



NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

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Request for Information OSW-2018 – Offshore Wind Renewable Energy Credits

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**COMMENTS BY DEEPWATER WIND, LLC.**

August 10, 2018

Deepwater Wind, LLC (“Deepwater Wind”) respectfully submits the following comments in response to the Request for Information OSW-2018 (“RFI”) filed by the New York State Energy Research and Development Authority (“NYSERDA”) published on July 20, 2018. The RFI solicits comments from stakeholders concerning the anticipated Request for Proposals (“RFP”) for Offshore Wind Renewable Energy Credits (“ORECs”) authorized by the New York State Public Service Commission (“PSC”) Order Establishing Offshore Wind Standard and Framework for Phase 1 Procurement issued in Case No. 18-E-0071 and dated July 12, 2018 (“Order”).

Deepwater Wind submits these comments as the only company to have developed, financed, constructed and operated an offshore wind farm in America. Our 30 MW Block Island Wind Farm was not only the first constructed in the U.S., but also the first offshore wind farm to complete a tax equity financing anywhere in the world. Deepwater Wind is honored to have been selected by the Long Island Power Authority to develop New York’s first offshore wind farm. Our 90 MW South Fork Wind Farm will serve Long Island’s south fork beginning in 2022, making it the first utility-scale project in America. Deepwater Wind has been awarded ORECs from the Maryland PSC for our 120 MW Skipjack Wind Farm, located within our Delaware Wind Energy Area, making it the first in the mid-Atlantic region. In May 2018, our Revolution Wind Farm was selected by the State of Rhode Island in the joint MA/RI procurement for 400 MW, and will achieve commercial operations in 2023. Our Revolution Wind Farm was awarded an additional 200 MW in Connecticut’s offshore wind solicitation.

We applaud Governor Cuomo, who has made New York a national leader in stimulating private investment in renewable energy, creating 21st century jobs across the state while reducing greenhouse gas and other harmful emissions. The New York Green Bank, NY-Sun Program, Clean Energy Standard, and other initiatives have proven track records of success as executed by the New York Public Service Commission (“PSC” or “Commission”), Staff, and the New York State Energy Research and Development Authority (“NYSERDA”). Given this Administration’s record of success, the Governor’s laudable goal of 2,400 MW of offshore wind energy by 2030 can be obtained and will position New York’s clean energy economy on the global stage.

We strongly support the Administration's commitment to purchase 800 MW between two solicitations in 2018 and 2019, which sends a signal to both developers and the global supply chain for offshore wind that New York will strongly compete for the economic, social, and environmental benefits of offshore wind.

Deepwater Wind appreciates the opportunity to provide comment on these crucial topics, and believes that the comments herein will lead to a robust and vibrant industry in New York. We look forward to working with NYSERDA to bring offshore wind to New York.

### **Summary of Comments**

1. NYSERDA should contract for at least 400 MW of offshore wind in its initial solicitation in order to (a) capitalize on the expiring federal Investment Tax Credit ("ITC") and (b) accelerate the development of a competitive local supply chain.
2. NYSERDA should endeavor to contract with more than one developer in order to (a) cultivate multiple competitive supply chains, which will promote greater competition in subsequent rounds of procurement, and (b) diversify the State's offshore wind market so that the unexpected delay or failure of a single project doesn't incapacitate the State's entire industry.
3. To effect the greatest competition in the initial OREC application period, as well as in the resulting supply chains, NYSERDA should require that all developers offer a standard 400 MW proposal to allow for a like-for-like / apples-to-apples comparison of bids from competing developers. In addition to the required 400 MW proposal, NYSERDA should also allow developers to offer additional proposals within a range of 200 MW to 800 MW, so that NYSERDA may gauge the benefits and costs of projects at differing scales.
4. For future application periods, NYSERDA should issue a schedule with annual procurements of 400 MW to achieve the full 2,400 MW goal. Doing so will allow the state to capture future cost reductions resulting from improvements in technology, and will also cultivate a durable local supply chain by providing visibility for future business opportunities, which will result in an attractive environment for developers and suppliers to invest in New York.
5. To promote a level playing field, NYSERDA should provide clear guidance on evaluation criteria and details regarding the methods that will be used to evaluate proposals.
6. NYSERDA should clearly and unambiguously define the formula used to establish the reference pricing in the Index OREC option.
7. NYSERDA should evaluate proposals with a heavy favor for Index OREC bids from developers over Fixed OREC bids.

In addition, Deepwater Wind offers comments in response to specific questions as included herein.

## Comments in Response to RFI Questions

### Procurement Schedule

1. The first solicitation will be issued in the fourth quarter of 018 (Order, p. 27).
  - a. How much time do proposers need to develop proposals, i.e., time between issuance of the RFP and the proposal submission date?
  - b. What factors (e.g., available staff, geotechnical and engineering studies, supply chain negotiations, ongoing data collection) drive the time needed to prepare proposals?

Given the significant impact of the ITC on pricing, NYSERDA should design its procurement schedule with the goal of making awards by June 1, 2019. If it is possible to accommodate a June 1, 2019 award, Deepwater Wind recommends that NYSERDA allow proposers 90 days from the issuance of the RFP to the proposal submission deadline, which will provide sufficient time to compile all information requested by NYSERDA in order to develop the most realistic pricing based on vendor quotes, engineering and technical studies, and other data collection. Developers will also use this time to provide realistic commitments towards economic development, and provide as much support necessary to ensure the most viable project proposal. If it is necessary to facilitate a June 1, 2019 award, NYSERDA could shorten the length of time granted to developers to submit a proposal to 60 days.

