

October 28, 2022

Submitted via email to <a href="mailto:transmission@newenglandenergyvision.com">transmission@newenglandenergyvision.com</a>

## Re: Comments of OW North America LLC on Regional Transmission Initiative Notice of Request for Information and Scoping Meeting

## Introduction

OW North America LLC, (aka "Ocean Winds" or "OW") is one of the largest and established offshore wind power developers with more than 1.5 GWs in operation and is on a trajectory to reach the 2025 target of 5 to 7 GW of projects in operation, or construction, and 5 to 10 GW under advanced development. In 2022, OW's offshore wind gross capacity already operating, contracted or with grid connection rights granted reached 14.6 GW. In the US, OW owns 50% equity stake in Mayflower Wind off the coast of Massachusetts and another 50% equity stake in Bluepoint Wind in the New York Bight off the coast of New York and New Jersey.

OW applauds the New England States for this laudable effort to solicit industry and stakeholder input regarding the critical challenge of electric transmission. We especially welcome the recognition of the fact that rising to this challenge effectively is essential to developing offshore wind, a vital native resource that is essential to meeting our State, Regional and Federal climate, energy security, reliability and economic development goals. OW is delighted to provide directional input in this process, providing context and support to the detailed comments of our trade associations and other stakeholders.

## OW's General Comments for State's Role in Offshore Wind Transmission

OW is actively seeking interconnection in ISO-NE, NYISO and PJM markets. OW's collective US interconnection experience, and that of our sponsor companies and our experienced staff, has been that the ambiguity and the long duration of existing interconnection practices and procedures to identify, optimize, and cost-quantify the full nameplate power deliverability at onshore injection points have been a challenge for advancing large offshore wind projects.

Given the cost, capacity, and temporal uncertainty of the interconnection process, offshore wind developers are effectively and implicitly encouraged to file multiple duplicative interconnection requests in order to de-risk their projects potentially delaying interconnection studies of later interconnection applicants. OW, and our projects, have experienced this phenomenon from both sides of the equation as both the early filer and the later entrant.

As more and more interconnection requests are filed, the self-interest of each developer will further incentivize each developer to file even a higher number of interconnection requests in advance, further hindering the speed of interconnection process for all market participants in a vicious cycle of self-interest of first movers in the interconnection queue. This is not the result of



malevolent action by developers or any party, it is simply the natural result of the current system and rational actors responding to the rules in front of them.

This unintended consequence of the existing interconnection process perpetually increases the number of grid upgrades being cost-allocated, putting an unreasonable price tag and a level of cost-uncertainty in each interconnection application. Especially smaller energy storage and onshore renewable developers get put off from such cost and timeline risks, slowing the States reach their individual clean energy targets as seen in the current NYISO class year process with energy storage projects generally not being able to financially accept their cost allocations for capacity injection rights.

Rather than opining on the upgrade policy mechanisms and funding sources, OW would like to provide a general direction for the near, and longer, term state of onshore grid development to enable offshore wind development in Northeast outlined as below.

1. The States, and ISO-NE led by them, should proactively focus on upgrading coastal POIs to accommodate the full deliverability of uncommitted offshore wind capacity off the coast of Massachusetts with commercial operation expected in late 2020s.

Coastal transmission grid in proximity to the Massachusetts offshore wind lease areas is not able to accommodate the estimated 10GW of uncommitted offshore wind resources in this region. The offshore wind developers are inherently not able to carry out such a large undertaking based on the financial resources of the individual projects. In addition, each developer is operating in a highly competitive power offtake market, which makes it not only financially burdensome and in some cases legally ineligible to cooperate on their development activities in order to stay competitive in state-sponsored power purchase solicitations.

