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Comments submitted via email to offshorewind@nyserda.ny.gov, Subject: RFI OSW-2018 Comment

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General Comments

EDF Renewables Development, Inc. appreciates the opportunity to provide comments for NYSERDA RFI OSW-2018. Due to the short timeline to respond and internal resource constraints, EDF Renewables Development, Inc. is submitting an abbreviated response ahead of the deadline and will follow up with additional replies within two weeks.

EDF Renewables Development Inc. is wholly owned by EDF Renewables (EDFR). Based in San Diego, CA, EDFR is a US corporation focused exclusively on the development, ownership and operation of renewable energy projects. EDFR. owns and operates almost 5000 MW of wind projects in operation in the US and has developed over 10,000 MW of operating wind and solar assets. The company has been in operation since 1987 and has grown rapidly over this period. East coast offshore wind operations are coordinated out of our Philadelphia office, as well as our corporate offices. EDFR is owned by EDF Energies Nouvelles (EDF EN). EDF EN owns 400 MW of operating offshore wind projects with 2GW expected to start construction in the next 2 years.

EDFR expects that any actions taken during this first round of offtake solicitations will likely form a precedent for future rounds and submits these comments in that context. EDFR will not be participating in the 2018/2019 RFP at this time.

EDF Renewables Development, Inc. replies to answered questions are in **bold** throughout the document.



Procurement Schedule

- 1. The first solicitation will be issued in the fourth quarter of 2018 (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?

Based on work done by NYSERDA in the NY Bight, EDFR assumes that 12 months is an appropriate amount of time between RFP issuance and submittal. EDFR assumes this same schedule will apply to future auctions.

b. What factors (*e.g.*, available staff, geotechnical and engineering studies, supply chain negotiations, ongoing data collection) drive the time needed to prepare proposals?

Supply chain negotiation will be a key driver in finalizing all pricing. This includes turbines, installation vessels, and foundations. There are limited US supply chain companies at this time, and the effort in supplying accurate bids takes multiple months.

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?

This term is reasonable, though potential changes in tariffs that have been proposed or implemented may cause supply chain prices to be higher to account for uncertainty past 3 months.

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?

In order for NY to allow for maximum competition in future solicitations, EDFR suggests that this round include no more than 800MW. While expectations are that the NY offshore market will grow, awarding more than 1/3 of offtake contracts in the first 2 years will reduce the opportunity for future competition or economic development by limiting the number of developers able to participate.



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?

Discrete MW targets will provide NYSERDA an "apples to apples" comparison of projects and speed review. This would apply to future solicitations as well.

5. The Order notes that NYSERDA could award more than 800 MW in the first year alone to secure economic develop 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?

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.

There are a limited number of viable interconnection locations in downstate NY. Future discussion about offshore transmission solutions that will expedite future projects while not causing project schedule risks are suggested.

- 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?

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?

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?
- 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?

Detailed analysis and comparison of alternatives is key to this. NYSERDA should be aware that this work will take many months and could impact the first round of projects.

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?

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? EDFR supports a fixed-price contract. The OREC models in New Jersey and Maryland are useful for consideration. In comparison, an "Index OREC" structure is not preferable because of the higher costs associated with financing a non-fixed price contract.
 - 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?
- 12. How should negative LBMPs be accounted for under this contracting structure?



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?

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? The bids should all be uniform. If NYSERDA wants to see a fixed price that doesn't change for each year, this should be specifically outlined. Alternatively, if NYSERDA wants bids with an escalator, this should be standardized across all bids. The more standardized bids can be, the quicker they can be assessed.
 - 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?
- 15. How should negative LBMPs be accounted for under this contracting structure?

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?
- 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?
- 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? The more each bid follows the same format as others regarding questions answered, data supplied, net benefits offered, and pricing, the quicker NYSERDA will be able to assess projects.
- 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?



- 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.
- 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?
- 21. 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?

Economic Benefits

- 22. 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?

Signed agreements or MOUs are the minimum standard for this. It is important to keep in mind that some projects details will not be certain at the time of submittal and NYSERDA should allow developers the flexibility to adjust agreements assuming the net benefits stay at the same level or improve.

- b. How should NYSERDA evaluate whether any investment is likely to lower the cost of future offshore wind projects?
- 23. 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?
- 24. 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.

- 25. 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.
- 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.

Should a project owner not meet economic benefit claims there should <u>not</u> be a change to the contract amount. This adds a level of uncertainty in all levels of project finance that will drive up costs. Should a project have a net benefit shortfall, EDFR suggest that additional investment or payment in activities that support offshore wind are appropriate. This will provide projects a clear understanding of their commitments should net benefits not materialize and can be quantified and included into projects costs. Should a project need to make any additional investment, it will grow the state industry, even if one project does not deliver benefits as planned.

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)?

This is a benefit that should be included as an economic benefit. The annual value of the fund should be counted towards the project annual value, assuming reasonableness of the fund size.

- 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?

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?
 - 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?

Audited financial statements are preferred.

- 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?
- 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)?



Technology for offshore wind is changing each year and bids should provide a baseline level of detail with some description of changes that may occur as the technology changes.

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?

MOUs or letters of support from vessel companies regarding schedule are needed. A decommissioning plan should be included. They are standard in the industry.

- 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.
- g. Reasonableness of Project Development Milestones: What milestones should be included in the development plan? What factors determine the reasonableness of the milestone schedule?
- h. Community Outreach: How should proposers be required to credibly demonstrate their community outreach and support?
- i. Environmental Impact: At the time of proposal submission, what geotechnical, geophysical, biological, and archeological studies should be completed and available?
- 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 this information be indicative or binding? What changes should be allowed?

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?
- 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?
 - 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?
 - 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?

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?



- 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?
- 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?

Projects should have the opportunity to submit for both 20 and 25 years so that NYSERDA can see first-hand the impact of longer term contracts on pricing in a uniform manner.

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

Thank you again for the opportunity to submit comments. EDFR plans to submit additional feedback in the near future.

Sincerely,

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Doug Copeland EDF Renewables