2. NYSERDA proposes requiring bids to remain firm and binding for 6 months in regard to the OREC pricing provisions and other commercial provisions. Is this duration reasonable, or is a longer or shorter time period warranted? What key factors affect how long a proposal can remain firm? How does this timeframe affect the preparation of the proposal?

We urge NYSERDA to design its procurement schedule to allow for an award by not later than June 1, 2019 so that developers can qualify for the federal ITC. Six months firm pricing is acceptable provided that it can accommodate a June 1, 2019 award.

### Procurement Quantity

3. The Order requires NYSERDA to seek approximately 800 MW of capacity between procurements in 2018 and 2019. Should the 2018 RFP prescribe a minimum capacity or a minimum annual OREC quantity per bid, and if so, what should the minimum be? Should the 2018 RFP prescribe a maximum capacity or annual OREC quantity per bid, and if so, what should the maximum be?

NYSERDA should base its procurements on MW of capacity, and not on OREC quantity. Doing so allows for a like-for-like / apples-to-apples comparison of projects, and will promote the development of sites with the best wind resource. NYSERDA should also avoid arbitrarily establishing limits on the number of ORECs a project can offer, sell or deliver. Given that wind is a variable resource, developers depend upon the years in which MWh production is above-average to make up for below-average years. A cap on the number of ORECs a project can sell would require developers to offer higher prices, based on the assumption that their output would be limited during those higher-production years.

In the 2018 solicitation, NYSERDA should contract for at least 400 MW of offshore wind in its initial solicitation in order to (a) capitalize on the expiring federal ITC and (b) accelerate the development of a

competitive local supply chain. NYSERDA should also endeavor to contract with more than one developer in order to (a) cultivate multiple competitive supply chains, which will promote greater competition in subsequent rounds of procurement, and (b) diversify the State's offshore wind market so that the unexpected delay or failure of a single project doesn't incapacitate the State's entire industry.

As it relates to sizing, NYSERDA should require that all developers offer a standard 400 MW<sup>1</sup> proposal to allow for a like-for-like / apples-to-apples comparison of bids from competing developers. In addition to the required 400 MW proposal, NYSERDA should also allow developers to offer additional proposals within a range of 200 MW to 800 MW<sup>2</sup>, so that NYSERDA may gauge the benefits and costs of projects at differing scales.

For future application periods, NYSERDA should issue a schedule with annual procurements of 400 MW to achieve the full 2,400 MW goal. Doing so will allow the state to capture future cost reductions resulting from improvements in technology, and will also cultivate a durable local supply chain by providing visibility for future business opportunities, which will result in an attractive environment for developers and suppliers to invest in New York.

4. Should the 2018 RFP allow bidders to submit multiple bids with differing capacity or OREC quantities? Should this be a continuous range, or should specific discrete target quantities be prescribed by NYSERDA?

See our response to #3 above.

5. The Order notes that NYSERDA could award more than 800 MW in the first year alone to secure economic development benefits or to accept low bid prices that take advantage of the expiring federal tax credits. What should the RFP include to promote these benefits?

While there may be benefits to NYSERDA granting a larger award, NYSERDA should also carefully consider several factors that adversely affect larger projects.

- **Tax Equity Availability.** Tax Equity is a material, but often-overlooked factor in the financing of offshore wind. To the best of our knowledge, the largest ITC tax equity transaction ever completed for renewable energy was for approximately \$300 million. For a single 1,100 MW project, a developer would have to attract over \$600 million of tax equity investment – roughly double the size of the largest comparable transaction – or choose to forgo the investment tax credit at the expense of ratepayers. Alternatively, a 400 MW project would need to partner with tax equity investors with \$200 million of tax liability, which is more readily available for project finance.

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<sup>1</sup> We recommend a required standard offer of 400 MW because it is roughly the capacity that a single offshore wind installation vessel spread can install during a single construction season, given today's turbine technology and the permitted work periods in the U.S. Accordingly, it is the logical and appropriate size for a utility-scale offshore wind farm.

<sup>2</sup> This range of 200 MW to 800 MW is consistent with Massachusetts' 83C procurement, which resulted in a robust competition.

- **Improving Technology.** Offshore wind technology is developing very rapidly. We proposed the Block Island Wind Farm in 2008 with a 2.5 MW turbine, which was the largest on the market at the time. We build the project a few years later with a 6.0 MW turbine. The size of turbines, and the rate of technological innovation are both increasing significantly. While there may be some economies of scale for larger projects, they are unlikely to outweigh the benefits that still better turbines and other technology could offer. Accordingly, while it is important for offshore projects to move forward at a utility scale in New York, the rate of procurement should also consider how future technologies may allow even better pricing.
- **Project Risk.** Larger projects entail more risk than smaller projects from virtually every perspective – community support, opposition from the fishing community, financing and capital availability, interconnection, equipment availability, ports availability, and many more. We note that the largest offshore wind farm in the world today is 630 MW. That project required the use of multiple well-established posts and supply chains. Comparables for those facilities do not exist in the US today.
- **Program Risk.** New York has one of the largest offshore wind programs in the country. Sustained popular support for this program will require demonstration of successful projects. Granting a single larger award endangers the entire program because if that single larger project fails, it's larger size risks taking down the entire program.

