establish a trajectory for Massachusetts to realize the 15 to 20 gigawatts of offshore wind needed under the pathways forecast in the Massachusetts 2050 Decarbonization Roadmap Report;² and
- Align with the magnitude of the economic development measures being proposed in other sections of the bill and recently enacted in Chapter 102 of the Acts of 202, *An Act relative to immediate COVID-19 recovery needs*.

For this reason, RENEW strongly recommends the General Court establish a second phase for offshore wind procurement with a schedule to provide certainty to developers and foster an in-state supply chain that will continue solicitations to 2030 and coincides with the expected arrival by the middle of this decade of new lease areas accessible to the North Shore and Boston.

Offshore wind deployment could also be facilitated by empowering Massachusetts communities to participate in offshore wind projects through purchases of this locally sourced power. While H.4348 includes a preference for offshore wind projects that partner with a municipal aggregator, additional language is needed to facilitate this goal by enabling Massachusetts communities that wish to participate to contract for ten years or more for power in a way that supports financing of additional renewable generation. RENEW supports amendment language being offered by a coalition that will allow municipal and non-profit aggregators the ability to enter long-term contracts with offshore wind developers that ensure they are financeable for developers.³

² Exec. Office of Energy and Envtl. Affairs, *Massachusetts 2050 Decarbonization Roadmap* 57 (Dec. 2020), https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download.

³ The Massachusetts Clean Energy Center (MassCEC) would be given the ability to work with these aggregators to provide the necessary financial backstop a developer would need to secure their own financing and ultimately develop additional wind turbines. This might mean MassCEC supporting a Letter of Credit or similar financial mechanism to backstop a long-term contract.

II. Offshore Wind: Eliminate the Declining Price Requirement

Section 83C requires that the price in subsequent procurements of offshore wind be lower than the cost of offshore wind generation procured under any prior solicitation (the "declining price requirement"). While the intent of the declining price requirement was to protect consumers by ensuring that the cost of offshore wind would fall, competition and technological innovation have been responsible for today's low prices and not the falling price cap. The Section 83C winning prices over the years have almost been at parity with land-based wind and solar resources and even the cost of new natural gas generation. This demonstrates that the declining price requirement has proven to be unnecessary to protect the interests of consumers. Therefore, RENEW respectfully requests that the committee eliminate the declining price requirement in favor of competition.

Ratepayer savings could also be gained starting with the next Section 83C solicitation by removing the ability of the electric distribution companies to receive a fixed payment for serving as counterparties to offshore wind contracts. While the bill does not eliminate remuneration, its improved approach will benefit consumers by requiring the electric distribution companies (EDCs) to demonstrate incremental risk to justify the remuneration. It also lowers the cap on remuneration to 2.5 percent from the 2.75 percent provided by current law.

The bill in revising Section 83C(a) appears to modify the declining price requiring by excluding "associated transmission costs" from being under the cap, though the wording is ambiguous. RENEW welcomes additional information on the legislative intent of this provision. Even if the next RFP excludes transmission costs, it will follow the recently concluded procurement in which bidders did not offer separate transmission costs. Thus, without a basis for comparison and without a clear mechanism for determining "associated transmission costs," requiring future projects to separate transmission costs as a basis for determining competitiveness would not work.

Elimination of the declining price requirement will also benefit RENEW's proposed second phase of offshore wind procurements, as described above, for when floating offshore wind projects will be ready to compete. In the Gulf of Maine, water depths range between 60 and 200 meters, which make it ill-suited for today's fixed-bottom turbine foundations.⁴ Exclusion of a declining price requirement in the second phase will accommodate the newer floating technology that has higher costs than today's fixed-bottom approach but is expected to decline significantly during this decade.⁵

⁴ United States Department of Energy, *Offshore Wind Market Report*, 48 (2021 ed.), https://www.energy.gov/sites/default/files/2021-

^{08/}Offshore%20Wind%20Market%20Report%202021%20Edition_Final.pdf

⁵ *Id.* at 81. (Floating offshore wind LCOE is estimated to decline from approximately \$160/MWh (2020) to \$60–\$105/MWh (2030).).

III. Offshore Wind: Transmission Upgrades Are Needed Now to Meet Future Demand

RENEW strongly supports the requirement in Section 14 of the bill for the Department of Energy Resources (DOER) to issue by June 1, 2022, a competitive solicitation for transmission to deliver offshore wind energy. With transmission projects having long lead-times for development, a 2022 deadline is essential. New England does not have the luxury of time before upgrades to the transmission system are needed to meet its decarbonization requirements. RENEW also endorses the provisions in Section 14(b) in the bill that require transmission proposals incorporate multiple values like environmental quality and justice, economic development, and market efficiency in addition to reliability.

