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Submitted via email to (to Marian.Swain@mass.gov)
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MA DOER
100 Cambridge Street #1020
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RE: Massachusetts 83C Round 4 Offshore Wind Solicitation: Request for Public Comment

Ocean Winds (OW) appreciates the opportunity to provide the following comments to the Massachusetts Department of Energy Resources (DOER), the Massachusetts Electric Distribution Companies (EDCs), and the Attorney General's Office (AGO) (collectively "RFP Drafting Parties") who are developing the fourth-round solicitation for offshore wind energy projects under Section 83C (83C Round 4).

About OW

OW is an international company dedicated to offshore wind energy and created as a 50-50 joint venture of EDP Renewables (EDPR) and ENGIE. Based on our belief that offshore wind energy is an essential part of the global energy transition, we develop, finance, build, and operate offshore wind farm projects all around the world.

When EDPR and ENGIE combined their offshore wind assets and project pipeline to create OW in 2019, the company had a total of 1.5 GW under construction and 4.0 GW under development. OW has been adding rapidly to that portfolio and is now on a trajectory to reach our 2025 target of 5 to 7 GW of projects in operation or construction, and 5 to 10 GW under advanced development. As of 2022, OW's total offshore wind gross capacity reached 16.6 GW.

OW, headquartered in Madrid, is currently present in eight countries and primarily targets markets in Europe, the United States, selected parts of Asia, and Brazil. The North American arm of OW is headquartered in Boston and is co-owner of three offshore wind projects in the United States: SouthCoast Wind, which is a joint venture with Shell, and two projects solely managed by OW, Bluepoint Wind in the New York Bight and Golden State Wind, which will be located off the Central Coast of California.

OW Comments

1. *Procurement Size: What should be the maximum procurement target, in megawatts (MW), for the 83C Round 4 solicitation?*

OW supports the position of our SouthCoast Wind joint venture that the upcoming procurement be targeted for at least 2,400 MW of Offshore Wind nameplate capacity with the goal of bringing under contract the full 5,600 MW envisioned and required by the statutory mandate as rapidly as possible. Bids into the procurement should include at least 400 MW of new capacity.

2. *Procurement Schedule: The 83C Round 4 RFP must be issued within 24 months of the prior solicitation pursuant to Section 83C.*

a. *What should the RFP drafting parties consider when designing the schedule for the 83C Round 4 solicitation, including deadlines for bid submission and selection of projects for negotiation?*

DOER and the RFP Drafting Parties should set a bid submission date for mid-October, with Confidential Submissions due one week later. We note that bid submissions for previous 83C procurements were due during the third or fourth quarter of the year, so a mid-October due date is consistent with past practice and precedent. An additional month from the due date used for 83C Round 3 provides bidders with sufficient time to adapt to any changes in the evaluation process and procurement rules that may be implemented as part of the recently enacted legislation "An Act Driving Clean Energy and Offshore Wind" and to mature economic development plans, further advance stakeholder outreach, and prepare proposals tailored to the needs of the Commonwealth.

OW is similarly very supportive of a regular procurement schedule for future procurements to provide stability and predictability. Giving clear notice of dates and amounts of future procurements will promote forward investment and will help ensure that the clean energy and climate mandates of the Commonwealth are met.

b. *How could the 83C Round 4 schedule be designed to best align with other offshore wind procurements being conducted or planned in neighboring Northeastern states?*

OW supports the SouthCoast position on alignment with procurements by other states. In particular, we strongly endorse the practice of not allowing contingent bids: i.e., bids that are contingent on the outcome of procurements in other states. This tailored prohibition should replace the generalized prohibition on contingent bids – which has proved to be overly vague and problematic.[1]

Allowing an external force to disrupt the Massachusetts procurement process would increase uncertainty and potentially create delay. This procurement can best be harmonized with efforts in other states by embracing the proposed schedule, which avoids conflict with ongoing and planned procurements in neighboring states.

3. *Commercial Operation Date: What should be the latest allowable commercial operation date for projects bidding into 83C Round 4, and why?*

Massachusetts and the offshore wind industry must work together to bring clean energy to Massachusetts as early as possible. Therefore, strong priority should be given to projects that will be able to have substantial generating capacity in commercial operation before 2030, which will assist the Commonwealth in reaching an essential emissions reduction milestone.

