Response of National Grid

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Background: National Grid (LSE: NG; NYSE: NGG) is an electricity, natural gas, and clean energy

delivery company that supplies the energy for more than 20 million people through its networks in New York, Massachusetts, and Rhode Island. National Grid is transforming its electricity and natural gas networks to support the 21st century digital economy with

smarter, cleaner, and more resilient energy solutions.

Most recently, to begin fulfilling its requirements in Massachusetts under Section 83C of an Act Relative to Green Communities, National Grid, the other Massachusetts electric distribution companies, and the Massachusetts Department of Energy Resources, monitored by an independent evaluator, evaluated offshore wind (OSW) proposals received in response to the Massachusetts Section 83C Offshore Wind Energy Generation request for proposals ("Section 83C RFP"). Pursuant to the Section 83C RFP, on July 31, 2018, National Grid and the other Massachusetts electric distribution companies filed long-term contracts with an 800 MW OSW energy generation project for review and approval by the Massachusetts Department of Public Utilities.

In Rhode Island, National Grid also is negotiating a contract with a 400 MW OSW project selected by two Rhode Island state agencies that were invited to participate in the Section 83C solicitation process conducted by Massachusetts.

The first OSW project in the United States, operational since 2016, has a long-term contract with National Grid. The project is a 30 MW OSW facility located off the southern coast of Block Island, Rhode Island.

Question #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?

National Grid's Response to Question #1:

NYSERDA should conduct a bidders' conference before proposals are due and should request questions from bidders regarding the RFP. NYSERDA could post the answers to those questions for the benefit of all bidders and stakeholders on a public website, similar to that maintained for the Massachusetts Clean Energy solicitations, as described below.

The Massachusetts Clean Energy website is a resource for the procurement of clean energy for the Commonwealth of Massachusetts and contains information on the Section 83C RFP process, including dates for the bidders' conference and Q&A, and is available at: https://macleanenergy.com/83c/

For the Massachusetts Clean Energy 83C Timeline, see: https://macleanenergy.com/83c/83c-timeline/

Question #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?

National Grid's Response to Question #2:

Six months is a reasonable period for OSW bid evaluation. For the Section 83C RFP process, OSW bidders held their bids firm and binding for a similar period from December 2017 to May 2018. After the OSW project selection in May, contract negotiations ensued until contracts were executed in July 2018.

Question #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?

National Grid's Response to Question #3:

The Section 83C RFP sought OSW bids of up to 400 MW in capacity and allowed for larger bids that could demonstrate greater benefits to customers. Bidders were required to commit that the OSW energy would be fully deliverable to meet load. Although participation in ISO-NE's capacity market was not

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required, bidders were required to meet a Capacity Capable Interconnection Standard and required to submit an energy profile (on average) that they committed to meet. This energy profile was an important part of the evaluation. Thus, the nameplate capacity bid reflected the OSW project's deliverable energy, and any necessary system upgrades were included in the bid proposal.

Question #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?

National Grid's Response to Question #4:

NYSERDA should require bids to meet uniform standards for the main criteria, including a specified minimum amount of nameplate capacity, in order to facilitate bid comparison. An option to bid an incremental amount for additional phasing could yield competitive results, as was done in the Section 83C RFP. The *Request for Proposals for Long-Term Contracts for Offshore Wind Energy Projects* issued June 29, 2019 in the Section 83C RFP is available at:

https://macleanenergy.files.wordpress.com/2017/02/section-83c-request-for-proposals-for-long-term-contracts-for-offshore-wind-energy-projects-june-29-2017.pdf

Question #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?

National Grid's Response to Question #5:

NYSERDA should request bids for 400 MW and allow an option to bid an incremental amount, in order to determine if the 800 MW is beneficial for customers. Also it should be required that the second solicitation pricing be required to be lower than the first solicitation pricing. One reason that the 800 MW OSW proposal was selected in the Section 83C RFP was that the project intended to take full advantage of the federal investment tax credit, which is declining each year. In addition, Section 83C requires that any future OSW contracts come in at lower prices than earlier ones. This aspect of the statute was another factor in support of selecting the 800 MW OSW proposal, as the option that offered the best option for future savings for customers.

