



NYSERDA

New York State Offshore Wind Standard Technical Conference & Request for Information

July 23, 2018



Agenda

Offshore Wind Standard Technical Conference

Agenda

1. Logistics
2. Welcoming Remarks
3. Offshore Wind Standard Order Overview
4. Introduction to NYSERDA's Request for Information (RFI)
5. RFI Questions by Topic

Offshore Wind Standard Technical Conference

Logistics

1. Webinar attendees will be on “mute”
2. NYSERDA will pause for questions at regular intervals
3. Webinar attendees please use “chat” function to ask questions
4. In-person attendees can ask questions at the podium
5. If you have technical issues or additional questions after the webinar concludes, please email offshorewind@nyserda.ny.gov

Welcoming Remarks

**John Rhodes, Chairman
New York Public Service Commission**

**Alicia Barton, President and CEO
NYSERDA**

Offshore Wind Standard Order Overview

Offshore Wind Standard

Governor Cuomo announced plan directing the procurement of approximately 800 megawatts of offshore wind to jumpstart industry

- On July 12, 2018 the Public Service Commission issued an Order directing NYSERDA, in consultation with NYPA and LIPA, to procure approximately 800 MW of offshore wind between 2018 & 2019
 - To access the Order, search Case “18-E-0071” on Commission’s web site
- First phase of offshore wind procurement will support state’s overall goal of 2,400 megawatts of offshore wind by 2030
- Will support the State’s Clean Energy Standard Mandate to obtain 50 percent of its electricity from renewables by 2030

Offshore Wind Standard

Procurement Timing & Funding

- NYSERDA will issue its first Request for Proposals in the fourth quarter of 2018
- NYSERDA will consult and coordinate with NYPA and LIPA
- A second solicitation may be issued in 2019
- NYSERDA will procure Offshore Wind Renewable Energy Credits (ORECs) from awarded facilities
 - Order places an obligation for Load Serving Entities (LSEs) to support these new offshore wind resources through the purchase of ORECs from NYSERDA
 - An Electric Distribution Company backstop will provide funding certainty



Offshore Wind Standard

NYSERDA - Scoring Criteria

- 70% Bid Price
 - Same weighting as Renewable Energy Standard Tier 1 and also uses a Net Present Value calculation
- 20% Economic Benefits
 - Must include a local content requirement, but has discretion in designing
- 10% Project Viability
 - Increase weight from Renewable Energy Standard Tier 1 solicitations to account for expiring federal tax credits



Offshore Wind Standard

Hybrid Procurement Approach

- Each proposal is required to include two bids, one for a fixed OREC price (Fixed OREC) and one for an adjustable OREC price (Index OREC)
- NYSERDA has authority to award a contract for either contract structure, but if an Index OREC is selected, the contract will specify conditions that may trigger a reversion to the Fixed OREC
- The two bids will be weighted and the 70% price component of the bid will be scored based on this combined weighted value
- NYSERDA may employ the use of a benchmark price above which a contract will not be awarded
- NYSERDA has discretion in specifying the contract term, which will be between 20 and 25 years

Offshore Wind Standard

Transmission

- The Order states that eligible projects must deliver their electrical energy into the New York Control Area (NYCA), either directly or into an adjacent control area with transmission into the NYCA
- A major decision for the Commission was to resolve whether transmission should be direct radials or developed via a shared radial to accommodate multiple projects; a secondary question regards transmission ownership
 - Phase I procurements will leave the transmission responsibility to the developer, and any developer is free to arrange for transmission with an independent developer
 - Any overbuilt transmission will not be accorded additional value in the evaluation process
 - NYSERDA was instructed to take into account the potential effects on project viability of alternative transmission structures

Offshore Wind Standard

Special Provisions

- Commission provided direction authorizing NYSERDA to include certain provisions in its RFP
 - Commitments to project labor agreements and prevailing wages as contract requirements for any awarded project
 - Provisions to ensure that any awarded offshore wind projects consider the interests of ocean users such as commercial and recreational fishing, environmental stakeholders, and coastal communities



