



# **New Jersey Offshore Wind Solicitation #2**

**Solicitation Guidance Document** 

**Application Submission for Proposed Offshore Wind Facilities** 

New Jersey Board of Public Utilities
44 S. Clinton Ave, Trenton, NJ

**September 10, 2020** 

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# 1 INTRODUCTION AND OVERVIEW OF THE OFFSHORE WIND RENEWABLE ENERGY CERTIFICATE ("OREC") PROGRAM

To implement Governor Phil Murphy's vision of making New Jersey a leading hub of offshore wind development and to meet the State's aggressive clean energy goals, as described below, the Board of Public Utilities ("BPU" or "Board") hereby announces that it is soliciting Applications to secure ORECs targeting 1,200 MW to 2,400 MW of offshore wind capacity. The Board seeks to promote robust competition in this solicitation and future solicitations to support the continued development of the offshore wind industry in New Jersey.

This Solicitation Guidance Document includes information on the timeline and mechanics of the Second Solicitation (Section 2), the Application requirements (Section 3), and the criteria for evaluating Applications (Section 4).

#### 1.1 Background

New Jersey Governor Phil Murphy signed Executive Order No. 8 ("EO8") on January 31, 2018.¹ The purpose of EO8 was to reinvigorate the implementation of the State's Offshore Wind Economic Development Act ("OWEDA" or the "Act").² With "some of the best offshore wind resources in the world," Governor Murphy affirmed the Garden State's commitment to "combat the threat of global climate change" to protect New Jersey and also "provide reliability and relief for the regional electric grid, which is the largest, most congested and most costly in the nation."³ Moreover, the Governor saw that "an aggressive offshore wind energy production goal" could result in the State housing key parts of the offshore wind supply chain for the Atlantic Coast which in turn would "contribute to a stronger New Jersey economy."⁴ To this end, Governor Murphy set a "goal of 3,500 MW of offshore wind energy generation by the year 2030."⁵

As required by OWEDA, the Board adopted rules that provided an application process and evaluation framework for offshore wind facilities.<sup>6</sup> EO8 also directed the BPU to begin the rulemaking process to establish the OREC Funding Mechanism to set forth the method and processes by which New Jersey ratepayers will fund offshore wind projects and how all revenues from these projects will be refunded and delivered to ratepayers.<sup>7</sup> In September 2018, the BPU issued a solicitation for 1,100 MW of offshore

<sup>&</sup>lt;sup>1</sup> See Attachment 6 for EO8. Executive Order No. 92, signed by Governor Murphy on November 19, 2019, changed the State's OSW goal to 7,500 MW by 2035. All other provisions of EO8 remained in full force and effect.

<sup>&</sup>lt;sup>2</sup> N.J.S.A. 48:3-87d(4) to -87.2.P.L. 2010, c. 57, signed into law August 19, 2010.

<sup>&</sup>lt;sup>3</sup> EO8 p. 1.

<sup>&</sup>lt;sup>4</sup> *Id.* p. 1-2.

<sup>&</sup>lt;sup>5</sup> *Id.* p. 2.

<sup>&</sup>lt;sup>6</sup> N.J.A.C. 14:8-6.1 et seq.

<sup>&</sup>lt;sup>7</sup> N.J.A.C. 14:8-6.6.

wind energy generation.<sup>8</sup> In June 2019, the BPU approved an Application for a 1,100 MW offshore wind generation project submitted by Ocean Wind.<sup>9</sup>

On November 19, 2019, Governor Murphy signed Executive Order No. 92 ("EO92"), increasing the State's offshore wind energy generation goal to 7,500 MW by 2035. 10 Governor Murphy found that as a result of efforts by the State following EO8, "offshore wind development is a growing economic sector in the State with increases in supply chain presence, private investment in ports, workforce development efforts, and research and development for offshore wind industry and labor." 11 Governor Murphy found that expanding the offshore wind goal will ensure that the State can "meet the State's goals of 50 percent renewable energy by 2030 and 100 percent clean energy by 2050, in addition to creating a significant number of good-paying jobs." 12

On February 28, 2020, Governor Murphy announced the offshore wind solicitation schedule to meet the 7,500 MW goal by 2035, shown in Table 1. Governor Murphy called on the BPU to take all necessary actions to implement the schedule. To be responsive to the evolving market, the schedule has been developed to provide flexibility in terms of the amount being procured with each solicitation and the exact timeline. There are a number of factors that could influence the timing and the quantity to be procured, including, but not limited to, the development schedule for transmission solutions to accommodate large new injections of offshore wind, the status of additional Bureau of Ocean Energy Management ("BOEM") lease areas, permitting, port readiness, establishment and evolution of the supply chain, workforce training, and technology progress affecting overall cost trends.

Table 1. Proposed Offshore Wind Solicitation Schedule for New Jersey through 2035

Solicitation	Capacity Target (MW)	Issue Date	Submittal Date	Award Date	Estimated Commercial Operation Date
1	1,100	Q3 2018	Q4 2018	Q2 2019	2024
2	1,200	Q3 2020	Q4 2020	Q2 2021	2027
3	1,200	Q3 2022	Q4 2022	Q2 2023	2029
4	1,200	Q2 2024	Q3 2024	Q1 2025	2031
5	1,400	Q2 2026	Q3 2026	Q1 2027	2033
6	1,400	Q1 2028	Q3 2028	Q1 2029	2035

This Solicitation Guidance Document explicitly draws from four significant documents that provide the legal framework and requirements for the solicitation, each of which is attached hereto as they give essential guidance for Applications submitted in response to this solicitation. They are:

<sup>&</sup>lt;sup>8</sup> In the Matter of the Opening of Offshore Wind Renewable Energy Certificate (OREC) Application Window for 1,100 Megawatts of Offshore Wind Capacity in Furtherance of Executive Order No. 8, Docket No. QO18080851, Order dated September 17, 2018.

<sup>&</sup>lt;sup>9</sup> Order in Docket No. QO18121289.

<sup>&</sup>lt;sup>10</sup> See Attachment 7.

<sup>&</sup>lt;sup>11</sup> EO92, p. 3.

<sup>&</sup>lt;sup>12</sup> Id.

<sup>&</sup>lt;sup>13</sup> State of New Jersey, "Governor Murphy Announces Offshore Wind Solicitation Schedule of 7,500 MW through 2035," February 28, 2020. <a href="https://www.nj.gov/governor/news/news/562020/20200228a.shtml">https://www.nj.gov/governor/news/news/562020/20200228a.shtml</a>

- OWEDA (Attachment 4);
- Application requirements in N.J.A.C. 14:8-6.1 et seq. (Attachment 5);<sup>14</sup>
- Executive Order No. 8 (Attachment 6); and
- Executive Order No. 92 (Attachment 7).

#### 1.2 Overview of the Solicitation

This solicitation seeks to secure ORECs targeting 1,200 MW to 2,400 MW of Qualified Offshore Wind Project(s) ("Qualified Projects"). The Board reserves the right to select less than 1,200 MW or more than 2,400 MW, if circumstances warrant.

Qualified Projects are wind turbine electric generation facilities located in the Atlantic Ocean in designated BOEM lease areas and connected to the electrical transmission system in New Jersey, including the associated transmission-related interconnection facilities and equipment, that have been approved by the BPU. 15 ORECs represent the environmental attributes of generation from these Projects. 16 Each Applicant that submits a Project seeking to become a Qualified Project must submit an Application in response to this solicitation. An Applicant may submit multiple Projects in an Application, with each specific configuration of the wind turbine electric generation facility, associated design elements, and offer components constituting a separate Project.