If NYSERDA elects to award more than 400 MW<sup>1</sup>, we urge NYSERDA to do so by granting multiple awards to multiple developers. This would result in the following:

- More robust, local economic development
  - NY-based suppliers and skilled labor will be better able to learn and grow to serve the offshore wind industry for years to come, rather than having to rely on foreign crews and suppliers for much larger projects
  - A robust, lasting pipeline of projects will attract out-of-state suppliers to invest in NY, creating permanent jobs
- Lower cost to implement the full 2,400 MW goal
  - Having multiple awards in the first procurement would ensure that no single developer has a monopoly on suppliers and infrastructure in the state, and promotes robust competition in subsequent rounds of procurement
- Coastal community engagement and environmental best practices
  - At more incremental project sizes, developers would be better able to listen to concerns of local stakeholders, like commercial fishing, which allows for flexibility in project design and construction. Considering that offshore wind is still new to the United States, best practices have not been fully developed to ensure minimal or beneficial impacts to the marine environments and local communities. As these practices are formed throughout the northeast, NYSERDA should initially proceed with smaller, multiple projects awarded in the first procurement.
- Project quality and execution
  - Project execution risk is substantial, and having multiple projects awarded would better ensure the State moves towards its goal of 2,400 MW by 2030

- Multiple, smaller projects under development would increase the ability of NY-based firms to compete to supply projects, and would cause competition among awarded developers to execute on time and on budget. This competition would result in improved project quality compared to a singular large award.
- Transmission and grid integration – see response to #6

### **Interconnection and Deliverability**

6. Are there unique challenges associated with interconnection of offshore wind into downstate New York injection points in New York City and/or Long Island that should be taken into consideration when preparing the RFP? If yes, please identify the challenges.

Yes, interconnecting any resource in downstate New York involves significantly more challenging than interconnecting in other places due to the extreme density of the existing built environment and overall design architecture of the ConEd and LIPA transmission systems.

On the other hand, the direct injection of clean energy into downstate New York offers many potential benefits to the system, including near-term wholesale market price suppression and the potential to defer the need for new transmission and/or generation additions. We note that New York’s first offshore wind farm was selected in a REV-based procurement that was designed to avoid such costly additions.

Accordingly, NYSERDA should require that bidders demonstrate the feasibility of their interconnection and deliverability plans by requiring that proposals include the following:

- A study by a qualified independent electrical consultant demonstrating that the proposed point of interconnection is capable of accepting the proposed delivery quantity or identifying the cost of upgrading the transmission system to accommodate such injections;
- A study by a qualified independent environmental consultant demonstrating the feasibility of the proposed cable landfall, onshore route and onshore substation location; and
- A description by the proposer of how they have accounted for the anticipated cost of upgrades in their proposed price offering.

Additionally, in its evaluation of proposals, NYSERDA should consider the benefits to New York Communities, Ratepayers and/or Taxpayers resulting from the proposed project, which may include, but are not limited to:

- Wholesale energy market price suppression and public health benefits resulting from reduced dispatch of existing generation in downstate;
- Avoided investments in new transmission or generation resources (using the principles established in ConEd’s BQDM program and PSEG-LI’s South Fork Resources RFP); and
- Accelerated retirements or other resources (e.g. if the addition of an offshore wind interconnection at a particular point in the grid allows for early retirement of a peaking unit, the commercial, socio-economic and public health benefits of that early retirement).

7. The Order requires that an eligible project must deliver its energy into the New York Control Area (NYCA), either by direct lead into New York or directly into an adjacent control area with transmission into NYCA (Order, p. 46).

- a. Please specify the transmission service requirements and the transmission path from an adjacent control area to enable delivery into NYCA. What requirements should be included in the RFP to support NYSERDA's need to verify delivery into the NYCA?
- b. For projects interconnected in a control area adjacent to NYCA but that deliver energy into NYCA, please describe the risks associated with such delivery. How should these risks be allocated? What options are available to proposers to manage such risks? Should the risk of curtailment be reflected in the contract? If so, how?
- c. The Order adopted the energy delivery requirement employed by NYSERDA in its Renewable Energy Standard RFPs (Order, p. 46, fn. 45). Are there revisions to that requirement that would assist developers in obtaining financing, or in estimating the cost of delivery?

See our response to #6 above.

8. With respect to capacity attributes of projects:

- a. What transmission arrangements would have to be made in ISO-NE or PJM to facilitate the long-term delivery of capacity to NYCA? What requirements should be included in the RFP for NYSERDA to evaluate the feasibility of delivery of capacity to NYCA?
- b. For projects interconnected in a control area adjacent to NYCA but that deliver capacity into NYCA, please describe the risks associated with such delivery. How could these risks be allocated? What options are available to proposers to manage such risks?

No comments

9. What level of detail should proposers be required to provide to demonstrate the reasonableness of their transmission cost estimates for HVDC or AC export cables, interconnection, and/or transmission system upgrades (if needed) included in their bid prices?

See our response to #6 above.