Offshore Wind Standard

Fishing and Environmental Considerations

- The Order is deliberate in its direction for NYSERDA to engage the fishing and the environmental communities in the development process to support responsible development



Offshore Wind Standard

Fishing and Environmental Considerations Cont'd

- In addition, the Order:
 - Brings New York State into the development process by requiring any awarded developer to engage in consultations with New York State agencies around fishing, wildlife and other environmental interests;
 - Provides for greater transparency by ensuring that developer collected “environmental data” is made publicly available;
 - Requires that proposers provide a Fisheries Mitigation Plan, which may reflect any best practices identified by the State’s Technical Working Group and encourages the development of Best Management Practices for consideration in future rounds of procurement; and
 - Includes consideration (points) for fishing compensation in the RFP.

Offshore Wind Standard

Visual Impacts

- Minimizing visual impacts is a strong concern, and will be a contract requirement.
- Based on the analysis in the New York State Offshore Wind Master Plan, a 20-mile setback from any coastal position would eliminate or minimize visual impacts under most daylight conditions.
- NYSERDA will have discretion to tailor the setback requirement if it determines that a modified approach is necessary to optimize the overall environmental and economic benefits of this and future procurements.
- Lighting controls to minimize nighttime visibility will be required.

Request for Information

Request for Information

Process

- NYSERDA seeks input into the development of its 2018 RFP
- NYSERDA issued an RFI on July 20, 2018
 - The RFI is available at <http://www.nyserda.ny.gov/osw-rfi>
- With this RFI, NYSERDA seeks to gather stakeholder input in a number of important areas regarding the RFP, including schedule, quantity, price, non-price evaluation criteria, and evaluation metrics.
- Comments are due in response to this RFI on August 10, 2018 by 5:00 p.m. Eastern Time.
- Submit responses to offshorewind@nyserda.ny.gov with the subject “RFI OSW-2018 Comments.”

Request for Information

Content

- Responses should be concise and focused on areas where the respondent has particular interest or expertise.
- Respondents are not required to answer all questions and should focus on questions relevant to their field of expertise.
- Responses should be less than 30 pages, in Microsoft Word or searchable PDF form, and without technical attachments.
- Respondents should provide only information that can be made public by NYSERDA.
- All responses to the RFI will be published on NYSERDA's website as submitted and should therefore not contain any confidential or proprietary information.

Request for Information

Areas for Feedback

- Procurement Schedule
- Procurement Quantity
- Interconnection and Deliverability
- OREC Pricing Options under the Index OREC Structure
- OREC Pricing Options under the Fixed OREC Structure
- Bid Price Evaluation
- Economic Benefits
- Project Viability
- Marine, Environmental and Other Impacts
- Eligibility/Contract Provisions

Procurement Schedule

Procurement Schedule

The Order:

- States NYSERDA will issue its first Request for Proposals in the fourth quarter of 2018
- States a second solicitation may be issued in 2019

The RFI Asks:

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

Procurement Quantity

Procurement Quantity

The Order:

- States that over a two-year period, Phase I of the Offshore Wind Standard will procure ORECs associated with the output of approximately 800 MW
- 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.
 - NYSERDA could award more than 800 MW in contracts in the 2018 procurement if sufficient attractive bids are received
 - NYSERDA could reduce the size of its initial solicitation if NYPA and/or LIPA pursue an immediate solicitation
 - If NYSERDA procures ORECs from 800 MW or more in 2018, a second procurement would require further Commission authorization

Procurement Quantity

The RFI Asks:

1. 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?
2. 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?
3. What should the RFP include to promote economic development or tax benefits?