Some states, such as New Jersey and New York, have taken proactive steps using FERC-compliant mechanisms to increase the headroom capacity of their coastal transmission grids. These states are using ratepayer funds to de-risk offshore wind projects and according to their respective ISOs are generating long-term ratepayer financial savings in the process. In New Jersey's case, the State has introduced a creative mechanism adopted pursuant to prior FERC Orders and demonstrated to the offshore wind industry that they are a dependable partner in bringing offshore wind to State of New Jersey in a transparent and orderly manner. OW encourages Northeast states to think holistically about transmission outside of established processes currently in the ISO-NE tariff to bring a solution to this process.

Simply limiting speculative, hence risk-mitigating, duplicative interconnection requests and "purging queues" is not the answer. Instead, there is an urgent need for proactive action: a clear policy signal to offshore wind developers that if a state-facilitated offshore wind project is awarded, the State will enable the grid upgrades needed to "beef up" the key coastal POIs that offshore wind projects will need to utilize.



There is no mystery to what areas will need to see increased headroom through upgrades to the regional grid. Coastal load centers and other Points of Interconnection (POI) that have been referenced in transmission interconnection requests from both generators and merchant transmission providers provide a road map of where such headroom is needed. OW's Mayflower Wind project demonstrated this when it shifted to a mature POI developed by a third-party transmission developer from its initial plan of interconnecting in a more congested area. As this example demonstrates, developers are willing to take significant steps to take advantage of increased on-shore headroom if the terrestrial network is upgraded – which is a fair characterization of the premise behind the action that the New Jersey BPU just took. Essentially, in the current policy and commercial environment, if you build the transmission capacity the generation interconnection requests from offshore wind developers will come.

2. Within the next three years, states should proactively focus on upgrading the grid to accommodate the full deliverability of upcoming offshore wind lease in Gulf of Maine to serve the large load pocket in Boston area with commercial operation expected by 2035.

It is expected that the new offshore wind lease areas to be announced in Gulf of Maine might provide another  $10 \, \mathrm{GW}$  of renewable power potential in Northeast. Given the relatively lower native load in Maine, offshore wind developers will want to interconnect to the south, most likely in or near the greater Boston area where there is significant (and given electrification of heating and transportation, rising) local load that this new clean generation could serve. Grid improvements to enable  $\sim \! 10 \, \mathrm{GW}$  in this area will be critical for the Northeast states to reach their necessary and commendable, yet ambitious, decarbonization targets.

It is essential that the states, and ISO-NE, not solely focus on upgrading coastal facilities to enable these injections, but also upgrade the in-land and in-city transmission bottlenecks that are so often a critical limiting factor. If we don't remove these in-land and urban transmission bottlenecks, the offshore wind resources will likely face major curtailment during the light-load conditions in the fall and spring: even with significant electrification of space/water heating and transportation. While some of these upgrades can be handled through existing ISO-NE and State tariffs because of their reliability and economic benefits additional efforts, starting with an upgrade program similar to the Phase I and Phase II upgrades undertaken by New York State utilities under a dedicated proceeding to accelerate New York's CLCPA greenhouse gas reduction targets, will likely to be needed.

OW does not express an opinion on whether the right tool for making more extensive upgrades is the existing Public Policy Transmission Upgrade tariff, a special tariff formulated to make these improvements, a new Regional Benefit Upgrade pursuant to the pending new FERC Transmission NOPR or a different tool – what matters is that the political will be mustered, and a clear plan is articulated to make these vital, and immediately needed improvements to our regional system.



3. Over the next 5 years, states should focus upgrades on the inter-regional interties across ISO and State lines so that the regional system reliability and resiliency is maintained with high levels of variable renewable generation in the electric grid by 2040.

As more variable renewable generation (i.e. wind and solar) enters the generation mix, grid planners will need to plan for the few number of hours when resources with fully dispatchable fast start capabilities will remain. While fully decarbonizing the grid will require deployment of large energy storage systems, we must also strengthen and augment interstate/inter-regional transmission interties, so that different generation profiles of a diversified pool of renewable generation can complement each other. This might include fast rampup capabilities of hydro-electric resources across boundaries, as well as the complementary generation profiles of solar and onshore wind resources with offshore wind resources. Coupled with adequate reserves from energy storage resources, these interties will likely serve a larger reliability purpose for grid operators across North America.