10. How should NYSERDA consider a strategic partnership between an offshore wind developer and a transmission owner in project viability or other award determinations? Are there reliability, economic, and/or operational benefits associated with such a strategic partnership as it pertains to "wet transmission," i.e., onshore substation, offshore substation and export cable?

NYSERDA should consider the experience of the developer and any potential partners in evaluation under project viability.

### **OREC Pricing Options under the Index OREC Structure**

11. Should bids be restricted to a single nominal strike price for the entire contract period? If yes, why?

- a. In the alternative, should proposers be permitted to submit a schedule of nominal strike prices that vary each year? If yes, should a schedule of nominal prices that vary by year be limited to a fixed annual percentage escalator, or should annual changes be allowed to vary from year to year?
- b. If the strike price changes annually, should the schedule of nominal prices be specified by contract year (beginning at actual commercial operation date) or by calendar year?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question. NYSERDA should be able to compare bid prices from all developers on an “apples-to-apples” basis, and thus should require that each developer submit a single, levelized pricing for the term of the contract, in nominal 2019 dollars. NYSERDA should allow developers to propose alternative pricing schemes. NYSERDA should establish, and make known before the RFP, a methodology for evaluating all bids on a like-for-like basis. We strongly encourage NYSERDA to review the “Quantitative Evaluation Report” prepared by Tabors Caramanis Rudkavich in connection with the Massachusetts 83C solicitation and published by the MA DOER. Final pricing terms should be defined in negotiations between the selected developers and NYSERDA

12. How should negative LBMPs be accounted for under this contracting structure?

The Index OREC mechanism should account for negative LBMPs by incorporating the same into calculating the reference energy price, assuming that an offshore wind operator will continue to operate through events of negative LBMPs, up to some maximum number that a developer can account for in their bid price.

13. Is the current NYISO first year UCAP factor (the ratio of UCAP eligible for payment to the operable capacity of a resource in a given settlement period) of 38% reasonable to apply as a fixed value throughout the OREC contract period? If not, why not?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question, subject to change in law risk. The NYISO’s reference discount rating for offshore wind UCAP eligibility is a publicly-available independent reference, and thus should be used by NYSERDA as long as it is the NYISO standard. But, in the event of a change in law, regulation or NYISO policy that changes that assumption, value ascribed to capacity in the calculation of the Index OREC value should be changed to reflect the then-current NYISO policy.

#### **OREC Pricing Options under the Fixed OREC Structure**

14. Should bids be restricted to a single nominal OREC price for the entire contract period? If yes, why?
  - a. In the alternative, should proposers be permitted to submit a schedule of nominal OREC prices that vary each year? If yes, should a schedule of nominal prices that vary by year be limited to a fixed annual percentage escalator, or should annual changes be allowed to vary from year to year?
  - b. If the OREC price changes annually, should the schedule of nominal prices be specified by contract year (beginning at actual commercial operation date) or by calendar year?

See our response to #11



15. How should negative LBMPs be accounted for under this contracting structure?

See our response to #12

### **Bid Price Evaluation**

16. How should the Benefit Cost Analysis Framework set forth in Case 14-M-0101 (Reforming the Energy Vision) be applied or otherwise refined in the 2018 RFP regarding price evaluation?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question, with the addition of other considerations.

Although the Benefit Cost Analysis Framework set forth in case 14-M-0101 is useful for many utility investments, it does not include economic development benefits in either the Ratepayer Impact, Societal Cost, or Utility Cost Tests. Economic benefits is a key component of offshore wind energy since it is an entirely new industry in the United States, and as described by the Public Service Commission will factor 20% of a proposal's evaluation. Since projects compete on both price and economic benefits, the Benefit Cost Analysis Framework alone does not grant NYSERDA the ability to compare projects on an apples-to-apples comparison. E.g. if two projects bid the same price but one offered more economic benefits, the Benefit Cost Framework would consider both bids as equal.

In addition to economic benefits, we strongly encourage NYSERDA to consider Ratepayer Impact, Societal Cost and Utility Cost factors set forth in Case 14-M-0101 as part of the "Price" consideration of offshore wind bids received, as detailed in our response to #6 above. Specifically, NYSERDA should adopt the same considerations applied by ConEd in its BQDM program and by PSEG Long Island in its South Fork Resources RFP to select projects based not on the lowest nominal bid price, but instead with a heavy consideration of Ratepayer Impact, Societal Cost and Utility Cost factors, such as:

- Wholesale energy market price suppression and public health benefits resulting from reduced dispatch of existing generation in downstate;
- Avoided investments in new transmission or generation resources; and
- Accelerated retirements or other resources (e.g. if the addition of an offshore wind interconnection at a particular point in the grid allows for early retirement of a peaking unit, the commercial, socio-economic and public health benefits of that early retirement).

17. Per the Order, the Fixed OREC and Index OREC bids will be weighted for consideration in the price component of the evaluation (Order, pp. 39-40, Appendix B). What weighting should be chosen for each option and why?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question, but for different reasons. Bids in Fixed REC price forms leave too much uncertainty, especially given the scale of offshore wind projects. While a single onshore wind farm or solar farm may be able to hedge its commodity power exposure with bilateral contracts, it is able to do so because of the relatively small size of its project relative to commercial and industrial loads. Conversely, the larger size of offshore wind adds significant risk to the potential to find bilateral offtakers. Therefore, Deepwater Wind recommends

that Fixed REC bids be given a weight of zero. In this case, final pricing could be negotiated between NYSERDA and the awarded developer.