Questions

Interconnection and Deliverability

Interconnection and Deliverability

The Order:

- States that eligible projects must deliver their electrical energy into the New York Control Area (NYCA), either directly or into an adjacent control area with transmission into the NYCA
- Phase I procurements will leave the transmission responsibility to the developer
 - NYSERDA should take into account the potential effects on project viability of alternative transmission structures



Interconnection and Deliverability

The Order cont'd:

- Any overbuilt transmission will not be accorded additional value in the evaluation process
- The Commission recognizes the potential economies of shared transmission solutions, and agrees that immediate steps are needed to study a potential backbone system for Phase II and beyond
 - DPS Staff and NYSERDA will convene a technical conference no later than September 28, 2018 to study the optimal configurations and ownership strategies for such transmission development

Interconnection and Deliverability

The RFI Asks:

1. What transmission arrangements are needed to deliver energy from outside of the NYCA?
2. What risks are associated with delivering energy from outside of the NYCA?
3. What transmission arrangements are needed to deliver capacity from outside of the NYCA?
4. What should developers have to provide to justify the reasonableness of their transmission cost estimates?
5. How should the presence of a partnership between a project developer and a transmission developer impact NYSERDA's evaluation of project viability?

OREC Pricing Options under the Index OREC Structure

OREC Pricing Options under the Index OREC Structure

The Order:

- Defines the Index OREC as adjustable OREC prices that net periodically against a reference price expressed in a market index
- The contract price will vary monthly over the term of the contract
- The Monthly OREC Price is calculated using reference energy and capacity prices, with the Index OREC Strike Price (bid by the generator) being the starting point for determining each Monthly OREC Price
- Each Monthly OREC Price will be calculated during a settlement period following each month by the general formula:

$$\text{Index OREC Strike Price} - \text{Reference Energy Price} - \text{Reference Capacity Price} = \text{Monthly OREC Price}$$

OREC Pricing Options under the Index OREC Structure

The Order:

- States that the Reference Energy Price shall be a time-weighted average hourly NYISO day-ahead market price index and a load-weighted average of those prices in NYISO Zones J and K
- The Reference Capacity Price shall be a megawatt-hour equivalent price based on the zonal load-weighted average monthly spot market Unforced Capacity (UCAP) prices in NYISO Zones G, H, I, J and K

OREC Pricing Options under the Index OREC Structure

The RFI Asks:

1. Should bids be limited to fixed-prices over the contract life, or should NYSERDA allow variable price schedules?
2. How should the contracting structure accommodate periods of negative locational-based marginal prices (LBMPs)?
3. In calculation of the \$/MWh-equivalent Reference Capacity Price, how should the UCAP factor be determined? Is use of a fixed value of 38% throughout the contract period reasonable?

OREC Pricing Options under the Fixed OREC Structure

OREC Pricing Options under the Fixed OREC Structure

The Order:

- Defines the Fixed OREC as a fixed as-bid OREC price through the contract lifetime – substantially identical to the approach adopted by the Commission for Tier 1 of the Renewable Energy Standard
- This option will be established on the same terms as used in the CES solicitations



OREC Pricing Options under the Fixed OREC Structure

The RFI Asks:

1. Should bids be limited to fixed-prices over the contract life, or should NYSERDA allow variable price schedules?
2. How should the contracting structure accommodate periods of negative locational-based marginal prices (LBMPs)?



Bid Price Evaluation

Bid Price Evaluation

The Order:

- Requires NYSERDA to solicit two separate bids from each bidder, one for the Fixed OREC and the other for the Index OREC
- The raw bid prices will be weighted using a formula articulated in the RFP, and the price component of the overall bid score (70%) will be based on this combined weighted value
- The RFP will include a maximum acceptable bid price, above which point any bids would be automatically rejected
- NYSERDA will also retain the right to reject all bids, taking into account not only the maximum acceptable bid price but also recent auction and market conditions

Bid Price Evaluation

The RFI Asks:

1. What weighting factors should be selected and why?
2. What price evaluation lessons can be learned from procurements in other jurisdictions?
3. How should the maximum acceptable bid price be determined?
4. The Index OREC bid prices will have to be adjusted by values for energy and capacity in order to be compared directly to the Fixed OREC bids. How should this adjustment be performed?
5. What other provisions should be included in the RFP to allow for more competitive pricing?