A developer's ability to provide a credible early Commercial Operation Date (COD) is largely dependent on the maturity of the underlying project in key areas including permitting and the ISO-NE interconnection process. Rather than setting a COD deadline in the RFP, OW believes the bid evaluation process should prioritize projects that can demonstrate the earliest credible CODs by

[1] See Independent Evaluator Report on the Round 3 Solicitation, Evaluation, and Bid Selection and Contract Negotiation Process under Section 83C of the Green Communities Act, Prepared by Peregrine Energy Group, June 6, 2022 at pp. 31-38. Available at https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/15038926

showing maturity in the Federal and State permitting processes and significant progress in the interconnection process, such as a fully executed Interconnection Agreement for a significant portion of its capacity and a credible path for interconnecting any remaining capacity.

4) *Transmission:*

a) *How should the 83C Round 4 requirements regarding transmission and interconnection of proposed projects be designed to maximize efficient use of the onshore transmission system?*

Transmission requirements and provisions for this procurement need to be cognizant of both current reality and the unique opportunities to build a stronger and more reliable grid that advances the Commonwealth's vision of a prosperous and de-carbonized economy.

The first step in meeting these twin challenges would be to prioritize, if not require, utilization of HVDC technology in this procurement – following the model of recent New York and New Jersey procurements. HVDC technology provides greater opportunities for meshed systems and other innovative methods to optimize offshore infrastructure and increase resilience and reliability, as well as providing onshore grid stability.

Injecting substantial amounts of power, via an HVDC connection, into one of the few robust coastal nodes in the ISO New England-operated system that can accept such an interconnection would be the definition of fully utilizing past investments in the onshore grid and should be recognized as such in the selection process.

Additionally, the handful of robust coastal nodes are the logical starting point for upgrades from regional efforts that Massachusetts can lead and targeted use of federal funds discussed in the next response below. This argues even more strongly for selection of bids that use HVDC technology into coastal nodes that both have available capacity to accept such interconnections and have visible and clear paths towards even greater capacity.

Strategic upgrades to such nodes, like the regional upgrades that have been proposed in Southeastern Massachusetts around Brayton Point, and reconductoring existing HVAC circuits to make better use of the existing transmission rights of way can "unbottle" the chokepoints that prevent expanded use of those same key coastal nodes.

Taking note of the opportunities for regional and federal funding for upgrades that could reduce project upgrade costs discussed below, OW endorses the Southcoast recommendation to use a symmetric mechanism to adjust bid prices to track interconnection and transmission system upgrade costs. Project compensation under PPAs can symmetrically increase or decrease if implementation of grid upgrades causes a material change in upgrade costs (such as a defined percentage or a pre-determined monetary amount) estimated and presented in a proposal. This is a reasonable cost and risk-sharing mechanism that should be incorporated into the RFP.

b. *Please comment on potential ways to integrate 83C Round 4 with ongoing regional transmission initiatives, including the Joint State Innovation Partnership for Offshore Wind.*

A regional tariff approach, like a Massachusetts-led utilization of the ISO-NE Public Policy tariff, represents a unique opportunity to augment these coastal interconnection nodes as well as the

network that connects those nodes to the "load centers" of the Commonwealth and New England. This is consistent with the call for a focus on onshore transmission reinforcement in OW's comments to the States during the New England Energy Vision process regarding transmission planning: https://newenglandenergyvision.files.wordpress.com/2022/11/ocean-winds-comments.pdf.

Requiring the use of HVDC technology and prioritizing projects that have mature interconnections and connect to the key coastal nodes that would be targeted for upgrades under a regional public policy upgrade program would be the surest way to integrate the results of this procurement with those laudable regional efforts.

c. *Please comment on the advantages and challenges of the "Meshed Ready" transmission requirement in the 2022 NYSERDA offshore wind RFP (ORECRFP22-1) and what factors would need to be considered for such an approach to be applicable in a Section 83C solicitation.*

Mandating use of HVDC technology, as New York and New Jersey have done, would be a significant step towards ensuring that selected projects are "mesh ready." A future where projects have additional opportunities to export power via an offshore network will not be built overnight. But we can move towards that future, with increased electrical system resilience and reliability, and reduced numbers of potentially impactful cable landings by embracing an HVDC standard in this procurement.

5. *Inflation, Supply Chain, and Macroeconomic Factors:*

a. *How could 83C Round 4 be designed to best account for current and future rates of inflation and other supply chain and economic pressures on the offshore wind industry to both ensure project viability and protect Massachusetts ratepayers?*

Earlier clean energy procurements by Massachusetts, and other states, predominantly occurred during the 2010 – 2020 period, a time of historically low and stable inflation and interest rates, particularly in the United States. Therefore, it is understandable why the mechanisms implementing those procurements did not anticipate increased price variability, like the systemic inflation we are currently seeing, and substantially higher interest rates. Even mechanisms that reflected changes in markets, like the "adjustable OREC" and "adjustable REC" renumeration schemes found in New York and New Jersey were intended to address energy market price volatility, not broad systemic inflation.