For each MWh generated and delivered to the transmission grid, a Qualified Project will be credited with one OREC. For each OREC, the Qualified Project will be paid its stated OREC Purchase Price which reflects the all-in costs of the Project, that is, the total capital and operating cost for that Qualified Project offset by any State or Federal tax credits and other subsidies or grants, as approved by the BPU.<sup>17</sup> The OREC Purchase Price will be fixed for each year over the first 20 years of each phase of the Qualified Project's commercial operation. Once the BPU approves one or more Qualified Projects as a result of this solicitation, the BPU will establish a Statewide OREC purchase requirement for future Energy Years in an amount to support the output of all Qualified Projects. This output will be an offset to existing State Class I renewable energy requirements.

A Qualified Project may sell ORECs up to an Applicant-specified and Board-approved maximum quantity during each Energy Year. This quantity is called the "Annual OREC Allowance." ORECs are eligible to be sold in the Energy Year in which they are generated and during the following two Energy Years. If the Qualified Project falls short of its Annual OREC Allowance in any Energy Year, such shortfall may be cumulatively added to the following Energy Year's Allowance. Over the 20-year contract term, the treatment of any energy shortfall provides reasonable assurance that the Applicant will be given the opportunity to realize the Project's full approved OREC Allowance.

<sup>&</sup>lt;sup>14</sup> Attachment 5 includes the OREC Funding Mechanism.

<sup>&</sup>lt;sup>15</sup> N.J.A.C. 14:8-6.1.

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> N.J.A.C. 14:8-6.5(a)(12)(vii).

<sup>&</sup>lt;sup>18</sup> N.J.A.C. 14:8-6.6(b)(4).

<sup>&</sup>lt;sup>19</sup> *Id.* at p. 3, an "Energy Year" is defined as the 12-month period from June 1 through May 31 and is numbered according to the calendar year in which it ends.

Per N.J.A.C. 14:8-6.5(a)(12), OREC pricing will be on a pay-for-performance basis. Payments will be made on a \$/MWh basis, subject to any quantity caps. The Applicant is responsible for any Project cost overruns. Ratepayers will not be responsible for any cost overruns or for costs associated with non-performance. The burden remains on the Applicant to propose a reasonable OREC price. The Board will then accept, modify, or reject the proposed price of the OREC and the associated term. The OREC pricing method shall represent the calculation of the price based on the total revenue requirements of the Project over a 20-year period including the cost of equipment, financing, taxes, construction, operation, and maintenance, offset by any state or Federal tax or production credits and other subsidies or grants. The value of the electricity and related capacity payments associated with the ORECs shall not be deducted when calculating the OREC price.

In return for the sale of ORECs, Qualified Projects are required to return all revenues received, including, but not limited to, from sales of energy, capacity, and, if applicable, ancillary services into PJM's wholesale markets. Other sources of operating revenue ascribable to bilateral sales of various tenors are also required to be returned to ratepayers. The mechanics for the transfer of ORECs and market revenues are addressed in the OREC Funding Mechanism (N.J.A.C. 14:8-6.6), which is included in Attachment 5.

#### 2 TIMELINE AND MECHANICS OF THE SOLICITATION

#### 2.1 Timeline for Submission and Evaluation

The timeline for this solicitation is shown in Table 2.

Table 2. Solicitation Timeline

Event	Date		
Board Consideration of Solicitation	September 9, 2020		
Solicitation Issued	September 10, 2020		
Technical Conference for all prospective Applicants	September 29, 2020		
Deadline to Submit Questions	November 13, 2020		
OREC Application Submission Deadline	December 10, 2020		
Administrative Completeness Determination Deadline	January 9, 2021		
Board Decision	June 2021		
Post-Application Meeting (if requested by an Applicant)	August 2021		

### 2.2 Website and Technical Conference

The BPU has created a <u>website</u> for this solicitation.<sup>20</sup> This website will host all solicitation documents and serve as the main point of contact between the BPU and interested Applicants. The website will also include instructions for accessing the portal for submitting Application materials.

A Technical Conference will be held for all prospective Applicants on September 29, 2020 from 1:00 PM to 3:00 PM EDT via webinar. Applicants must <u>register</u> for the webinar. <sup>21</sup> During the Technical

<sup>&</sup>lt;sup>20</sup> See <a href="https://www.njoffshorewind.com/">https://www.njoffshorewind.com/</a>.

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<sup>&</sup>lt;sup>21</sup> See https://attendee.gotowebinar.com/register/8115158183927728400.

Conference, the BPU will review key details of the solicitation, including Application requirements and evaluation criteria.

To ensure that all Applicants have the same information, a Question and Answer ("Q&A") page will be established on the website. At the Technical Conference, Board Staff may verbally respond to questions that are submitted in advance of the webinar. Applicants will have the opportunity to submit questions during the webinar, which may be answered real-time or deferred to written responses on the website. Only written responses on the Q&A page of the website will constitute official guidance. Written responses to questions submitted through the website or during the Technical Conference will be posted to the website and available to all Applicants. Names and other identifying details will be removed from the submitted questions to maintain confidentiality.

The Board retains the right to issue an amendment to this Solicitation Guidance Document if needed. Any such amendment will be posted to the solicitation website.

#### 2.3 Application Submission

Applications for Projects seeking to be deemed Qualified Projects must be submitted by the OREC Application Submission Deadline shown in Table 2. Applications must be submitted electronically through the BPU External Access Portal. Prospective Applicants must follow the instructions in Attachment 8 to register for a MyNewJersey Account and gain access to the BPU External Access Portal. It is recommended that Applicants begin the process of registering for a MyNewJersey Account no later than 30 days prior to the OREC Application Submission Deadline. Applicants will be able to upload documents to the portal for transmittal to the BPU at any time, but submissions will not be reviewed by the BPU until after the OREC Application Submission Deadline. Applicants are encouraged to begin uploading documents in advance of the OREC Application Submission Deadline to ensure a successful submission. Applicants will receive a receipt confirmation after submitting their Applications. There is a file size limit of 100 MB on files uploaded to the BPU External Access Portal. Files larger than this should be separated into multiple files and named as noted in Section 3, with "Part [X of Y]" added to the end of the file name. Additional guidance regarding Application submission through the BPU portal will be provided on the Application Requirements page of the solicitation website.

# 2.4 Application Requirements

Applicants may offer Projects of any size up to approximately 2,400 MW. <sup>22</sup> Applicants are encouraged to submit Applications covering a range of Project sizes, including Projects smaller than 1,200 MW. There is no limit on the number of Projects that can be included in an Application. This will support the BPU's desire to retain flexibility in its procurement of approximately 1,200 MW to 2,400 MW. Throughout the evaluation process, the BPU will gauge the impact of Project size, or the size of a portfolio of Projects, on all evaluation criteria.

Each Application must include an Application Form for each Project included in the Application (Attachment 1). The Application Form requires summary information and standardized quantitative inputs, including the OREC Purchase Price. In addition, each Application must include an Administrative

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<sup>&</sup>lt;sup>22</sup> Projects greater in size than 2,400 MW will be accepted if the addition of the final turbine results in a total nameplate capacity greater than 2,400 MW.

Completeness Checklist (Attachment 2) to ensure that all the required materials have been submitted, and an Applicant Commitment Form (Attachment 3) signed by a responsible officer.

The required contents of a complete Application are described in detail in Section 3.