Questions

Economic Benefits

Economic Benefits

The Order:

- Acknowledges the State's geographic advantage
- Recognizes the potential economic benefits are large, and the best way to secure them is through a procurement process that includes procurement criteria to provide for development within New York

The RFI Asks:

1. What information should be required in an Economic Benefits 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?

Economic Benefits

The Order:

- Identifies the opportunity for economic development, workforce employment, and purchases of local products and service, among other things.

The RFI Asks:

1. 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?

Economic Benefits

The Order:

- NYSERDA is expected to include a local content provision in the evaluation criteria. The exact form and weighting of local content, and the extent to which it affects the evaluation of bids, will be within NYSERDA's discretion.

The RFI Asks:

1. With respect to local content provisions that may include (i) communicating opportunity to NYS businesses, and (ii) require each proposer provide opportunity for NYS firms to bid on contracts
 - a. What categories of expenditures are reasonable to apply such a requirement to?
 - b. What is the practicality of requiring opportunity for NYS firms to bid; 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.

Economic Benefits

The Order:

- To ensure objectivity and transparency in the evaluation process, NYSERDA will clearly describe the criteria in each solicitation and the rationale for their application will be appropriately documented in the contracting record.

The RFI Asks:

1. With respect to penalties or other contractual repercussions that may arise from non-compliance with economic benefit claims, NYSERDA is considering:
 - a. reducing the contract price in proportion to the shortfall;
 - b. requiring seller to make additional investment to make up a shortfall;
 - c. requiring seller to submit a payment in proportion to a shortfall to fund related activities.

Economic Benefits

The Order:

- A variety of factors should be considered as economic benefit criteria, including direct expenditures, investment in enabling supply chain and infrastructure, and commitments to offshore wind industry and supply chain stimulating activities. Weight should be attributed to, expenditures and investments that create real, persistent and sustainable institutional or labor capabilities in NYS, and that lower the cost of future OSW projects.

The RFI Asks:

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

Economic Benefits

The Order:

- Weight should be attributed to those activities, expenditures and investments that create real, persistent and sustainable institutional or labor capabilities in New York State, and that lower the cost of future offshore wind projects. Criteria may also include other direct benefits to New York economic interests.

The RFI Asks:

1. How NYSERDA could give 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
2. What information may be reasonable to use as the basis for assigning such additional weight; and
3. How much additional weight is appropriate to assign to expenditures or investments that create such benefits.

Economic Benefits

The Order:

- Any compensation programs included in these plans will be considered and weighted in the bid evaluation process.

The RFI Asks:

1. How should proposers quantify economic impacts to commercial fishing through compensation programs/fisheries mitigation plans as discussed in the Order?



Project Viability

Project Viability

The Order:

- Permitting Plan and Status
- Financing Plan
- Developer Experience
- Proposed Technology
- Development and Logistics Plan
- Interconnection Status
- Reasonableness of Project Milestones
- Community Outreach
- Environmental Impact*
- Wind Resource Assessment

* Environmental evaluation criteria for the purpose of scoring proposals are reserved for Phase 2 due to the need for further analysis and development of BMPs

Project Viability

The RFI Asks:

1. 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), based on the criteria listed in the Order

Questions

Marine, Environmental, and Other Impacts

Marine, Environmental, and Other Impacts

The Order:

- Notes that minimizing visual impacts is a strong concern and will be a contract requirement;
- Provides NYSERDA discretion in setback requirements, and;
- Requires lighting controls to minimize nighttime visibility.

