



BY ELECTRONIC DELIVERY TO board.secretary@bpu.nj.gov

October 7th, 2022

Secretary of the Board
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350

RE: Response to Request for Information Docket No. QO22080481

To the New Jersey Board of Public Utilities:

In response to the Request for Information Docket No. QO22080481, issued September 16th, 2022, Vineyard Offshore LLC ("Vineyard Offshore") is pleased to provide the enclosed. We hope our feedback will assist the New Jersey Board of Public Utilities' ("NJBPU") efforts to ensure a successful solicitation.

Vineyard Offshore is an offshore wind developer and a subsidiary of Copenhagen Infrastructure Partners ("CIP"). CIP is a 50% shareholder company in Vineyard Wind 1, the nation's first commercial-scale offshore wind project. The following comments are informed by our prior experience with offshore wind solicitations and experience developing offshore wind projects in the US and elsewhere.

Respectfully submitted,

Lars Pedersen
Chief Executive Officer

Project Design

Given that project size is generally constrained by interconnection and/or transmission capacity rather than lease area, it is common for lease areas to be developed into multiple projects of different sizes. Smaller projects could be built cost-efficiently adjacent to larger projects after the larger project has been awarded an offtake agreement, with both projects constructed at the same time. Therefore, smaller projects can provide competitive OREC pricing because they are part of a synergized project portfolio, which allows NJ ratepayers to benefit from economies of scale from projects awarded in previous procurement rounds.

Therefore the "optimal project capacity" is the one which delivers the lowest cost power to NJ ratepayers, and project proposals should be evaluated based on their benefits to NJ ratepayers rather than on a MW capacity basis.

Responses to specific questions

3. What considerations should guide the determination of minimum and/or maximum project bid sizes?

The key consideration to guide the determination of minimum project bid sizes should be the relevant building blocks of a project's transmission system, and specifically, the export cable capacity. Generally, HVAC export cable technology can deliver capacity ranging from 400-500MW on one cable, and the most efficient design of project capacity would maximize the export cable capacity. Thus, in order to permit a standardized and modular interconnection solution to a shared offshore transmission system, projects should be sized to in modular increments of 400-500MW.

6. What are the benefits and challenges of the Board allowing the inclusion of energy storage in applicants' projects?

With respect to a potential energy storage component, we believe the grid-level benefits which energy storage provides are best deployed at grid-scale across the NJBPU service territory. Considering the plans for a shared offshore wind transmission system, there would not appear to be a natural benefit to the grid from integrating energy storage into an individual offshore wind project. Thus, our recommendation is to exclude it from consideration in the SGD.

Economic Impacts and Strength of Guarantees for Economic Impacts

With respect to requiring deposits related to firm economic benefits guarantees, requiring deposits - even if refundable - comes at a cost, and this cost will be reflected in a higher OREC price. Thus, in the event that all economic benefits are realized and deposits are refunded, NJ ratepayers would still pay a higher OREC price for the term of the OREC agreement to accommodate for the carrying cost of these deposits. This would increase the cost of delivering energy and benefits, and thereby decrease the level of benefits being proposed

Responses to specific questions

8. Board Staff is considering requiring deposits that are refundable if firm economic benefits guarantees are met - or a damages term if economic benefits are not met - that would be applicable to all applicants.

NYSERDA's precedent for commitments to economic benefits and consequences for failure to meet those benefits is generally accepted by most developers in the market, and can serve as a strong starting point for the NJBPU. As it is difficult to commit fully to realizing economic developments given the long development and construction timelines of offshore wind projects, there should be a reasonable variance permitted prior to incurring penalties, as NYSERDA includes.

We suggest that any damages should be a one-time payment rather than a permanent change to OREC tariff.

9. Proposed economic benefits require pledges or guarantees from applicants to ensure timely realization. What are the practical limitations of such pledges or guarantees?