In accordance with N.J.S.A. 48:3-87.1 and N.J.A.C. 14:8-6.5(a)(15), to defray the cost of reviewing the Applications, each Applicant must provide an Application Deposit of \$500,000. This Application Deposit covers up to three Projects. Applicants must submit an incremental Application Deposit of \$25,000 for each additional Project included in the Application.<sup>23</sup> The Application Deposit must be paid by a check made out to "Treasurer – State of New Jersey" and sent to the following address such that it will be received before the OREC Application Submission Deadline:

New Jersey Board of Public Utilities Attn: Chief Fiscal Officer 44 South Clinton Avenue, 9th Floor P.O. Box 350 Trenton, NJ 08625-0350

Per N.J.A.C 14:8-6.5(a)(15)(iii), subsequent to approval of a Qualified Project, the successful Applicant may, at the direction of Board Staff, be required to place additional amounts on deposit with the State for the purpose of reimbursing the Board for costs related to regulatory review of the Project, including, but not limited to, consulting services, oversight, inspections, and audits.

Per N.J.A.C. 14:8-6.3(d) the Applicant shall meet with Board Staff and representatives of the Division of Rate Counsel no less than 30 days prior to submission of an Application to discuss all aspects of the Application. Applicants are also required to meet with representatives of the New Jersey Department of Environmental Protection (NJDEP) no less than 30 days prior to the submission. Instructions for scheduling meetings with each of these parties will be posted to the solicitation website. Applicants are encouraged to provide regular updates to these parties as the Application is developed.

The Board's rules of practice prohibit Applicants and Commissioners of the Board of Public Utilities from discussing the solicitation, or topics directly related to the solicitation, from the date the solicitation is announced until the Board Decision is issued, which is currently anticipated to occur in June 2021. While discouraged during the solicitation, Applicants may request the Board's Office of General Counsel to review a Commissioner(s) meeting request on matters unrelated to the solicitation. Parties may continue to communicate with other agencies, with Rate Counsel, and with Board Staff in the normal course of business.

Once Applications are submitted, Board Staff will make an initial determination of administrative completeness, per N.J.A.C. 14:8-6.4. Board Staff will notify Applicants by email within 30 days after the OREC Application Submission Deadline regarding any identified Application deficiencies. Applicants will then have one week to respond to a deficiency notice. Failure to respond satisfactorily to a deficiency notice will constitute grounds for disqualification.

<sup>&</sup>lt;sup>23</sup> Any variation in attributes represents a separate Project. Examples of configuration changes that define a separate Project include, but are not limited to, size, price, point(s) of interconnection, infrastructure investments, and economic impacts.

Once an Application is deemed administratively complete, Board Staff will evaluate it as described in this document. The BPU has 180 days from the receipt of an administratively complete Application, either at the OREC Application Submission Deadline or upon receipt of a deficiency notice response, to approve, conditionally approve or deny the Application. Board Staff expects to ask Clarifying Questions of Applicants regarding administratively complete Applications throughout the evaluation period. Applicants will have a maximum of two weeks to respond to Clarifying Questions, although Board Staff reserves the right to establish a shorter response period. Board Staff may also schedule interviews with Applicants and request Best and Final Offers. These activities — Clarifying Questions, interviews and Best and Final Offers — are expected to occur in Q1 and Q2 2021. All materials provided and statements made during these activities will be considered binding on the Applicant and will be considered as part of Board Staff's formal evaluation. Board Staff will endeavor to provide Applicants with as much advance notice as possible regarding expected engagement as the evaluation proceeds. The schedule in Section 2.1 contemplates a BPU decision in June 2021.

After the Board Decision announcing Qualified Projects is made, a post-Application meeting may be requested by each Applicant to receive feedback on their Application and discuss potential areas of improvement for future solicitations.

#### 2.5 Confidentiality of Applications

All materials filed with the Board are public documents and are therefore subject to the good government sunshine laws of the State of New Jersey. However, the Board appreciates the confidential nature of some of the material that must be submitted with an Application and recognizes that New Jersey law allows Applicants to request protection of:

any information ... which in the person's or entity's opinion constitutes trade secrets, energy trade secrets or other energy information submitted pursuant to N.J.S.A. 52:27F-18, proprietary commercial or financial information, or information which if disclosed, would be likely to cause damage to either a competitive or bidding position or national security, may assert a confidentiality claim by following the procedures set forth in this subchapter.

N.J.A.C. 14-1-12.1(b).

To facilitate the review process, the Board will require all Applicants to submit public (redacted) and confidential (unredacted) versions of their Applications by the OREC Application Submission Deadline, per the Board's Rules of Practice and Procedure governing submission of confidential materials, N.J.A.C. 14-1-12.1, et seq., and the Open Public Records Act, N.J.S.A. 47:1A-1 et seq. ("OPRA"). Each uploaded file must include "Public" or "Confidential" in the file name. The Board intends to next an its website all

14-1-12.1, et seq., and the Open Public Records Act, N.J.S.A. 47:1A-1 et seq. ("OPRA"). Each uploaded file must include "Public" or "Confidential" in the file name. The Board intends to post on its website all public versions of all Applicants' submissions after the final Board Order awarding ORECs under this solicitation. The public versions of all documents must also be searchable PDF files, except where a different file type such as Excel is required.

For the confidential version of the Application, Applicants must include a statement identifying each type of data or materials it asserts are exempt from public disclosure under OPRA and/or the common law, and explaining the basis for the proposed redaction. Assertions that the entire Application and/or

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<sup>&</sup>lt;sup>24</sup> The venue and format for interviews will be determined when the interviews are scheduled. Remote participation will be permitted.

prices are exempt from public disclosure under OPRA, the common law, or the U.S. Copyright Act are overbroad and will not be honored by the Board. If an Applicant elects not to seek confidential treatment of their Applications in their initial submittals, the entirety of the Application may be subject to public release.

Additionally, to facilitate public transparency, any winning Applicant will be required to make additional materials in their bid publicly available post-award, including, but not limited to, all materials necessary for members of the public to understand the Applicant's commitments to jobs, economic development, environmental and fisheries protection, and other commitments. While there may be limited instances where material may remain confidential post-bid (e.g., turbine and/or foundation supply arrangements, Project financial information), the Board will look to the guidance provided by the Division of Purchase and Property ("DPP") regarding the release of formal procurements as persuasive authority. The DPP rules state, in pertinent part, that "[a]fter the opening of sealed proposals, all information submitted by bidders in response to a solicitation of proposals is considered public information ... except ... as may be exempted from public disclosure by the Open Public Records Act" N.J.A.C. 17:12-1.2(b)-(c).

The Board notes that it may elect to share confidential portions of the Application materials with other New Jersey government entities, including, but not limited to, Rate Counsel and the Economic Development Authority, during the evaluation period or post-award.

#### 3 MATERIALS REQUIRED FROM APPLICANTS

The materials to be submitted by prospective Applicants are based on requirements laid out in N.J.A.C. 14:8-6.1 et seq. (Attachment 5), specifically N.J.A.C. 14:8-6.5. The materials to be submitted in the Application are described in detail in the following subsections, and include information provided pursuant to N.J.A.C. 14:8-6.5, as cited throughout, and additional information deemed necessary by the Board in order to conduct a thorough evaluation of the Application, per N.J.A.C. 14:8-6.5(a)(16).

There are two primary components to the Application: the Application Narrative and the Application Form. The Application Narrative must be a single, standalone document with the file name "Application Narrative" that includes the information described in the following subsections, with a detailed table of contents. A single Application Narrative must be submitted that addresses each requirement for each of the Projects included in the Application. The Application Narrative must be a fully searchable PDF document. The Application Narrative must include all the information described in the remainder of this Section 3 and in the order listed herein. For example, Applicant Information must be presented in Section 1 of the Application Narrative. If specific content is relevant to multiple sections of the Application Narrative, it does not need to be repeated in each section. Instead it may be presented once and cross-referenced as needed. Applicants can include additional relevant information beyond the listed requirements at their discretion.