OW encourages the states to take proactive steps to begin planning for the upgrade of these system interties, which will require a high level of stakeholder engagement across ISOs, state and federal jurisdictions. However, there will also be major transmission upgrades needed across the ISO-NE, NYISO, NBSO and Hydro-Québec TransÉnergie control areas to bolster the capacity of these interties. Other states are clearly thinking along these lines, taking steps to pay for infrastructure in neighboring states that is needed to facilitate offshore wind injections into their territory – we note in this regard the decision of the NJ BPU to allow for payment by New Jersey customers of the cost of upgrades in Maryland by BG&E to allow full deliverability of offshore wind into New Jersey. Of course, recalling prior efforts to bring power from Canada to the Massachusetts and the broader New England system, there is broad precedent for such action here.

Federal planning and funding assistance could be essential in moving forward the technical feasibility studies and collaborative processes needed to make these upgrades – and realize on the climate and energy visions and goals of the New England States by allowing the ISO-NE control area to draw on, and export to, our neighbors.

4. A focus on previously studied concepts, lines and projects is a critical first step in building the offshore grid of the future.

The decision of the NJ BPU in their Transmission "SAA" docket illustrates the incremental nature of progressing towards a robust grid that supports significant offshore wind deployment. Our comments above reflect our belief that New Jersey is starting in the right place: onshore. However, while reinforcing and expanding the terrestrial network is an essential step towards a meshed and efficient grid there are other early and immediate steps that can be taken here in New England that the States can help propel forward.

There are a number of prior projects, ISO-NE studies and efforts that have been planned, studied and progressed that could create foundation for an offshore



grid and on-shore infrastructure needed to support full offshore wind deployment. If properly progressed, perhaps with the support of federal funding, further refinement of such projects and concepts could be very helpful in meeting the offshore wind, climate and energy goals of the States.

Moreover, projects that build on the legacy of projects that were intensely studied by ISO-NE, like the Anbaric WindLink or the various sub-sea lines into Boston from the north, and prior studies that are still being advanced, like the Cape Cod Cluster Study, provide an excellent starting point for further studies and development.

This same group of prior projects, corridors and studies provide a rich potential pool for developers to draw upon. A mechanism for regional funding of such projects, if they can show real value in helping to meet climate, energy diversity, reliability and security goals, can unlock tremendous value.

## 5. Conclusion

The very fact that the New England States have come together to ask important questions about these essential topics is very important and shows that we have a real opportunity to make progress in creating this much-needed infrastructure.

The potential federal funding referenced in the RFI flowing from recently enacted statutes, in particular the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA), the FERC Transmission and Interconnection NOPRs and the potential for revolutionary change in critical tariffs they portend, and the action of other states and regions all testify to the importance of this moment. In particular, we would take note of the New Jersey SAA process discussed in our comments above. The NJ BPU decision released on October 26, 2022 was a landmark, making a commitment to fund critical onshore infrastructure needed to unlock the potential for the offshore wind off our shores.

We encourage the New England States to embrace this moment and take the bold action of crafting a mechanism for developing and funding the transmission infrastructure needed to support the surge of offshore wind that some of the States have done so much to inspire and which can bring huge benefits to the entire region.

Thank you for your time and consideration. If you have any questions please contact Dogan Yiginer (<a href="mailto:dogan.yiginer@oceanwinds.com">dogan.yiginer@oceanwinds.com</a>) or Seth Kaplan (<a href="mailto:seth.kaplan@oceanwinds.com">seth.kaplan@oceanwinds.com</a>) from our team.

Yours sincerely,

....

Michael Brown CEO, Ocean Winds North America