However, in some European markets, there was always a higher level of concern about potentially volatile economic conditions and the high probability that this concern would move developers to include a substantial risk premium in their bids. As a result, many European countries have provided indexation mechanisms for revenues to provide effective inflation hedges for CapEx and OpEx and reduce priced-in risk premiums.

Obviously, the era of low inflation and interest rates has come to an end. Consequently, it is certain that a procurement that does not provide an indexation mechanism will see bids that reflect a very high risk premium.

This reality was recognized by New York in the third Offshore Wind procurement conducted by NYSERDA OSW and in the pending New Jersey BPU procurement and they have incorporated an indexation mechanism into their most recent procurements.

The mechanisms that NY and NJ have introduced would provide some hedging against inflationary risks and provide some reduction in developer-specific risk-premiums. However, any indexing mechanism will have inherent risk due to several factors:

- Projects are typically exposed to several inflation factors (commodities, wages, etc.) in different proportions. This can be translated into a formula with different weights to each factor. A mechanism could not perfectly hedge if it does not reflect all factors, or the factors are applied in different weights. Therefore, an ideal indexation mechanism would use a basket of indices and weigh each one of them.

- For each indexation factor, actual inflation is never the same as the selected inflation index. Choosing an inflation index with a good degree of similarity is critical to provide an efficient hedge.

- Projects are exposed to different inflation risks both in the construction and operations phases. An ideal hedge would cover until the end of exposure, i.e., until the end of operations. If this is not an option, the longer an inflation hedge will cover, the better it will be. As the hedge is extended, for example going from 'bid submission up to Financial Close+1yr' to 'bid submission to COD,' or even from 'bid submission to end of PPA term,' the project exposure to inflation and therefore the risk premium that bidders will include in their bids will decrease. Of course, a very sophisticated hedging mechanism will recognize that at different milestones (Financial Close, COD, etc.), the costs and nature of the project will change and a different index will become most appropriate.

The French Model

Design of the index is key to minimizing these inefficiencies, enabling the mechanism to provide an effective hedge. As referenced above, there is a history of these mechanisms in Europe; for example, the methodology developed by the French government in the "Appel d'offres" (RFPs) for offshore wind tariffs provides an interesting model. That scheme, used in a French RFP launched in 2011, included an indexation mechanism based on two parameters including a basket of inflation indices. The parameters are:

- Parameter "K": reflects changes in what French government considered as main CapEx components according to their relative weight. Tariff is indexed according to this parameter until a development milestone considered as a proxy of the moment in which CapEx is closed.

- Parameter "L": reflects changes in OpEx; tariff is indexed to this parameter since CapEx is closed until the end of operations.

- The mechanism was very well received by market participants and has been improved in the subsequent RFP rounds. This is shown in the Normandy Appel d'offres rules published in April 2022 that follow the same approach with updated "K" and "L" parameters.

An indexation formula that would build on this model and provide a hedge against changes in inflation and reduce the risk premium in bids the most would be something like the following:

- From bid submission to Financial Close + 1 yr: Index = [0.80 x CPI + 0.15 x Steel + 0.05 x Crude Oil] x P1

- From Financial Close + 1 yr to COD: Index = [1.00 x CPI] x P2

- From COD onwards = [1.00 x CPI] x P3

- P1, P2, P3 would be the percentages of the bid price subject to the adjustment at different stages of the project. The following factors would optimize hedge effectiveness:
    - P1 is 70%; P2 is a gradual decrease from 70% to 17%; P3 is 17%

The following indices are reliable industry benchmarks with needed transparency and visibility:

- The recommended Steel index would be CRU U.S. Midwest Domestic Hot-Rolled Coil Steel Index and recommended Crude Oil index could be either Brent or WTI.

Alternative Approaches

OW acknowledges that DOER and the RFP Drafting Parties may wish, for simplicity, to make use of an inflation adjustment based on a single index factor. If this option was chosen, OW proposes use of the model discussed above but replacing the Steel or Crude Oil components by CPI or a broader industry index such as the Handy-Whitman Index. A simple mechanism that adjusts the PPA price following the CPI or the Handy-Whitman Index until at least Financial Close if not COD or a period ending two years after construction (as discussed below) would be a good first step towards this more sophisticated system.