The timely realization of economic benefits is contingent on the project being able to complete various development and construction milestones according to the proposed schedule. The interdependence of the permitting process overall, not least state and federal permits, is the key factor in achieving the proposed schedule. If state and federal agencies are delayed in issuing permits, a project proponent cannot reasonably progress on delivering economic benefits linked to milestones such as start of construction. Thus, there should be reasonable relief for such events that are reasonably outside the control of the proponent

Performance Guarantees

With respect to the proposed nameplate capacity, given that NJ is buying capacity before any project has obtained its key permits, and the technology is constantly evolving, a proponent should have a reasonable opportunity to scale the project to maximize the projects technical potential (WTG size, transmission technology, permitting) by scaling capacity [5-10%] up or down between OREC award and COD.

NJ has decided to procure power from projects in an early development stage and must accept a sharing of some risks.

Responses to specific questions

17. What are the potential benefits and impacts of assessing a performance guarantee for failing to construct, or constructing less than, the proposed nameplate capacity?

Performance guarantees and penalties for constructing less than the required capacity may result in higher costs to NJ ratepayers and potentially fewer environmental benefits to NJ than the project could otherwise have delivered in the same timeframe.

18. If performance guarantees are to be incorporated in the Board Order governing the delivery of ORECs, how could a completion guarantee be structured to irrevocably and unconditionally guarantee performance by a certain date?

For any project or project proponent, there are events outside the reasonable control of a proponent and the NJBPU that would prevent such an unconditional guarantee being provided, given that NJ has decided to buy power from projects that are not yet fully permitted.

No proponent can guarantee delivery timing of permits nor control that permit conditions end up being financially viable. If the NJBPU wants to put such risks fully on the project proponents, it has to be willing to accept a significant risk premium.

We should note that no State so far has required guarantees beyond normal forfeiture of guarantees/deposits and that such mechanisms have been sufficient in the US (and around the world) to fully incentivize proponents to deliver projects timely.

19. Regarding protection of ratepayer interests: a. How would the inclusion of a performance guarantee requiring performance by a certain date affect an applicant's OREC offer price?

Guarantees that must be provided irrespective of whether risks are in reasonable control will increase ratepayer pricing proportional to the punitive payments.

b. What measures could be taken to protect New Jersey ratepayer interests?

The existing structures used in other markets - with increasing security deposits by a date certain in order to extend timeline for COD (2 years), 1 year of extensions with LDs - have worked well so far and delivered competitive proposals

c. Can the cost of a performance guarantee be laid off to a guarantor at good value from New Jersey ratepayers' standpoint? If not, why not?

It is unlikely that the cost of a performance guarantee can be laid off to a guarantor at good value from the NJ ratepayer standpoint. Most of the risks that would have to be laid off are binary in nature and outside the control of proponents (permitting timeline, permitting conditions), and such costs would have to be put on the price in any case.

20. N.J.A.C. 14:8-6.6(b)(4) allows ORECs in excess of the Annual OREC Allowance in a given year to be carried forward to the next year if there are unmet ORECs in that year. How should the Board Order address a circumstance where there are persistent unmet ORECs over the OREC term?

No proponent will take a risk on weather over time or permitting conditions that allow for less capacity than asked for. NJ has full visibility into the proposed projects and must make a risk assessment at time of selection - the proponent is highly incentivized to maximize output from the project

Inflation/Deflation Adjustment

An indexation mechanism is an important tool which allows NJ ratepayers to solicit the most competitive pricing from developers. This benefits ratepayers by removing the need for developers to add significant buffer to their OREC price to account for volatility in inflation and commodity prices in the future.

All industries, including OSW, are seeing significant inflationary pressure coupled with commodity pricing shocks from COVID and the Ukraine war. This has significantly increased the short- and medium-term risks.

Responses to specific questions

22. What are the benefits and challenges of including an inflation adjustment mechanism in the Third Solicitation to account for changes in commodity pricing and labor costs?

The chief benefit from an inflation adjustment mechanism is that the NJBPU can be more certain that a project can be delivered on the proposed schedule, as it reduces the risk that developers abandon a project due to the combination of aggressive pricing and unforeseen increases in cost.

Without an adjustment mechanism there is a high risk that the lowest cost project at bid award will be the one that is betting on the lowest future cost increases. We are currently seeing this trend in the market today – in light of the sharp increases in steel, labor, and other commodities, some developers with attractively low offtake tariffs at bid date are now considering abandoning projects or trying to negotiate price increases.