The Application Form (Attachment 1) is an Excel file that requires entry of quantitative components and must be submitted as a working Excel (.xlsx) file. A separate Application Form must be submitted for each Project included in the Application, with the file name "Application Form – [Project Name]." A summary of the required inputs is presented in Section 3.17 of this document.

Additional components of the Application include required attachments as noted below and any additional attachments that the Applicant believes provide supplemental information that is necessary to fully describe the Application. Unless specifically required to be provided in a different format such as

Excel, attachments should be consolidated for each section of the Application Narrative into a single searchable PDF file with numbered pages, with the file name "Attachments to Section [#]."

To assist Applicants in preparing their Applications, an Administrative Completeness Checklist – an Excel file with a condensed statement of the requirements from OWEDA and N.J.A.C. 14:8-6.5 along with supplemental information deemed necessary by the BPU as included in this Solicitation Guidance Document – is included with this document as Attachment 2. A single completed Administrative Completeness Checklist must be submitted for the Application as a working Excel (.xlsx) file with the file name "Administrative Completeness Checklist," and is intended to allow Applicants and evaluators to assess whether an Application is administratively complete. However, it is only a tool for Applicants and evaluators. The ultimate requirements are those contained in this Solicitation Guidance Document, which incorporates references to N.J.A.C. 14:8-6.5 et seq. <sup>25</sup>

Each Applicant must submit a single Applicant Commitment Form (Attachment 3) as part of the Application, with the file name "Applicant Commitment Form." By signing the Applicant Commitment Form, the Applicant acknowledges that it will comply with terms that will be conditions of any BPU Order granting ORECs. If an Applicant is unable to make any of these commitments, a full explanation must be provided as an attachment to the Applicant Commitment Form when it is submitted.

New Jersey's near shore and offshore waters are biologically diverse and rich with fisheries and other species habitat that provide important natural resource and economic value to the State and its residents. While New Jersey has studied these resources the introduction of new onshore and offshore industry introduces new variables into both the natural and economic environment that must be well studied and understood as offshore wind developments are constructed, operated, and decommissioned. Accordingly, conducting ongoing research and monitoring the effects of offshore wind industry on the distribution and abundance of wildlife and fisheries resources is a priority for New Jersey. To facilitate a shared understanding of these effects Applicants will be required to commit financial and technical support to research initiatives and the regional monitoring of wildlife and fisheries related to the introduction of offshore wind projects with a \$10,000 per megawatt of project nameplate capacity fee. NJDEP and BPU will collaborate with the selected Applicant, research institutions, industry, regional monitoring organizations and members of the New Jersey Offshore Wind Environmental Resources Working Group to identify and prioritize research and monitoring needs. Example studies could include but are not limited to: annual habitat surveys, regional studies and collaboration with neighboring states to develop and collect information, evaluation of the extent and attenuation of noise resulting from construction and operation of offshore wind energy facilities and its effects on the background biological soundscape, and assessment of vulnerability of fisheries receptors.

#### 3.1 Applicant Information

Section 1 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

• A demonstration of the Applicant's applicable experience in projects of similar size and scope to the proposed Project, including the use of other turbine types (N.J.A.C. 14:8-6.5(a)(2), N.J.A.C. 14:8-6.5(a)(2)(i)(1));

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<sup>&</sup>lt;sup>25</sup> See Attachment 5.

- List of all key employees (N.J.A.C. 14:8-6.5(a)(1)(i));
- Description of any work done to date by the key employees in developing projects of similar scope, especially any ocean-based energy project or New Jersey large-scale energy project siting work (N.J.A.C. 14:8-6.5(a)(1)(ii));
- If the work described was not performed by the entire team of key employees, the Applicant must delineate the experience or work performed by key employees (N.J.A.C. 14:8-6.5(a)(1)(iii)); and
- The Applicant shall disclose, in detail, any prior business bankruptcies, defaults, disbarments, investigations, indictments, or other actions against either the Applicant, its parent company, affiliates, subsidiaries, or any key employees identified above (N.J.A.C. 14:8-6.5(a)(1)(iv)).

Section 1 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

• The project name, commercial operation date ("COD"), size, turbine type(s), explanation of the Applicant's role in the project, and any other relevant characteristics for each project of similar size and scope to the proposed Project that is listed in accord with the above.

Attachments to Section 1 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Resumes of key employees which identify each employee's track record in construction and operation of power plants of similar size and scope (N.J.A.C. 14:8-6.5(a)(1)(i)); and
- Two years of audited financial statements, including accompanying financial notes to these statements, of the Applicant and/or parent company in US GAAP. If not in US GAAP, the Applicant shall provide an opinion from an accounting firm that attests to the financial statements and accompanying financial notes and the strength of the Applicant and/or parent company and has provided professional qualifications that demonstrate that expertise (N.J.A.C. 14:8-6.5(a)(3)(vi)).

The Applicant is not permitted to reallocate or replace the personnel/resources or key employees they used to obtain the OREC award, without prior approval of the Board  $(N.J.A.C.\ 14:8-6.5(a)(1)(vi))$ .

#### 3.2 Project Descriptions

Section 2 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A detailed description of each Project (N.J.A.C. 14:8-6.5(a)(2));
- Specify whether each Project is located at one site, or divided among several sites (N.J.A.C. 14:8-6.5(a)(2)(i)(6));
- Describe any current uses, conflicts or characteristics of the ocean and land areas that will be used for each Project (N.J.A.C. 14:8-6.5(a)(2)(i)(5));
- Define the attributes which make the site(s) attractive, and list any potential problems, constraints or limitations with siting an energy facility at that location or locations (N.J.A.C. 14:8-6.5(a)(2)(i)(7));
- To the fullest extent possible, indicate the major types of equipment that have been selected to be installed, and the characteristics specified (N.J.A.C. 14:8-6.5(a)(2)(i)(8));

- Indicate whether the Applicant plans to own or lease equipment (N.J.A.C. 14:8-6.5(a)(2)(i)(9));
- Describe the selected equipment, the specifications, warranties, how long it has been commercially available, approximately how many are currently in service and where they are installed (N.J.A.C. 14:8-6.5(a)(2)(i)(10));
- The type, size, and number of individual units for the selected turbines and foundations (N.J.A.C. 14:8-6.5(a)(2), N.J.A.C. 14:8-6.5(a)(2)(v));
- The history, to date, of the same type, size and manufacturer of installed turbines and foundations globally (N.J.A.C. 14:8-6.5(a)(2));
- Demonstrate that the wind technology is viable, cost competitive and suitable for use in New Jersey's offshore environment under varying and expected meteorological and climate conditions (N.J.A.C. 14:8-6.5(a)(2)(i)(2));
- Include a description of the ability of the equipment to work in New Jersey's offshore and near shore climates and the basis for that conclusion (N.J.A.C. 14:8-6.5(a)(2)(i)(11)); and
- Describe construction plans in detail, identifying proposed subcontractors, with evidence of capability of performing necessary tasks, as well as proposed time frames for completion of all necessary tasks (N.J.A.C. 14:8-6.5(a)(2)(iii)).