18. What bid price evaluation process “lessons” have been learned from offshore wind procurements in other jurisdictions that NYSERDA should take note of for purposes of the 2018 RFP?

NYSERDA should consider that other jurisdictions have had differing objectives in their procurements of offshore wind, and that they conducted their solicitations and evaluations in different ways.

In the case of the case of New York’s first offshore wind farm, the solicitation was a technology-neutral competition among projects that could help LIPA avoid the need to invest in costly new transmission or generation infrastructure, in accordance with the principles of REV (NYS PSC case 14-M-0101). PSEG Long Island retained an independent consultant to evaluate and rank these effects.

In the case of Maryland PSC Docket #9431, in which the state chose to purchase two offshore wind farms, the Commission engaged an independent consultant (Levitan & Associates) to conduct a unbiased net environmental and economic benefits test that considered, among others, the public health benefits of offshore wind, the job-creation and economic development benefits of the proposed projects and the market benefits that would result from the injection of large quantities of clean energy.

In the case of Massachusetts’ 83C solicitation, DOER retained an independent economic consultant (Tabors Caramanis Rudkavich) to conduct a comprehensive review of the proposals’ cost and their benefits in the market. A public (i.e. redacted) version of their “Quantitative Evaluation Report” is available on the MA DPUC web site.

For its upcoming procurement(s), NYSERDA should consider that pricing of offshore wind in other markets may not reflect conditions in New York for several reasons:

- Other markets may have more advanced infrastructure and supply chains readily able to serve the offshore wind industry in those markets, and NYSERDA is actively considering local content requirements when those components are not as mature in New York.
- Every market has different procurement mechanisms, and New York’s is especially unique. Pricing seen for PPAs, Feed-in-tariffs, or other types of OREC mechanisms may not be comparable with those that would be proposed using the Index or Fixed ORECs.
- Labor, energy, real estate and material costs are different in every market.
- NYSERDA is actively considering the most advanced environmental best practices of any procurement to date, which may result in price impacts compared to other markets.

At a minimum, NYSERDA should borrow the common theme from each market: the use of independent experts to develop a level playing field and to evaluate proposals on a like-for-like / apples-to-apples basis. NYSERDA should also specifically quantify the following with an independent evaluation:

- As part of its “Price” considerations, NYSERDA should engage an independent consultant to conduct an evaluation similar to that of PSEG Long Island’s scope in the South Fork Resources

RFP, which evaluated the potential for a project to defer the need for investments in new transmission or generation resources.

- As part of its “Price” considerations, NYSERDA should engage an independent consultant to conduct an evaluation similar to that of Tabor Caramanis Rudkavich’s scope in the MA 83C process to quantify the impact on the wholesale energy markets resulting from each project.
- As part of its “Economic Benefits” considerations, NYSERDA should engage an independent expert to conduct an analysis similar to that of Levitan’s in Maryland to consider the societal, market and economic development benefits of its projects using a comparable model-based methodology.

19. NYSERDA will use a maximum acceptable bid pricing metric in the solicitation (Order, p. 42). What factors should and should not be considered in setting the maximum acceptable bid price?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question. See also our response to #18.

20. How should the Index OREC strike price be adjusted to account for the included energy and capacity components in order to be structurally comparable to the Fixed OREC price, for purposes of both (i) comparison to the maximum acceptable bid price; and (ii) calculation of a weighted average bid price

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question.

21. Are there other provisions that are consistent with the structure of the order that would, if included in the RFP, allow for more competitive pricing?

No comments

22. NYSERDA retains the authority to reject all bids (Order, p. 43). What factors other than the maximum acceptable bid metric should be considered when determining whether to select or reject bids?

No comments

### **Economic Benefits**

23. In addition to project-specific spending and job creation in New York State, the Order encourages investment in enabling supply chain and infrastructure in New York, and commitments to offshore wind industry and supply chain stimulating activities that create real, persistent and sustainable institutional or labor capabilities in New York State, and that lower the cost of future offshore wind projects (Order, pp. 52-53).

- a. What documentation of such commitments should be required in the RFP to demonstrate real and verifiable investments in these categories?
- b. How should NYSERDA evaluate whether any investment is likely to lower the cost of future offshore wind projects?

Deepwater Wind agrees with NYSERDA that first competitive solicitation of offshore wind should result in the creation of a local supply chain that will result in decreased cost of subsequent projects and the creation of a globally competitive supply chain and workforce in New York.

NYSERDA should require developers to quantify their proposed economic development commitments in their proposal. NYSERDA should adopt the Commission's position and require developers to submit an Economic Benefits Plan that includes quantitative analysis of expected economic benefits with their bids. This analysis should also be separately verified by an independent consultant retained by NYSERDA to evaluate all economic benefits plans on an apples-to-apples basis. To substantiate their proposals, Developers should be required to submit all letters of support or supporting technical documentation related to proposed economic benefits.

As detailed in our response to #3, NYSERDA should require that developers propose at least one standard project and set of terms to allow for an apples-to-apples comparison. Accordingly, NYSERDA should require the base bid include a specified minimum percentage of expenditures of the project to use New York-based firms. It should also allow bidders to offer higher levels of local labor participation. NYSERDA should evaluate projects based on their commitments to using New York firms and labor, using an independent consultant to evaluate proposals on an apples-to-apples basis.