This can easily lead to a situation where projects cannot move forward because they cannot absorb different outcomes which is already materializing in the market. NJ would then potentially have to renegotiate and/or retender with higher delivery costs anyway.

A project that is awarded a low OREC tariff but is ultimately never built provides no benefit to NJ ratepayers.

24. If an inflation adjustment is included, what are the elements of residual inflation risk?

The residual risk elements after an inflation and commodity indexation are included would be foreign currency exposure for non-US components and interest rate developments with both significantly impact pricing considerations.

25. What are the advantages and disadvantages of a requirement to propose (a) a fixed OREC price without inflation adjustment and (b) an inflation adjustable OREC price, versus making one or both optional?

A fixed price is in some ways a wager on correctly forecasting the cost increases in the four to five years between bid date and financial close.

We do not recommend requiring both a fixed-price and an inflation adjusted price, and instead, to submit only an inflation adjusted price. Requiring a fixed-price asks the developer to underwrite the inflation risk, whereas an inflation adjusted price invites the state and the developer to share equally future changes in inflation. The absence of an adjustment at financial close requires developers to underwrite future costs of labor and materials, and if these costs are below projections, then NJ ratepayers see no benefits.

27. Describe how an inflation adjustment mechanism could affect the project development timeline and/or viability of an offshore wind project.

An inflation adjustment mechanism is critical to enabling the project viability for the reasons identified in response 22 and our general response in this section. Without an inflation adjustment mechanism, market interest in the procurement will likely be lower.

29. Should the inflation adjustment mechanism be based on a single defined index or multiple indices?

We recommend using multiple indices, in a manner similar to NYSERDA.

30. What publicly available index or indices are most suitable to capture applicants' exposure to inflation during the project development period? Please explain the relevance of the index or indices you suggest. If the index is not publicly available, how would you suggest the Board meet its goal of transparency and openness?

We recommend taking a similar approach to NYSERDA.

31. If multiple indices are used, please provide any suggestions on how they should be weighted for purposes of tracking key component costs, including calculation examples. Please identify suggested sources, either proprietary or public, that represent the best information source.

Developers should have the liberty to propose the % allocation among a list of indices provided by the state in their bid. This ensures that the mechanism is as close as possible to a 1:1 adjustments for costs. In general, the more perfect the adjustment is to the overall cost exposure the lower the risk premium that developers will apply to their OREC price, and the lower the OREC price will be for NJ ratepayers.

33. What is an appropriate way to set the baseline value of the inflation index or indices at the time of bid submission, for example an annual average or discrete monthly value?

NYSERDA's approach of a monthly average 3-months pre- and 3 months-post is sufficient.

34. Regarding the milestone for determining the price adjustment date: a. What is the best milestone for determining the price adjustment date?

The best value for NJ ratepayers will come from allowing a 1-time adjustment at Financial Close. Financial Close is generally very closely aligned with the Notice to Proceed for major construction and procurement contracts, and also inherently the permitting timeline as the permits are generally a condition precedent for financial close.

b. What are the benefits and challenges of the milestone being a fixed calendar date versus the date of a defined event?

A fixed calendar date is difficult given that permitting events can - outside any reasonable control of project - changes its timeline.

c. Please explain your choice of milestone date and how it could be unambiguously defined.

d. If there is ambiguity, please explain why it should be considered.

The unambiguous definition for the date of adjustment should be Financial Close, as defined by the date on which an investor and/or lenders in the project have issued definitive documentation and engaged in binding legal documentation to invest/lend in the project. This is customarily evidenced by a statement from the financing institutions/investors, and where applicable, copies of any securities documents registered in the public domain. This type of definition is commonly used in other transactions and the market is accustomed to providing such type of documentation.

36. What specific content in regard to the inflation adjustment factor in a Board Order awarding a project would strengthen an applicant's ability to execute binding agreements on a timely basis with primary original equipment manufacturers ("OEMs")?

Similar to our response in question 31, the greater the match between an inflation adjustment factor in the OREC agreement, and a match to the project's overall exposure, the greater the

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likelihood that a project can execute binding agreements on a timely basis and meet the schedule proposal in the bid.