Alternatively, as discussed below, a revised version of the NYSERDA-crafted adjustment mechanism, incorporating interest rates into that system for example, could provide a reasonable approach to this critical problem.

It is notable, in terms of reducing risk premium being priced into bids, that projects that are more mature, and therefore closer to Financial Close and COD, will be less exposed to inflation pressures going forward and therefore less prone to make use of such an adjustment.

b. *Please comment on when costs for offshore wind project components and labor should be expected to stabilize, including any comments on how that expected timing would impact bid development for 83C Round 4.*

While project costs may eventually stabilize, OW anticipates that they will do so at a much higher rate than they were prior to 2021, i.e., less volatile but much higher. However, we do not expect that project costs will stabilize between now and the submission of bids under this procurement. Additionally, complex and confounding external factors such as the ongoing Russian invasion of Ukraine continue to have an impact and will continue to do so for an undefinable future period.

c. *Please comment on the Inflation Adjustment provision of the 2022 NYSERDA offshore wind RFP (ORECRFP22-1) and what factors would need to be considered for such an approach to be applicable in a Section 83C solicitation.*

If DOER and the RFP Drafting Parties may wish to mirror, to some degree, the indexation model proposed by NYSERDA, then it is important to recognize, as noted by SouthCoast, that the NYSERDA model provides indexation to commodities only, and does not factor in changes in interest rates. One of the most significant factors driving inflation, both in the supply chain but more importantly in project-specific costs, are interest rates. Therefore, if the RFP is going to include an indexation mechanism based on the NYSERDA model, we recommend that it be adjusted to include interest rates, specifically the U.S. Prime Rate,[2] by replacing the fixed component, which is weighted in the NYSERDA model at 20%, with the U.S. Prime Rate weighted at 20%.

[2] https://www.wsj.com/market-data/bonds/moneyrates

d. *Please comment on recommended timing applicable for an inflation adjustment price provision, if warranted, including any comments on the price adjustment timing in the 2022 NYSERDA RFP, which allows for an adjustment from bid submission to BOEM COP approval. Please also comment on how such a provision should be considered in the evaluation process when comparing fixed price bids to inflation-adjusted bids.*

As noted above, a primary objective of the inflation adjustment mechanism should be to minimize the risk premium that bidders will incorporate into bids to protect against inflation risk. To help meet this goal, the adjustment for inflation must occur no earlier than Financial Close as the project moves forward toward construction. To further reduce any chance of bids reflecting such a risk premium, we would echo the perspective of SouthCoast and extend the adjustment period until two years after the start of construction.

OW agrees that comparing fixed price bids to inflation-adjusted bids would be a very difficult task. We strongly suggest that this is not a task that needs to be undertaken – rather, the bidders should be on a level playing field, all offering inflation-adjusted bids making use of the same prescribed indexing mechanism.

6. *Federal Funding:*
   a. *How could 83C Round 4 be designed to ensure Massachusetts ratepayers receive the maximum benefits of the new federal funding opportunities, tax credits, and/or other programs available to offshore wind developers under the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA)?*

One type of federal funding that might be most susceptible to optimization with projects are the grants from the BIL (also known as the Infrastructure Investment and Jobs Act or "IIJA") for Grid Resiliency[3]. OW strongly recommends that the RFP provide guidance regarding what grid improvements the Commonwealth and the regional Transmission Owners (TOs) are targeting for upgrades through these grants. DOER, as the focal point and lead agency for efforts to bring such Federal grants to Massachusetts, is aware of plans and proposals to use such grant funds to support and upgrade key coastal nodes and the infrastructure supporting those nodes and to integrate them into the larger system.

Bids that utilize such nodes, taking advantage of the plans and efforts of the TOs and the Commonwealth to utilize these Federal funds, should be given priority and credit in the selection process – if an effort is going to be made to open a door for connection to the network and load, then those who work through that door should be recognized.

Such a preference would also optimize a regional tariff funded transmission expansion rising to meet the climate-driven public policy signal, such as a Massachusetts-led utilization of the ISO-NE Public Policy tariff discussed above.