Economic Development Commitments should be established in a separate Joint Development Agreement including the developer, NYSERDA and any other public entity that the developer or NYSERDA deems appropriate to involve. Doing so will allow NYSERDA to involve other state entities (e.g. ESD, State Parks, others) and encourage developers to partner with municipal economic development authorities.

24. In accordance with the Order's guidance to include a local content provision in the evaluation criteria (Order, p. 52), NYSERDA may require that proposers file an Economic Benefits Plan (EB Plan), to demonstrate its commitments. The purpose of this EB Plan is (i) to explain and justify the proposer's claims, and (ii) to help evaluators consider the viability of claims. What information should be required in an EB Plan to support scoring of:

- a. Supply chain and supportive infrastructure investments?
- b. Opportunities for New York State businesses to bid on project expenditures?
- c. Enabling investments in activities, e.g., workforce development, R&D, other?

See our response to #23.

25. NYSERDA may establish a minimum requirement in the RFP to provide opportunities to New York State firms for project-related expenditures. Options include (i) requiring that opportunities for contracts be communicated to a New York State vendor list maintained by NYSERDA, and (ii) requiring that each proposer provide opportunity for New York State firms to bid on contracts representing some percentage of total project costs.

- a. What categories of expenditures are reasonable to apply such a requirement to?
- b. With respect to approach (ii), please comment on the practicality of such a requirement; what level of demonstration would be required; what is a reasonable specified percentage of total project costs to require; and what exceptions would it be reasonable to include.

See our response to #23.

26. In accordance with the Order, NYSERDA is interested in conveying greater weight to those expenditures and investments that (i) create persistent institutional or labor capabilities in NYS, and (ii) lower the cost of future offshore wind projects (Order, pp. 52-53). Please comment on:

- a. The proposed approach;
- b. What information may be reasonable to use as the basis for assigning such additional weight; and
- c. How much additional weight is appropriate to assign to expenditures or investments that create such benefits.

See our response to #23.

27. NYSERDA may establish penalties or other contractual repercussions, such as those used in its Renewable Energy Standard Tier 1 solicitations, which reduce the contract price in proportion to any shortfall below 85% of the economic benefits claimed, based on the independent audit of benefits realized during the first three years of commercial operations. Here, NYSERDA is considering: (i) reducing the contract price in proportion to the shortfall; (ii) requiring seller to make additional investment to make up a shortfall; or (iii) requiring seller to submit a payment in proportion to a shortfall to fund related activities. Please comment on these alternative approaches.

The potential for a change in the contract adds significant risk, and has the potential to result in higher financing costs. Deepwater Wind understands the need for an enforcement mechanism, but suggests that a more cost-effective approach would be a requirement for the developer to submit a payment in proportion to the shortfall (option iii). This should be explicit in the RFP as well as any resulting contracts between the developer and NYSERDA. As discussed above, NYSERDA should independently verify economic impact analysis submitted by developers.

28. If a fishing compensation program is submitted in conjunction with the fisheries management plan, how should the proposer quantify the economic impacts? How should the fishing compensation plan be considered along with other economic benefits (Order, p. 48)?

Fisheries compensation plans should be considered in connection with project viability, not economic benefits. Projects that are well-sited and well-developed will have less need for, or no need for, a fisheries compensation program. Such well-sited and well-developed projects should not be judged adversely, simply because they don't harm the fishing industry.

29. The Order recognizes that the development of offshore wind creates the potential for high-quality employment opportunities and therefore presents a significant potential benefit to New York State. What measures or arrangements do you consider the most efficient and effective ways to:

- a. Ensure that the maximum potential high-quality employment opportunities are available to New Yorkers?
- b. Ensure that a properly trained, highly-skilled and qualified workforce is available to fill the various labor needs throughout the duration of the project?

- c. Ensure opportunities for the participation of New York small businesses?

See our response to #23 above.

### **Project Viability**

30. What information and documentation should be required of proposers to demonstrate viability (please be specific as to the type of information and the level of detail which should be submitted), as follows, based on the criteria listed in the Order (Order, p. 53):

- a. Permitting Plan and Status: What level of detail should a proposer provide with respect to the project permitting plan and the status of each required permit?

NYSERDA should require a project plan that demonstrates knowledge of all required permits and team members with experience in obtaining and administering each.

- b. Financing Plan: What level of disclosure should a proposer be required to submit to demonstrate financial strength, e.g., audited financial statements, project pro forma, expressions of interest from equity and debt investors, other?

NYSERDA should require a financing plan that demonstrates experience in raising capital for comparable projects and audited financial statements that conform with US GAAP. Evaluation of financing plans should be based on the sponsor's experience and the quality of the plan.

- c. Developer Experience: How should proposers demonstrate that each member of the proposed project team has sufficient relevant experience to finance and develop the project?

NYSERDA should require a project management plan that includes project team resumes and an organizational chart that demonstrates sufficient related experience to finance and develop the project

- d. Proposed Technology: What level of detail should a proposer provide with respect to the project design and construction plan? How specific must a development plan be with respect to turbine arrangement, number and size of turbines, foundation design, turbine / blade selection, electrical collector station, export cable design / route, landfall location, and interconnection point(s)?