RENEW has several recommendations for implementation of Section 14. If DOER were to proceed with one or multiple transmission solutions, the bill should require measures in transmission agreements that address project-on-project risks. This might include reasonable financial assurance requirements on transmission developers and other risk reduction measures. DOER should also be required to ensure any transmission solution selected has technology that is competition friendly including compatibility with a range of interconnecting generator technologies while preserving flexibility to accommodate advances in technology.

Existing renewable energy generators in Northern New England have for years experienced higher levels of congestion and curtailment than those in the rest of the region due to transmission limitations. Similar constraints are now appearing to the south for offshore wind. ISO New England (ISO) has concluded that 5,800 megawatts of offshore wind can be interconnected along the Southern New England coast before significant upgrades to the transmission network are needed. However, significant local upgrades are already required, as evidenced by ISO's ongoing Cape Cod Cluster study and the increasing upgrade costs for individual projects. Contracts are already in place for about half of the 5,800 megawatts of offshore wind connections to southeast New England that the ISO has determined would trigger major upgrades while offshore wind procurements that have concluded or are already planned will exceed 5,800 megawatts.

A transmission procurement that considers, as stated in the bill, the "total amount of transmission needed to achieve Massachusetts' and other states' offshore wind and decarbonization goals" is a better way to conduct transmission planning and development for lowering costs, enhancing reliability, and minimizing environment effects than continuing with the current project-by-project approach. New Jersey's recent transmission procurement, for example, is designed to integrate gigawatts of offshore wind off its coast. Eliminating the inclusion of transmission costs from the declining price requirement merely reinforces that short-term approach. Even if policymakers had a fair means to determine "associated transmission costs," removing the cost cap on transmission alone would lead to inefficient development of transmission and increase consumer costs. Underutilization of scarce points of interconnection and cable routes leads to escalating transmission costs, as subsequent projects are forced to seek alternate and often more distant points of interconnection and/or more complex or longer cable corridors.

IV. Offshore Wind: Adopt Environmental and Fisheries Mitigation Plan Requirements That Can Be Adapted and Improved to Reflect Federal Obligations and Evolving Scientific Knowledge of the Marine Environment

RENEW holds that offshore wind projects must be developed with strong and reasonable protections to safeguard our coastal and marine environment and wildlife, especially vulnerable species like the endangered North Atlantic right whale. The bill's proposed revisions to Section 83C will strengthen these efforts though RENEW recommends two small modifications to minimize business risks for offshore wind developers by increasing business certainty.

The bill should be amended to clarify that developers are expected to adapt the mitigation plans at the time of federal project approval to (1) account for changes to best practices based on technological innovation and advances in scientific understanding of the marine environment, and (2) conform to federal conditions on development and operation. In Section 83C(m), developers must include environmental and fisheries mitigation plans that consist of an "explicit description of the best management practices and any on- or off-site mitigation the Applicant will employ, informed by the latest science at the time the proposal is made." While this language requires developers to submit a plan based on the latest science, finalization of mitigation measures will ultimately arise after the developer has conducted survey work and consulted with government agencies and stakeholders. To provide developers with increased business certainty, the bill should also make plain that developer updates to their mitigation plans based on these factors will not serve as a cause for state regulatory review that could jeopardize their approved PPAs.

RENEW also respectfully requests the bill be clarified in Section 83C(d)(5)(viii), to ensure that environmental and fisheries mitigation plans, while they should be a requirement, are scored on a pass/fail basis. All developers earning passing score should earn the same number of points towards the overall scoring. Otherwise, to grade each developer's plan and assign "partial credit" for a mitigation plan will make mitigation plans a competitive factor in each RFP that will stifle information sharing in the industry on important advances for mitigating environmental externalities from offshore wind facilities. If best practices and mitigation strategies are scored, instead of being shared with all developers for maximum environmental benefit, they may be reserved to create a competitive advantage. By contrast, RENEW does support scoring of the requirement in Section 83C(d)(5)(ix), which is a condition that developers make a commitment in their bids to provide financial and technical assistance to support monitoring of wildlife and habitat, as it involves easily quantifiable monetary contributions.

Concerning scoring criteria generally, RENEW requests the legislation require the EDCs to disclose the details on the weighting of all criteria. The EDCs have stated that details on criteria weighting cannot be disclosed to protect against bid manipulation.⁶ If developers see the

⁶ D.P.U. 19-45 Joint Petition for approval of a proposed timetable and method for the solicitation and execution of long-term contracts for offshore wind energy generation, 46 (May 17, 2019).

weightings, though, they will learn which criteria are considered more important by their assigned higher weightings and they will tailor their proposals to meet policy objectives.