Section 2 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- Summary of the Projects being submitted by the Applicant and their differentiating characteristics;
- If the selected equipment is not currently commercially available, describe the development status and expected timeframe for the equipment becoming commercially available;
- Identification of the port(s) that will be used to support construction of the Project and the activities that will be conducted at each port;
- Zoning classifications for all land areas that will be used for the Project;
- Whether the Applicant plans to include storage capability;
- If the Applicant plans to include storage capability, the following information must be provided:
  - o Type of storage system, including manufacturer and model, if applicable;
  - The location of the storage system and how it is integrated with the Project and with the electric transmission and/or distribution system in New Jersey;
  - Description of the anticipated storage charge / discharge operating regime, including any technology limitations affecting dispatch;
  - Description of how storage will be deployed, e.g., maximize energy revenues, reduce peak demand for electricity, or improve reliable operation of the system;
  - Description of how storage will contribute to maximizing revenues to be returned to customers;
  - Any other benefit provided by the storage system;
- Any new and innovative technologies that will be utilized to reduce the demand for peak electric
  generation, improve the reliable operation of the electric system, reduce the emissions from
  electric generation, and/or avoid, minimize, or mitigate environmental and/or fisheries impacts;
  and
- A detailed description of the vessels that will be used for the construction of the Project, and how Jones Act compliance will be addressed for each vessel and/or vessel class.

Attachments to Section 2 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Maps, surveys, and other visual aids that support the detailed description of the Project (N.J.A.C. 14:8-6.5(a)(2));
  - The configuration of turbine array, location of cable and balance of system equipment  $(N.J.A.C.\ 14:8-6.5(a)(2));$
  - o Indicate the areas used for all aspects of the Project including the location(s), the construction staging area(s) and port usage (N.J.A.C. 14:8-6.5(a)(2)(i)(3));
  - o Include a map with the location of the site(s) clearly marked by longitude and latitude and the Federal Bureau of Ocean Energy Management, Regulation and Enforcement block numbers (*N.J.A.C.* 14:8-6.5(a)(2)(i)(4));
- A letter of intent or memorandum of understanding from the turbine manufacturer/supplier to supply the selected turbines (*N.J.A.C.* 14:8-6.5(a)(2));<sup>26</sup>
- A demonstration of the financial strength of the selected turbine manufacturer/supplier (N.J.A.C. 14:8-6.5(a)(2));
- A declaration from the foundation manufacturer/supplier that states their ability to manufacture and deliver all foundations within the targeted schedule (*N.J.A.C.* 14:8-6.5(a)(2));
- A declaration from the undersea cable manufacturer/supplier that states its ability to manufacture and deliver all undersea cable components within the targeted schedule (N.J.A.C. 14:8-6.5(a)(2));
- A letter of intent or memorandum of understanding from the proposed engineering, procurement, and construction ("EPC") contractor, balance of plant ("BOP") contractor, and/or key construction contractors or vendors (*N.J.A.C.* 14:8-6.5(a)(2));
- Provide evidence that the Applicant has selected certified wind turbine generators or a detailed certification plan that is underwritten by a certifying body (*N.J.A.C.* 14:8-6.5(a)(2)); and
- Audited financial statements for two years, in US GAAP, including accompanying financial notes
  to these statements, for key Project suppliers including, but not limited to, the turbine
  manufacturer and EPC contractor. If not in US GAAP, the Applicant shall provide opinions from
  an accounting firm that attests to the financial statements, including accompanying financial
  notes to these statements, and the strength of the key suppliers, and has provided professional
  qualifications that demonstrate that expertise (N.J.A.C. 14:8-6.5(a)(3)(vii)).

Attachments to Section 2 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- The maps, surveys and other visual aids must also include the locations of the export cable (generator lead line) route, substation(s), converter station (if applicable), cable landfall location, onshore transmission right-of-way, and point(s) of interconnection;
- A demonstration of the financial strength of the:
  - Selected foundation manufacturer/supplier;
  - Selected undersea cable manufacturer/supplier;
  - Proposed EPC contractor;

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<sup>&</sup>lt;sup>26</sup> If possible, the letter of intent or memorandum of understanding from the turbine manufacturer/supplier should state their ability to manufacture and deliver all components within the targeted schedule.

- Proposed BOP contractor;
- o Other key construction contractors or vendors; and
- If the Applicant plans to include storage capability, a diagram showing configuration of the storage system with respect to Project facilities and point of interconnection with the electric grid.

Subsequent to award, successful Applicants are permitted to replace or update the equipment identified in the Application with more technologically advanced equipment that is equal to or better than the equipment identified in the Application, subject to Board approval (N.J.A.C. 14:8-6.5(a)(2)(ii)). Any such replacement shall not increase the OREC Purchase Price or reduce the economic impacts. Applicants are encouraged to include in the Application the equipment that is intended to be used in the Project. Applicants will not be penalized if the proposed equipment uses new or innovative technology and as a result does not have a commercial operating history, subject to review of the relevant required information, including the supplier's track record of innovation, financial strength, certification plans, or any other information that the Applicant finds pertinent.

# 3.3 Energy Production Estimate

Section 3 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Assumptions that are the basis for the estimate of net energy output for the Project, as reported in the Application Form (*N.J.A.C.* 14:8-6.5(a)(2)(v));
- Account for, to the fullest extent possible, the coincidence between time of generation for the Project and peak electricity demand ( $N.J.A.C.\ 14:8-6.5(a)(2)(vi)$ );<sup>27</sup>
- Provide an estimate, with support, of the amount of energy that will be generated over the term of the life of the turbines (*N.J.A.C.* 14:8-6.5(a)(2)(vi));<sup>28</sup>
- Estimate, with support, the level of generation that the Project will be able to provide over the life of the equipment, assuming the Project runs for the equipment's full life (N.J.A.C. 14:8-6.5(a)(2)(vi));<sup>29</sup> and
- Provide the total amount of clean energy being generated over the term of the OREC program and the life of the turbines  $(N.J.A.C.\ 14:8-6.5(a)(b)(v))$ .<sup>30</sup>

Section 3 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

<sup>&</sup>lt;sup>27</sup> PJM defines seasonal peak and off-peak hours for the wholesale energy market. PJM data is available at <a href="https://www.pjm.com/markets-and-operations/energy.aspx">https://www.pjm.com/markets-and-operations/energy.aspx</a>.

<sup>&</sup>lt;sup>28</sup> Provide a single value (for each Project) representing the total amount of energy that is expected to be generated over the life of the turbines. More granular values will be provided in the Application Form.

<sup>&</sup>lt;sup>29</sup> Provide a single value (for each Project) representing the total amount of energy that is expected to be generated over the life of the Project equipment other than the turbines.

<sup>&</sup>lt;sup>30</sup> Provide a single value (for each Project) representing the total amount of energy that is expected to be generated over the 20-year contract term, and a single value (for each Project) representing the total amount of energy that will be generated over the life of the turbines.

• An explanation of how the Annual OREC Allowance, as submitted in the Application Form, is derived from the wind resource and energy assessment.

Attachments to Section 3 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A wind resource and energy assessment from a wind energy consultant for the exact manufacturer, model and specifications of turbines selected for the Project (N.J.A.C. 14:8-6.5(a)(2)(v)); and
- Professional qualifications for the wind energy consultant to demonstrate sufficient expertise; (N.J.A.C. 14:8-6.5(a)(2)(v)).

#### 3.4 Financial Analysis

Section 4 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A complete financial analysis of the Project (N.J.A.C. 14:8-6.5(a)(3);
- A comprehensive business plan with fully documented estimates of all associated and relied upon revenue and expense projections (N.J.A.C. 14:8-6.5(a)(3)(iv));
- Tax credits, subsidies or grants the Project will qualify for (N.J.A.C. 14:8-6.5(a)(12)(viii)(2));
- Debt service costs and return on equity assumptions (N.J.A.C. 14:8-6.5(a)(12)(viii)(3));
- Taxes and depreciation assumptions (N.J.A.C. 14:8-6.5(a)(12)(viii)(4)); and
- The operation and maintenance ("O&M") plan for the Project must be integrated into the financial analysis of the Project (N.J.A.C. 14:8-6.5(a)(7)(vii).