[3] For further information, see https://www.energy.gov/gdo/preventing-outages-and-enhancing-resilience-electric-grid-grants, https://www.energy.gov/gdo/frequently-asked-questions-grid-resilience-and-innovation-partnerships-grip-program and https://www.fedconnect.net/FedConnect/default.aspx?doc=DE-FOA-0002740&agency=DOE

b. *Please comment on when the Internal Revenue Service should be expected to issue regulations related to relevant tax credits under the Inflation Reduction Act.*

OW has been engaged with the White House, the Treasury Department, and many agencies and departments within the Federal government on both the substance and timing of these tax credits. Unfortunately, one clear lesson from that engagement is that the timing of guidance and/or regulations implementing the Inflation Reduction Act (IRA) and generally clarifying questions around the Investment Tax Credit (ITC) cannot be forecast with any degree of accuracy. Said guidance is being prepared by Internal Revenue Service staff, who have a large number of IRA and IIJA provisions before them, and then vetted and approved through a multi-layer and multi-step process. It is likely that such guidance will be issued in a piecemeal manner as each provision is reviewed and implemented – increasing the uncertainty around when guidance on any particular point will be issued.

c. *Please comment on the provisions of the Rhode Island RFP requesting bidders to describe how they would consider EDC customers in the event of the availability of any tax credit or other government grant or subsidy not contemplated in their proposals.*

Federal laws and the mechanisms they put in place may offer developers and affiliates direct credits, supports, and subsidies, most notably the enhanced ITC from the IRA. Requiring projects to clearly state their intentions, plans, and assumptions (to the maximum extent possible) regarding such support will be critical for providing bid evaluators with essential information and putting all bidders on a level playing field.

Such disclosure will enable DOER and bidders to work together on a case-by-case basis if a new grant or subsidy results in a material, positive change in project economics. Given the highly uncertain nature of the substance at issue here, this is probably the only reasonable or possible course of action to ensure that EDC customers see value from tax credits, grants, or subsidies that projects unexpectedly receive.

7. *Economic Development, Workforce, and Diversity, Equity & Inclusion (DEI): How could 83C Round 4 be designed to best encourage investments and commitments that maximize economic benefits to the Commonwealth, support workforce harmony, and advance goals for DEI? Specifically, please refer to Section 2.3.2.i of the 83C Round 3 and to the relevant provisions in Section 61 of An Act Driving Clean Energy and Offshore Wind.*

The DEI components of the 83C RFPs, particularly the requirement that bidders develop and submit Workforce Diversity and Supplier Diversity Program Plans, have become a national model. Further refinement, including providing more specific guidance on groups and geographic areas that should be targeted for such efforts, would be helpful to bidders and the larger community.

8. *Environmental Justice: How could 83C Round 4 be designed to best encourage project design and investments that avoid negative impacts on, and direct positive benefits of the project to, Environmental Justice (EJ) communities? Please refer in particular to Appendix J of 83C Round 3 and to the relevant provisions in Section 61 of An Act Driving Clean Energy and Offshore Wind.*

The EJ requirements of the Section 83C III procurement are similarly 'best in class' and should be maintained. This will allow bidders to build upon the experience and models that have developed under the prior procurements.

9. *Environmental and Fisheries Impacts: How could 83C Round 4 be designed to best encourage project designs that avoid, minimize, and mitigate negative impacts on the environment and fishing industry? Please refer in particular to Appendix J of 83C Round 3 and to the relevant provisions in Section 61 of An Act Driving Clean Energy and Offshore Wind.*

SouthCoast Wind offers very specific suggestions regarding edits to Appendix J of the 83C III RFP, which OW endorses.

Specifically, we agree that Appendix J should be modified to reflect the developing and very specific guidance and requirements that projects are now receiving from BOEM. Conformity and alignment with BOEM on specific plan details regarding the addition of new groups and organizations as Fisheries Representatives, coordination with such new entrants, and management of forms, gear replacement and "gear loss compensation," and other Fisheries matters is critical to avoid the creation of duplicative requirements on projects.

The entire Fisheries Outreach and Management system is undergoing revision and evolution as BOEM finalizes its Fisheries Mitigation Guidance and works with the States on the potential creation of a broad multi-state fisheries compensation fund. Appendix J should reflect this changing reality.

10. *Please provide any additional comments regarding implementation of the new provisions in Section 61 of An Act Driving Clean Energy and Offshore Wind in 83C Round 4.*

The change in decisional authority under the revised statute, changing the roles of the EDCs and DOER in the process, is significant. Clarity regarding the impact of this statutory change on the bid evaluation process, the substance of the evaluation, the composition of the Evaluation Team, and the award process would be very helpful and would inform the preparation of bids.

We appreciate the opportunity to provide these comments.

Sincerely,

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