NYSERDA should require that bidders offer technology that is commercially available to the developer at the time of the RFP deadline, but should allow the developer flexibility to change to a different technology in the future, unless such change would undermine an economic development commitment. NYSERDA should evaluate the completeness and viability of a proposal, and should evaluate a developer's ability to design a project based on the appropriate level of information for a project at this stage of development.

- e. Development and Logistics Plan: What level of site control should be required for the necessary port facilities and other support infrastructure? What level of detail should be required in order to demonstrate the reasonableness of proposer's equipment procurement plan, including selection

and scheduling for construction vessels? Should proposers be required to submit a decommissioning plan, and if so, what level of detail and specificity should be required?

NYSERDA should require that bidders offer a logistics plan that makes use of real estate that is commercially available at the time of the RFP deadline, but should allow the developer flexibility to change to a different location in the future, unless such change would undermine an economic development commitment.

- f. Interconnection Status: Should the RFP require additional minimum requirements, beyond a valid interconnection request having been submitted to NYISO, with respect to completion of interconnection studies and the project's status in the interconnection process? If so, what should the requirements be? Please describe in detail how transmission and interconnection cost risk should be analyzed by NYSERDA.

Given the workings of the NYISO Interconnection Process (which is different than that of PJM or ISO-NE), there is no benefit to requiring that developers be in the queue prior to submitting a bid. Instead, developers should be allowed to propose a point of interconnection and submit the studies we describe in our response to #6 above.

- g. Reasonableness of Project Development Milestones: What milestones should be included in the development plan? What factors determine the reasonableness of the milestone schedule?

NYSERDA should evaluate the reasonableness of schedules, particularly permitting and development schedules, against offshore wind projects in the United States. We recognize that Block Island is the only example, but any permitting schedule that is more aggressive than Block Island's should only be deemed reasonable if there is a compelling explanation as to why it can be done more quickly, given the volume of data required by state and federal agencies, and the need for extensive public input.

- h. Community Outreach: How should proposers be required to credibly demonstrate their community outreach and support?

Community outreach is a foundational aspect of project success. Developers should submit all letters of support or other documentation regarding preliminary community outreach, and NYSERDA should evaluate this information in project viability.

- i. Environmental Impact: At the time of proposal submission, what geotechnical, geophysical, biological, and archeological studies should be completed and available?

The extent to which projects have invested in in-situ studies should not be a differentiating factor as any developer with funding can do those studies. What matters more is demonstration of consultations with communities and stakeholders prior to commissioning such studies, in order to ensure that the studies are conducted in ways that are safe and acceptable, and that they are gathering data that is useful, on sites that the communities and stakeholders will support. In Massachusetts, Vineyard Wind did a great deal of study work, only to face significant opposition from the fishing community because they weren't

consulted in advance. Similarly, in Maryland US Wind did a great deal of survey work, but faces significant opposition from the municipality of Ocean City, who claims they weren't consulted.

- j. Wind Resource Assessment: At the time of proposal submission, what wind resource studies, turbine power curve data, energy yield calculation, gross (turbine) output, expected availability, and losses by category should be available or provided? Should this information be indicative or binding? What changes should be allowed?

Developers can reasonably provide energy production estimates, including a 12X24 estimates. However, developers must have the ability to change the turbines, if they choose, and optimize the array layout.

### **Marine, Environmental and Other Impacts**

31. The Commission Order references that the Offshore Wind Master Plan and its incorporated study that concluded that a 20-mile setback from any coastal position would minimize visual impacts during most times of day (pp. 49-50). NYSERDA has the discretion to tailor the setback requirement if it determines that a modified approach is necessary to optimize the overall environmental and economic benefits.

- a. What factors should NYSERDA consider in determining the RFP's setback requirement?

Community support for offshore wind projects is critical both for project viability, and for maintaining on-going popular support for the local offshore wind industry. We encourage NYSERDA to carefully consider the opposition of Ocean City, Maryland to the proposed US Wind project there (which is 17 miles from shore), and contrast it with the support of the East Hampton, NY community to the project proposed there (which is over 30 miles from shore). NYSERDA should consider community input into designing setback requirements. Different communities have different opinions on visual impacts but nevertheless developers should exhibit some early stage of community engagement with respect to visual impacts, especially if a developer will seek local approvals for transmission cable routing.

32. The Order includes a number of provisions relating to environmental concerns and commercial fishing interests (Order, pp. 47-48) including the development of best management practices and the submission of a fisheries mitigation plan.

- a. Are there examples of best management practices that could serve as a useful starting point for environmental and commercial fishing considerations?
- b. What information should proposers be required to provide in their fisheries mitigation plan to demonstrate potential mitigation measures in this area? What level of specificity is appropriate?
- c. What commitment should proposers provide regarding how they will work with the commercial fishing communities to design and operate sites that provide the greatest practical access for commercial fishing (by gear type) and for commercial vessel (and other maritime shipping interest) navigation and transit through turbine arrays?

Not all sites have the same level of potential impacts to fishing. Accordingly, developers should be allowed to propose fisheries mitigation programs that are appropriate for their sites.



33. The Order requires that environmental data collected by the developer be made publicly available, except data normally considered proprietary. What environmental data collected by developers should be made publicly available and what data should be considered proprietary?