V. Offshore Wind: Have DOER Make Bid Decisions to Minimize Conflicts of Interest

The evaluation team for the current offshore wind solicitation process consists of both DOER and the EDCs. Together, they are responsible for bid review and project selection. RENEW prefers models in which a state energy agency alone selects winning bids without an EDC decision-making role in project selection to eliminate the appearance of any conflicts of interest with several electric distribution companies' affiliates making investments in bidding projects. RENEW therefore supports legislation excluding the EDCs from the evaluation team in competitive RFPs. DOER should be the sole entity responsible for project selection while being able to *consult* with the EDCs and receive recommendations from the Attorney General's Office.

VI. Energy Storage: Create a Procurement Program for Short and Long Duration Large-Sized Energy Storage Projects to Capitalize on Their Low Costs and Capabilities

RENEW recommends a third section on energy storage be added to the bill to launch large energy storage system development and to optimize existing long duration storage located in Massachusetts. Today, while large-sized energy storage systems are the least-cost form of peaking generation resources,⁷ they lack any opportunities in Massachusetts to receive the long-term commitments for financing that are being provided to small-sized resources. Current state programs to promote energy storage limit participation to smaller project sizes, constraining the ability of the state to meet its statutory energy storage target and achieve its greenhouse gas reduction goals. RENEW recommends a new procurement program for energy storage systems and long duration energy storage systems that covers new and existing resources including development of any incremental upgrades at existing long duration storage facilities after July 1, 2021.

Massachusetts should also establish a robust energy storage requirement to match the magnitude needed to achieve its decarbonization requirements, by raising its 1,000 MWh goal to 3,000 megawatts by 2030.⁸ This update would be appropriate for Massachusetts based on its electric demand in comparison to 2030 goals recently set in neighboring states like larger New York (6,000 megawatts) and smaller Connecticut (1,000 megawatts).⁹ This stronger requirement

https://www.lazard.com/media/451882/lazards-levelized-cost-of-storage-version-70-vf.pdf

⁷ Lazard, Levelized Cost Of Storage Analysis, (LCOS 7.0) 5-6 (2021),

⁸ Massachusetts' 1,000 megawatt-hour goal, which was set in *An Act to Advance Clean Energy*, ch. 227, 2018 Mass. Acts. 9, represents only 500 megawatts of battery storage. A 150-megawatt battery that can operate for two hours produces 300 megawatt-hour system.

⁹ Just last month, New York Governor Hochul in her State of the State Address announced she was directing the Department of Public Service and New York State Energy Research and Development Authority to double the target in the state's Energy Storage Roadmap to "at least" 6,000 megawatts by 2030 from the 3,000 megawatts adopted in the 2019 New York Climate Leadership and Community Protection Act. The Connecticut General Assembly

would foster development of new energy storage systems and maximize use of existing ones at a level that can lower peak emissions according to goals set by the Roadmap Act and reduce costs arising from fossil-fueled generation units running during peak hours. Recent cold spells have shown that a quarter of the region's winter peak energy needs are typically fulfilled by old generating units fueled by coal and oil. By accelerating the switch from fossil fuels to energy storage at peak times, we can reduce emissions and improve the environment. Further, recent wholesale electricity auctions have shown that battery energy storage is among the least cost of new resource technologies – which is a win for consumers.

As for the existing language in Section 15 of the bill, RENEW supports the intent of the provision to create a wholesale distribution service rate schedule to apply to standalone energy storage systems. Language currently included in H.4348 directs the utilities to create a rate structure that appropriately accounts for both the grid costs and benefits of batteries. However, this language should be further clarified to recognize that the appropriate rate structure for battery systems may fall under the jurisdiction of either the Massachusetts Department of Public Utilities or the Federal Energy Regulatory Commission. Standalone energy storage can provide a range of valuable services when connected to either the transmission or distribution systems. Under current rules, distribution-connected batteries pay retail rates when they charge from the grid, but only earn wholesale prices when they sell energy back onto the grid. This is because charging load is incorrectly treated like traditional consumption, not as a sale for resale with flexible charging and discharging times. Applying retail rates to distribution-connected batteries is inappropriate, and cost-prohibitive to the development of new energy storage systems.

VII. Conclusion

Thank you for your consideration of RENEW's positions on H.4348.

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Francis Pullaro **Executive Director**

copy: Speaker Ronald Mariano

Members of the Joint Committee on Telecommunications, Utilities & Energy

through Public Act No. 21-53 set a goal of deploying 1,000 megawatts of energy storage capacity by the end of 2030.