Section 4 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- Coverage ratios for recourse and non-recourse debt tranches; and
- A nominal levelized cost of energy ("LCOE") over the 20-year contract term using a 7% nominal discount rate and the Project's expected output, as reported in the Application Form.

Attachments to Section 4 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- An Excel file containing financial statements for the Project over the development, construction, operation, and decommissioning periods, <sup>31</sup> which must include:
  - $\circ$  Pro forma income statements (N.J.A.C. 14:8-6.5(a)(3)(i));
  - o Balance sheets (N.J.A.C. 14:8-6.5(a)(3)(ii));
  - Cash flow projections for the proposed OREC period, including the internal rate of return, and a description and estimate of any State and/or Federal tax benefits that may be associated with the Project (N.J.A.C. 14:8-6.5(a)(3)(iii));

<sup>&</sup>lt;sup>31</sup> A separate Excel file must be provided for each Project with the file name "Financial Statements – [Project Name]."

- All tax credits or other subsidies upon which the Applicant is relying, as described in Section 3.6 (N.J.A.C. 14:8-6.5(a)(5)(ii));
- A full cost accounting of the Project, including total equipment, construction, O&M, and decommissioning costs (N.J.A.C. 14:8-6.5(a)(3)(v), N.J.A.C. 14:8-6.5(a)(12)(vii)(1)); and
- The feasibility study used to determine the construction costs included in the cost accounting (N.J.A.C. 14:8-6.5(a)(3)(v)).

Attachments to Section 4 of the Application Narrative must include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- The Project financial statements must include the annual earnings before interest, taxes, depreciation, and amortization ("EBITDA") over the 20-year contract term;
- The full cost accounting of the Project must specifically identify the material and installation costs for the generator lead line between the offshore substation(s) and the point(s) of interconnection; and
- The full cost accounting of the Project must specifically identify the incremental costs associated with design elements to facilitate future expansion of OSW delivery capability, as described in Section 3.9.

## 3.5 Project Financing Plan

Section 5 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- The proposed method of financing the Project (N.J.A.C 14:8-6.5(a)(4));
- A detailed financial plan (*N.J.A.C* 14:8-6.5(a)(4)(iv));
- Identification of equity investors, fixed income investors, long and short term debt, and any other sources of capital (N.J.A.C. 14:8-6.5(a)(4)(i), N.J.A.C. 14:8-6.5(a)(4)(iv));
- A demonstrated ability to finance construction through market sources, which may include taxexempt bond financing through the New Jersey Economic Development Authority (N.J.A.C. 14:8-6.5(a)(4)(iii));
- Names, functions, and fees of all financial and legal advisors (N.J.A.C. 14:8-6.5(a)(4)(iv)); and
- Specify if and under what conditions equity or other ownership interests in the Project can be transferred to other parties and considerations involved (N.J.A.C. 14:8-6.5(a)(4)(iv)).

Attachments to Section 5 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

• Evidence of the ability to finance the Project, such as: a letter of intent to offer credit from credible financiers, a letter of commitment from equity investors, and/or a guarantee from an investment-grade party (N.J.A.C. 14:8-6.5(a)(4)(ii)).

The Applicant shall notify the Board in writing of any changes to the financing plan within 30 days and such changes will be subject to Board approval (N.J.A.C. 14:8-6.5(a)(4)(iv)).

#### 3.6 Documentation of Financial Incentives

Section 6 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Documentation to demonstrate that the Applicant has applied for all current eligible State and Federal grants, rebates, tax credits, and programs available to offset the cost of the Project or provide tax advantages (N.J.A.C. 14:8-6.5(a)(5));<sup>32</sup> and
- Documentation of all Federal and State tax incentives for which the Applicant is applying or has applied or otherwise are applicable, even if such incentives have not been sought or approved (N.J.A.C. 14:8-6.5(a)(5)(i)).<sup>33</sup>

Section 6 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

• The assumed Federal Investment Tax Credit and/or Production Tax Credit that the Applicant expects to be eligible for, and a proposed plan to secure such tax credits.

# 3.7 Project Revenue Plan & Strategy

Section 7 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A Project revenue plan which forecasts revenues as well as identifies the strategy for offering the electricity provided in the electric market and for generating all expected revenues (N.J.A.C. 14:8-6.5(a)(6)(i));<sup>34</sup>
- Provide an estimate, with documented support, of the amount of electrical capacity the Project will make available that is calculated consistent with PJM rules and procedures (N.J.A.C. 14:8-6.5(a)(2)(vi));
- The Project revenue plan must link the anticipated revenues to the Project time schedule (see Section 3.11) and costs for the entire Project's lifecycle term extending to the expected life of the turbines and eventual decommissioning (N.J.A.C. 14:8-6.5(a)(6)(ii)); and
- Specify financial expectations and marketing strategies for securing revenue from expected capacity based payments in PJM markets, energy based payments in PJM markets, Renewable Energy Credit ("REC") revenue from Renewable Portfolio Standard ("RPS") or voluntary markets, and emission credits from various air emission reduction cap and trade programs (N.J.A.C. 14:8-6.5(a)(6)(iii)).

Section 7 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

<sup>&</sup>lt;sup>32</sup> State grants, rebates, tax credits, and programs referenced here are not limited to New Jersey, and may include those from other states.

<sup>&</sup>lt;sup>33</sup> This list shall be consistent with the list of tax credits, subsidies or grants the Project will qualify for that is provided in the Financial Analysis (see Section 3.4).

<sup>&</sup>lt;sup>34</sup> Includes all expected revenues in the energy, capacity, and, if applicable, ancillary services markets, as well as any bilateral sales.

- Describe the approach to calculating a capacity price forecast, and, if different than the proxy
  used by Board Staff for evaluation, provide an explanation of why the Applicant's approach is
  preferred;<sup>35</sup> and
- Strategies for maximizing Project revenues and how, if at all, the Applicant intends to address any risk associated with such strategies, including a description of the Applicant's contingency plans to address how capacity revenue may be realized over the contract term in the event that the Project is not eligible to participate in PJM's annual BRA.

The value of electric energy, capacity payments, and any other environmental attributes or other benefits shall be returned to ratepayers for the full contract term for each phase of the Project. Such other benefits include, but are not limited to, tax credits, subsidies, grants, or other funding not previously identified in the Application and not included in the calculation of the OREC price submitted to the Board. To the extent that the Project produces energy revenues exceeding those associated with the sale of ORECs, the Applicant may propose that it retain up to 25 percent of the incremental energy revenues, but not any other environmental attributes or other benefits, with the remainder to be returned to ratepayers. The annual amount of revenues from whatever source expected to be generated by the Project shall be reflected in the revenue plan (N.J.A.C. 14:8-6.5(a)(12)(ix)).