Raw data collected at a developer's expense should be considered proprietary, but summaries of such data, based on scopes agreed to with agencies and stakeholders, can and should be made publicly available.

34. The Order suggests that NYSERDA file a proposed revision to the Environmental Research Program's Clean Energy Fund Investment Plan to support offshore wind environmental research.

- a. How much funding should be made available to support State-sponsored environmental research, and over what timeframe?
- b. How could these funds be used to best reduce risk and advance responsible development of offshore wind?

No comment.

#### **Eligibility/Contract Provisions**

35. To encourage the greatest participation by offshore wind developers, what specific considerations should be made in defining eligibility and threshold requirements, bid flexibility, and other procurement mechanics?

In addition to the Commission's eligibility requirements, NYSERDA also should consider developer team experience in these categories under the project viability metric

36. NYSERDA has the discretion to determine additional eligibility requirements for participation in the solicitation beyond those defined in the Order (Order, p. 46).

- a. Are there additional eligibility requirements that should be included in the solicitation? If so, what are the (dis)advantages of imposing such eligibility requirements on proposers?

Deepwater Wind supports the eligibility requirements set by the Commission, including requiring that eligible projects have the following characteristics:

- Hold a valid lease with the Bureau of Ocean Energy Management that is in good standing at the time the RFP is due
- Be not smaller than a certain MW capacity, not larger than a certain MW capacity, and must offer a standard-sized MW capacity to allow for an apples-to-apples comparison. See our comments on this in #3 above.
- Demonstrate the ability to deliver their output in to the NYCA under all reasonable grid operating circumstances.

37. NYSERDA will have discretion in fixing specific contract terms between 20 and 25 years (Order, p. 41). Should NYSERDA require proposers to submit offers for one or more specified terms, or allow respondents to propose a term length?

As detailed in our response to #3, NYSERDA should require that developers propose at least one standard project and set of terms to allow for an apples-to-apples comparison. Given that 20 years is the term of the Block Island Wind Farm PPA, the South Fork Wind Farm PPA, the Maryland OREC awards and the PPAs recently awarded to Vineyard Wind and Deepwater Wind in MA, CT and RI, we suggest that 20 years should be the basis of the standard term. However, in addition to that, NYSERDA should also allow developers to propose alternative configurations, including a term of up to 25 years.

38. What factors should be considered in setting a latest allowable commercial operation date (COD) (Order, p. 46)?

- a. How should the contract address delays in achieving the COD?
- b. Should liquidated damages (LDs) be employed to foster timely commercial operation? Related to LDs, what factors should be considered in determining the reasonableness of a delayed COD?
- c. If a selected project is not completed by the contractual COD, what size financial penalty should be levied for failure to perform?

As detailed in our response to #3, NYSERDA should require that developers propose at least one standard project and set of terms to allow for an apples-to-apples comparison. Given that America's only operating offshore wind farm required 5-years from receipt of a fully-approved, un-appealable PPA to achieve commercial operations, we suggest that NYSERDA should require that all developers to propose a standard COD that is 5 years post receipt of a contract with NYSERDA. In addition to that, developers should be allowed to propose earlier or later CODs, provided that they (1) can explain why an earlier COD is reasonable and (2) they demonstrate that their later COD still allows for an in-service date prior to Gov. Cuomo's goal of 2,400 MW before 2030 and is accounted for in the evaluation of benefits. Appropriately-sized LD's are commercially reasonable as enforcement mechanisms.

39. The development of offshore wind is important to New York both economically and environmentally. Timely completion of on offshore wind project, in a cost-effective manner, is critical. What measures or arrangements do you consider the most efficient and effective ways to:

- a. Ensure that the project proceeds on-time and on budget, and is protected from potential disruption and delays due to labor disputes?
- b. Ensure construction management flexibility to coordinate the work of multiple trade contractors, including both union and non-union contractors, who might otherwise be subject to different restrictions, and to efficiently respond to any project-specific construction standards?

Developers should be required to submit a plan and NYSERDA should review the same to determine (1) it's reasonableness and (2) the ability of the developer to successfully execute it.

40. The Order states that "[i]f NYSERDA awards a contract using the Index OREC method, the contract will specify conditions that may trigger a reversion to the Fixed OREC method and price that was bid" (Order, p. 40).

- a. How should this provision be included in the contract?
- b. What conditions could trigger the reversion?
- c. Should there be a limited timeframe within which such a reversion must be exercised?

Deepwater Wind supports the position of the New York Offshore Wind Alliance on this question. Deepwater Wind recommends that the contract revert to a Fixed OREC method only if the Index OREC method is invalidated by litigation or by statute. Final terms of such a reversion should be defined in the negotiation period between NYSERDA and the awarded developers.

41. Are there any other topics or risks that NYSERDA should consider in drafting the RFP?

Deepwater Wind does not propose any additional topics or risks to consider in drafting the RFP

### **Conclusion**

Deepwater Wind appreciates the opportunity to provide input and looks forward to working with the NYSERDA, and stakeholders in this process. NYSERDA has given extensive consideration to achieving Governor Cuomo's ambitious goals. Given its successful experience in developing, financing, constructing, and operating the only offshore wind farm in the United States, Deepwater Wind respectfully urges NYSERDA to adopt the comments herein.