Question #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.

National Grid's Response to Question #6:

Depending on the location of the interconnection, local areas impacted may have minimum and/or maximum limits for energy transmitted both into and out of the area (i.e., load pocket). Incorporating

OSW may require that significant fast response generation and/or energy storage be planned and installed at or near the point of interconnection, particularly in order to meet local area reliability and capacity needs.

Question # 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?

National Grid's Response to Question #7:

The cost impact of performing NYCA capacity studies and obtaining energy delivery and CRIS rights can be significant and highly unpredictable. NYSERDA should consider a deliverability standard similar to that in New England. In the Section 83C RFP, successful OSW developers were required to pay for all upgrades as determined by the ISO-NE to ensure that the contracted energy can be delivered.

Question # 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?

National Grid's Response to Question #8:

Successful OSW developers should be held responsible for all system upgrades to achieve deliverability into NYCA during peak periods.

Question # 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?

National Grid's Response to Question #9:

Bidders should include a high level of detail for their transmission cost estimates, particularly because the bid evaluations will be weighted 70% on price and only 10% on project viability. There should be transparency of system upgrade cost estimates. Low cost projects that are not viable should not be chosen.

Question # 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?

National Grid's Response to Question #10:

NYSERDA should consider strategic partnerships between OSW developers and transmission owners, as well as generators, since interconnecting OSW will require some level of firming power (*i.e.*, energy storage systems, land-based generation, or a hybrid of both) close to, if not at, the point of interconnection. Bid partnerships should be given strong consideration and the OSW developer must take responsibility to incorporate any/all partnerships as one joint bid submittal. In the Section 83C RFP, partnerships were allowed and the bidder was required to take responsibility for a single bid for a single project. Any risks would have to be managed between the partners in the selected bid proposal.

Question # 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?

National Grid's Response to Question #18:

In Massachusetts, National Grid provided details about the evaluation process in its July 31, 2018 filing in docket D.P.U. 18-77, a petition for approval of the OSW power purchase agreements. Specifically, National Grid described the joint evaluation and scoring of the bids received, the joint selection of the winning proposal with the other companies and the Department of Energy Resources, and the joint negotiation of final contracts. This filing is available at:

https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber/18-77

Within the Section 83C RFP process, the independent evaluator that monitored the process issued a Report on the Solicitation, Evaluation, Bid Selection and Contract Negotiation Process under Section 83C of the Green Communities Act. The independent evaluator's report on the evaluation process and outcome, filed on August 3, 2018, is available in redacted form at: https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber/18-77

Question # 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?
- 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)?
- 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?
- 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?

National Grid's Response to Question #30:

Regarding interconnection status, the RFP should consider the status of NYISO studies underway and require the developer to be responsible for all system upgrades necessary to achieve the higher standard of deliverability during peak periods.

Question # 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?

National Grid's Response to Question #36:

NYSERDA should require that the residual value of the assets continue to benefit customers when the contract ends. Every bid should be required to include this residual value. Specifically, the successful developer must provide the ORECs to NYSERDA for the life of the units.

Question # 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?

National Grid's Response to Question #37:

NYSERDA should provide a proforma contract with threshold requirements and limited exemptions to the contract. NYSERDA should request bids for both 20 and 25 year contract periods in order to compare the best value for customers. Periods longer than 20 years are typically not necessary in order to obtain project financing, but shorter contracts may have higher prices as developers will recover their costs over a shorter period. It should be required that the developer provide the ORECs to NYSERDA for the life of the generation assets; this will eliminate the need to replace the contract in order to obtain ORECs from generation assets that have been already paid for by customers.

Question # 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?

National Grid's Response to Question #38:

Regarding liquidated damages, this provision should be used in the proforma contract, with the developer paying for time extensions by posting additional credit, in order to assure timely commercial operation. Any delays that eliminate the ability to use tax credits are at the developer's risk; no adjustment to contract pricing should be allowed.

Question # 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?

National Grid's Response to Question #39:

Regarding delays due to labor disputes, the proforma contract should contain force majeure terms that address labor disputes.