# 3.8 Economic Development Plan

As noted in the requirements below, Applicants will use this section of the Application Narrative to address the expected economic development impacts on New Jersey communities, including any plans to use offshore wind infrastructure already planned for New Jersey, such as the New Jersey Wind Port, as well as any plans to use alternative infrastructure located in New Jersey or elsewhere.<sup>36</sup> Applicants should detail how their supply chain plans will create direct economic benefits, as well as whether the Project(s) will help meet the Governor's goal of making New Jersey a hub for offshore wind, including construction, operations, project development, research and development, and innovation. Plans should specify contributions to the development of a long-term and sustainable supply chain for offshore wind manufacturing, research and development, and services. The Application Narrative should also detail how the Applicant would engage or integrate its efforts with Governor Murphy's WIND Institute efforts related to workforce development and innovation.<sup>37</sup>

The Board recognizes that different Project configurations may have different economic impacts or involve use of different supply chain components or facilities. Applicants are encouraged to include economic impacts in each Project and to identify whether specific Projects may support greater economic impacts. In calculating economic impacts, Applicants should identify what assumptions they have made regarding economic impacts associated with the first solicitation. Only incremental economic

AE: \$157.79/MW-dayJCPL: \$157.79/MW-day

• PSEG: \$170.64/MW-day

• RECO: \$157.79/MW-day

<sup>&</sup>lt;sup>35</sup> For evaluation purposes, Board Staff will base capacity proxy prices on the average of the previous three Base Residual Auction ("BRA") resource clearing prices of relevance in New Jersey:

<sup>&</sup>lt;sup>36</sup> See <a href="https://nj.gov/windport/index.shtml">https://nj.gov/windport/index.shtml</a> for information about the New Jersey Wind Port.

<sup>&</sup>lt;sup>37</sup> See <a href="https://www.njeda.com/OET/Offshore Wind/WIND-Institute">https://www.njeda.com/OET/Offshore Wind/WIND-Institute</a> for information about the New Jersey WIND Institute.

impacts specifically related to the Project's development, construction, operation, and decommissioning can be included in the Economic Development Plan. To avoid double-counting, Applicants affiliated with prior awardees must ensure that economic impacts associated with the prior award are excluded. Incremental operations and the corresponding economic impacts that build on investments associated with existing infrastructure or a prior award may be included.

Section 8 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Detailed job creation information, including location, type of activity or occupation, and wages or salaries for employment activities to be created by the Project and assumed employment impacts within New Jersey, with job totals expressed as full-time equivalent positions assuming 1,820 hours per year (N.J.A.C. 14:8-6.5(a)(11)(vi), N.J.A.C. 14:8-6.5(a)(11)(xiii));<sup>38</sup>
- Method for confirming employment impacts (N.J.A.C. 14:8-6.5(a)(11)(vi));
- Other benefits, such as increased in-State activity from construction, O&M, and equipment purchases (*N.J.A.C.* 14:8-6.5(a)(11)(iv));
- Proposed consequences if the claimed in-State employment and spending benefits do not materialize (*N.J.A.C.* 14:8-6.5(a)(11)(vii));<sup>39</sup> and
- A detailed input-output analysis of the impact of the Project on income, employment, wages, indirect business taxes and output<sup>40</sup> in the State with particular emphasis on in-State manufacturing employment (*N.J.A.C.* 14:8-6.5(a)(11)(i), *N.J.A.C.* 14:8-6.5(a)(11)(v)).<sup>41</sup>

Section 8 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- A description of the Applicant's plan for incremental investments in infrastructure, supply chain, workforce development and other offshore wind cluster-building programs, and the associated economic benefits for the State, with a focus on:
  - Workforce development;
  - o Investments in innovation;
  - Investments in existing infrastructure;
  - Use of the marshalling and/or manufacturing facilities at the New Jersey Wind Port; and

<sup>&</sup>lt;sup>38</sup> Applicants are encouraged to be as specific as possible about the specific job types, including the applicable trades, and salaries associated with each Project. Information provided in this section of the Application Narrative must be consistent with the data provided in the Application Form.

<sup>&</sup>lt;sup>39</sup> Consequences shall include guaranteed employment and spending by phase, the timeframe for meeting these guarantees and how shortfalls will be made up, such as a trust that would be funded if guarantees are not met. Applicants are encouraged to include consequences that will support workforce development for jobs-related shortfalls.

<sup>&</sup>lt;sup>40</sup> Output refers to the sales of sectors or industries that would be supplying the Project with materials (such as turbines, steel and cement for support structures, wire for transmission cables), and services (such as construction and installation services, as well as engineering, legal, finance, and other professional services).

<sup>&</sup>lt;sup>41</sup> The Board will not specify what input-output models are acceptable, and will allow Applicants to use any model that successfully captures New Jersey economic benefits. Suggested models include, but are not limited to: Rutgers R/ECON model, Regional Economic Models, Inc. (REMI), MIG Inc. IMPLAN model, and the Bureau of Economic Analysis RIMS II model.

- Development of alternative ports for marshalling, manufacturing, and O&M activities;
- A description of how the economic development plans, including supply chain and other arrangements, will promote effective competition and reduce risk in the offshore wind marketplace;
- For each proposed port facility, provide the status of any arrangement or commitment to utilize the port and describe plans, or provide plans if they have already been prepared, to develop the port, including construction or rehabilitation of shoreline protection structures, wharf structures and other infrastructure improvements;
- A description of the Applicant's plan to use unionized labor for construction and for O&M, including considerations related to prevailing wages, union neutrality agreements, and participation in community benefit agreements that include commitments to local hiring and skills training for local people;
- A description of the Applicant's plan to develop training programs in New Jersey to support
  expedited learning techniques for industry professionals, including university and community
  college partnerships designed to educate undergraduate and graduate students across the
  spectrum of research and development initiatives, including engineering, construction, finance,
  management and services related to the creation and dissemination of economic benefits in
  New Jersey;
- A description of the Applicant's plan to include diversity and inclusion initiatives as part of the training programs and hiring practices;
- Planned in-State spending to support development, construction, O&M, and equipment purchases;
- Identification of the supply chain components and installation labor, that are expected to be provided by in-State businesses and/or workers;
- Planned in-State spending that will support environmental justice communities by providing
  jobs, grants, training programs, or environmental benefit projects to address historical and
  cumulative impacts in economically disadvantaged communities, along with an explanation of
  the nexus between the spending and the Application;<sup>42</sup>
- · Method for confirming in-State spending; and
- Descriptions of other programs, initiatives and/or support that the Applicant is committing to, but which may be difficult to quantify, such as:
  - Bringing offshore wind research and development into the State privately or in partnership with universities and/or community colleges;
  - Catalyzing an offshore wind cluster in New Jersey;
  - Actively attracting other supply chain companies to locate in New Jersey (or supporting State government in these efforts);
  - Participating in or sponsoring offshore wind "ecosystem building" activities, e.g., conferences, supplier networking, start-up company mentorship;
  - Participation in workforce development programs, including apprenticeship programs, particularly for environmental justice communities;
  - o Providing investment or technical assistance in industry infrastructure development; or
  - Other corporate responsibility commitments.

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<sup>&</sup>lt;sup>42</sup> See the NJDEP Office of Environmental Justice's website at <a href="https://www.nj.gov/dep/ei/">https://www.nj.gov/dep/ei/</a> for more information about environmental justice communities in New Jersey.