The RFI Asks:

1. What factors should be considered in determining the RFP's setback requirement?

Marine, Environmental, and Other Impacts

The Order:

- Reinforces the value of the Technical Working Groups (TWGs) and encourages their use for sharing information and informing State decision making and requires bidders to participate in the TWGs;
- Requires the selected developer to consult with the State in developing its approach to satisfy federal requirements relating to fishing, wildlife, and other environmental interests;
- Requires developer collected “environmental data” transparency;
- Encourages NYSERDA to request additional funding from the NYS DPS to enhance support of offshore wind related environmental research, and;
- Provides the option of incorporating environmental impact criteria into the bid scoring calculations in Phase 2 and BMPs.

Marine, Environmental, and Other Impacts

The RFI Asks:

1. What environmental data should be made available vs. what data should be considered proprietary to the developer?
2. How much funding is needed to support environmental research, and how can it be best be used to reduce risk and support responsible development?
3. Are there examples of best management practices that could serve as a useful starting place?



Marine, Environmental, and Other Impacts

The Order:

1. Requests the F-TWG develop BMPs to prevent or reduce potential impacts associated with offshore wind energy development;
2. Requires bidders to submit a “Fisheries Mitigation Plan” which may also include any BMPs established by the TWGs, and;
3. Requires NYSERDA to consider any compensation programs included in “Fisheries Mitigation Plans” in the bid evaluation process.

Marine, Environmental, and Other Impacts

The RFI Asks:

1. What information should be required in a fisheries mitigation plan?
2. What commitment should proposers provide in regard to how they will work with the commercial fishing communities to design, build and operate sites?
3. If a compensation program is included in the fisheries mitigation plan, how should the proposer quantify the economic impacts and how should the fishing compensation plan be considered along with other economic benefits?

Questions

Eligibility/Contract Provisions

Eligibility/Contract Provisions

The Order:

- Limits eligibility to offshore wind electric generation facilities that:
 - Are located in ocean waters of the United States;
 - Become operational on or after January 1, 2015;
 - Deliver their electric energy into the New York Control Area, either by direct lead into New York or directly into an adjacent control area with transmission into the New York Control Area; and
 - Have obtained a lease from BOEM.
- But provides NYSERDA with discretion to determine additional eligibility requirements for participation in the solicitation.

Eligibility/Contract Provisions

The RFI Asks:

1. 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?



Eligibility/Contract Provisions

The Order:

- Does not include any rule regarding how the RFP or contract should designate a commercial operation date requirement.

The RFI Asks:

1. What factors should be considered in setting a latest allowable commercial operation date (COD)?
 - 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?

Eligibility/Contract Provisions

The Order:

- Allows NYSERDA to fix contract terms between 20 and 25 years (Order, p. 41).

The RFI Asks:

1. Should NYSERDA require proposers to submit offers for one or more specified terms, or allow respondents to propose a term length?



Eligibility/Contract Provisions

The Order:

- Provides that 20% of the overall score will be based on the economic benefits to New York pledged by a developer in its proposal.

The RFI Asks:

1. How NYSERDA should design contractual enforcement provisions to address shortfalls in economic benefits, and explains that NYSERDA may establish penalties or other contractual repercussions:
 - a. which reduce the contract price in proportion to any shortfall below a certain percentage of the economic benefits claimed;
 - b. require seller to make additional investment to make up a shortfall; or
 - c. require seller to submit payment(s) in proportion to a shortfall to fund related activities.

Eligibility/Contract Provisions

The Order:

- States that “if 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.”

The RFI Asks:

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

Eligibility/Contract Provisions

The Order:

- Recognizes that development of offshore wind is important to New York both economically and environmentally, and that timely completion of an offshore wind project in a cost-effective manner is critical.

The RFI Asks:

1. 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?

Questions

Next Steps

Next Steps

Request for Information

- Comments are due in response to the RFI on August 10, 2018 by 5:00 p.m. Eastern Time.
- Submit responses to: offshorewind@nyserda.ny.gov with the subject “RFI OSW - 2018 comments.”

