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Eric Steltzer
Deputy Director, Renewables and Alternative Energy
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Dear Deputy Director Steltzer:

The New England Power Generators Association (“NEPGA”)¹ appreciates the opportunity to respond to the Department of Energy Resources’ (“DOER”) Offshore Wind Study (“OSW”) Stakeholder Questions on the necessity, benefits and costs of procuring an additional 1,600 MW of OSW beyond the amounts already authorized under Section 83C of *An Act Relative to Green Communities*, St. 2008, c. 169, as amended by St. 2016, c. 188, § 12 (“Section 83C”).

NEPGA is the trade association representing competitive electric generating companies in New England. Its members own and operate a complex and diverse mix of resources that provide various reliability services in a competitive and cost-effective manner. NEPGA’s member companies represent approximately 25,000 MW – or approximately 90% of all generating capacity throughout New England.

Since electric restructuring in the late 1990s, generators participating in New England’s competitive wholesale electricity markets have invested billions of dollars in facilities to produce a reliable, cost-effective supply of electricity without guaranteed cost recovery or a guaranteed rate of return. In fact, 2016 and 2017 featured the lowest annual average wholesale electricity prices since the beginning of the competitive markets. The region’s markets have also produced a cleaner, more efficient fleet of power plants, reducing greenhouse gas emissions by 46% since 1990 - the most of any sector of the economy over the same period.

Additional OSW procurements would carve-out a large swath of the market and insulate those resources from broader competition. In addition, creating ever-larger carve-outs

¹ The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.

would place the competitive markets on a potentially unsustainable path going forward. If Massachusetts were to complete OSW procurements currently allowed by law, including the additional 1,600 MW of OSW authorized by the legislature in 2018, NEPGA estimates that the percentage of regional energy needs provided by all state-sponsored resources would grow to approximately 58% by 2027. This estimate does not account for the potential of still more procurements, which may occur given current legislative proposals in Massachusetts and other New England states. While the financial impact of the reduced revenues for merchant facilities impacted by these OSW contracts cannot be projected with precision, both existing generation resources whose production declines and existing generation resources whose production is largely unchanged (e.g., baseload price-taking units) can expect to receive lower revenues in the wholesale electric energy markets.

As an example, consider an existing dispatchable combined cycle electric generation unit that would face declining production, and receive lower energy prices during those hours when it continues to operate. First, new resources that receive out-of-market revenues will enter the market as price-takers (effectively offering their energy at \$0/MWh), which would displace some existing generating units that would have otherwise operated in the absence of the contracted resources. When generation is displaced, for these (and other) resources to remain viable, the revenues lost will now need to be recovered through the value of the other services resource provides (i.e., capacity and/or ancillary services). Second, when the resource is operating, energy prices will be lower than they would have been in the absence of the state-supported clean energy resources. Thus, the revenue opportunities will be lower. Moreover, to the extent the resource is the marginal unit, it will earn no margin on its energy sales.

NEPGA is concerned that under these conditions, existing resources will not be able to earn enough revenue to remain in the market, forcing them to seek retirement earlier than they would have absent the additional OSW resources. ISO New England (ISO-NE) could nonetheless decide to retain those resources for fuel security or other reliability needs, as it did with the Mystic Generating Station in Everett, through cost-of-service agreements. Resources receiving an out-of-market payment from ISO-NE could then enter bids into the Forward Capacity Auction as price takers, further distorting the market signals necessary to attract investments in new and existing plants that will still be needed for reliability. In short, the impact of additional OSW procurements, in conjunction with other large-scale energy procurements, threatens to upend the benefits of competitive markets by displacing existing plants, suppressing market prices, accelerating the use of costly out-of-market contracts, and once again exposing ratepayers to the risks of higher costs and bad investments.

To mitigate the variable nature of OSW resources, new market-based products would need to be designed to incentivize continued investment in resources that can quickly ramp up and down to ensure a constant balance between system load and the available

supply of generation. Specifically, the system would need to calculate a sufficient amount of reserve capacity that would be needed in a future where intermittent OSW resources increase by 1,600 MW or more. The markets would then need to properly value those resources (e.g., fast ramping capabilities) that would be necessary to support significant OSW penetration and ensure overall system reliability.

Additional OSW procurements beyond those already authorized under Section 83C would also have specific wholesale market impacts on other low and zero emission resources. As discussed above, existing baseload resources, particularly those that provide zero carbon energy, can expect to receive lower revenues as a consequence of an influx of OSW and other state-supported resources that act as price takers in the wholesale energy market. This would effectively decrease energy market prices, potentially impacting the viability of existing zero carbon resources needed to achieve the Commonwealth's greenhouse gas emissions goals under the Global Warming Solutions Act.

Further, some existing units that qualify for state RPS will also be impacted by reduced energy market revenues. This impact will be especially acute for many existing hydroelectric resources, and other resources that qualify for RPS, but that are not supplying energy under long-term power sale agreements or otherwise receiving revenue from serving consumer loads. These hydroelectric resources not only contribute to meeting the Commonwealth's emissions goals, but those with pondage capability also add significant value to reliability through their ability to vary output based on system conditions. However, these resources are often overlooked in the state policies that favor new rather than valuable existing resources. Additionally, RPS-qualified resources that see their long-term contracts expire during this period will face this same market dynamic.

NEPGA thanks DOER for the opportunity to provide its perspective on this important issue.

Respectfully submitted,

/s/

Daniel Collins
Director of Government Affairs