Attachments to Section 8 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

• Documentation including, but not limited to, contracts or other binding commitments to substantiate any claims that manufacturing services related to the Project will be sourced from a New Jersey location (N.J.A.C. 14:8-6.5(a)(1)(vii)).<sup>43</sup>

# 3.9 Environmental Protection Plan and Emissions Impacts

Section 9 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Analysis of the anticipated environmental benefits and environmental impacts of the Project (N.J.A.C. 14:8-6.5(a)(11)(xiv));
- A scientifically rigorous description of all associated environmental impacts from preconstruction activities through decommissioning including, but not limited to, environmental,
  water use, water quality, avian, marine mammals, sea turtle, noise, aesthetics, tourism,
  navigation, endangered species, sea-bed disruption of marine life, morbidity or mortality among
  avian, mammal or benthic populations, emissions of combustion byproducts to the air or oil or
  other toxic releases to the ocean, or solid waste generation (N.J.A.C. 14:8-6.5(a)(11)(xiv)(1));
- Specifically describe how the Applicant's activities will be coordinated with the NJDEP Ecological Baseline Studies, and indicate how each resource issue, if impacted, will be addressed (N.J.A.C. 14:8-6.5(a)(11)(xiv)(2));
- The anticipated CO<sub>2</sub> emissions impact of the Project (N.J.A.C. 14:8-6.5(a)(8));<sup>44</sup>
- Provide information regarding the direct emissions impacts of the Project, including CO<sub>2</sub>, SO<sub>2</sub>, and particulate matter ("PM<sub>2.5</sub>"), as well as other relevant environmental impacts, such as impacts on the marine environment (N.J.A.C. 14:8-6.5(a)(11)(xiv)(3));<sup>45</sup>
- Provide an assessment of environmental impacts from the Project compared to other similar Class I renewable energy projects (N.J.A.C. 14:8-6.5(a)(11)(xiv)(4));
- Environmental impacts (direct and comparative) must be quantified to the extent that they are significant and it is possible to quantify them (N.J.A.C. 14:8-6.5(a)(11)(xiv)(5)); and
- The comparative environmental impacts shall be monetized, to the extent possible, for evaluation as part of the overall cost-benefit analysis (see Section 3.16) (N.J.A.C. 14:8-6.5(a)(11)(xiv)(6)).

Section 9 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

<sup>&</sup>lt;sup>43</sup> Applicants can also submit non-binding commitments, memoranda of understanding, or similar documents. If non-binding documents are submitted, the Applicant should be explicit about the nature of the agreement, and provide a timetable for finalization.

<sup>&</sup>lt;sup>44</sup> Must be consistent with data provided in the Application Form.

<sup>&</sup>lt;sup>45</sup> This information shall encompass the development, construction, operation, and decommissioning of the Project, and be consistent with the emissions impacts reported in the Application Form, including a full accounting of emissions produced from vehicles, vessels, and machinery.

- Provide information regarding the Project's direct emissions of NO<sub>x</sub> during the development, construction, operation, and decommissioning of the Project that is consistent with the emissions impacts reported in the Application Form, including a full accounting of emissions produced from vehicles, vessels, and machinery;
- A plan for transparent reporting of findings related to impacts to marine mammals, sea turtles, and avian species;
- A description of the baseline and monitoring data that the Applicant intends to collect from preconstruction through decommissioning regarding the spatial and temporal presence of marine
  mammals, sea turtles, and avian species, and how the Applicant plans to make such data
  available to NJDEP and other designated parties, including making the data publicly available to
  the extent possible given confidentiality considerations;
- A description of whether and how the turbine arrays, including foundations, and offshore
  platforms could be utilized as an infrastructure to provide direct ocean and ecological
  observations throughout the water column;
- A description of any commitments to fund research related to the assessment and avoidance of environmental impacts, including impacts to marine wildlife, in addition to the required fee described in the introduction to Section 3;
- A plan to address the identified impacts, including any innovative measures to avoid, minimize or mitigate impacts;
- A description of the considerations related to identifying the cumulative impacts of New Jersey's
  offshore wind development plans as well as interactive impacts with offshore wind
  development plans in neighboring states;
- A description of how the Applicant will identify (or has identified) environmental stakeholders, and how the Applicant proposes to communicate with those stakeholders during preconstruction activities through decommissioning, as well as a plan for transparent reporting of how stakeholders' concerns were addressed;
- A description of Project design elements that will facilitate future expansion of OSW delivery capability, including potential sharing of offshore or onshore substations with future Qualified Projects, by avoiding, minimizing, or mitigating future incremental environmental impacts, such as reducing the area of seafloor or shoreline disturbance, the number of cable landfalls, or the footprint of the onshore right-of-way or interconnection facilities, e.g., through creation of additional substation bays or laying extra unused conduit;<sup>46</sup>
- A description of lighting controls for the Project;
- A description of how onshore elements of the Project will be compatible with surrounding land use and communities, and will safeguard environmentally and culturally sensitive areas;
- A description of how the direct and avoided emissions of the Project, as reported in the Application Form, were calculated, including all assumptions used in preparing estimates of direct and avoided emissions;
- Explicit listing of foundations, assumptions, and conditions used in the quantification and monetization of environmental impacts.

Attachments to Section 9 of the Application Narrative must include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

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<sup>&</sup>lt;sup>46</sup> If the Project does not include such design elements, a rationale for exclusion must be provided.

 A visibility study that presents visual simulations of the Project from the nearest coastline point, including, at a minimum, clear, partly cloudy, and overcast conditions during early morning, midafternoon, and late day, as well as one simulation at night with the turbines lit under clear conditions.

#### 3.10 Fisheries Protection Plan

Section 10 of the Application Narrative must include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- A scientifically rigorous description of the marine resources that exist in the Project area, including biota and commercial and recreational fisheries, that is informed by published studies, fisheries-dependent data, and fisheries-independent data, and identifies species of concern and potentially impacted fisheries;
- A scientifically rigorous plan to detect impacts to marine resources, including biota and recreational and commercial fisheries;
- Identification of all potential impacts on fish and on commercial and recreational fisheries off the coast of New Jersey from pre-construction activities through decommissioning;
- A plan that describes the specific measures the Applicant will take to avoid, minimize, and/or mitigate potential impacts on fish, and on commercial and recreational fisheries;
- A description of the considerations related to identifying the cumulative impacts of New Jersey's
  offshore wind development plans, as well as interactive impacts with offshore wind
  development plans in neighboring states;
- A description of the baseline and monitoring data that the Applicant intends to collect from preconstruction through decommissioning regarding the spatial and temporal presence of finfish
  and shellfish, and how the Applicant plans to make such data available to NJDEP and other
  designated parties, including making the data publicly available to the extent possible given
  confidentiality considerations;
- A description of whether and how the turbine arrays, including foundations, and offshore platforms could be utilized as an infrastructure to provide direct ocean and ecological observations throughout the water column;
- A description of any commitments to fund research related to the assessment and avoidance of fisheries impacts, in addition to the required fee described in the introduction to Section 3;
- A plan for transparent reporting of findings related to marine resources, effects, and impacts;
- An explanation of how the Applicant will provide reasonable accommodations to commercial and recreational fishing for efficient and safe access to fishing grounds;
- A description of how the Applicant will identify (or has identified) fisheries stakeholders, and how the Applicant proposes to communicate with those stakeholders during pre-construction activities through decommissioning, as well as a plan for transparent reporting of how stakeholder concerns were addressed; and
- A description of the Applicant's plan for addressing loss of or damage to fishing gear or vessels from interactions with offshore wind structures, array or export cables, survey activities, concrete mattresses, or other Project-related infrastructure or equipment.

# 3.11 Project Timeline

Section 11 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A timeline for the permitting, licensing, and construction of the Project (N.J.A.C. 14:8-6.5(a)(13);
- A detailed implementation plan and schedule that highlights key milestone activities and completion dates during the permitting, financing, design, equipment solicitation, manufacturing, shipping, assembly, in-field installation, testing, equipment commissioning and service start-up (N.J.A.C. 14:8-6.5(a)(2));
- Indicate the equipment's delivery time once an order has been placed (N.J.A.C. 14:8- $6.5(a)(2)(i)(12));^{47}$
- Specify the expected time requirements in the aggregate from start to finish as well as the time required to accomplish each specific activity related to Project design, resource monitoring, impact studies, permitting, construction and decommissioning activities, with associated milestones delineated for each category of activity (N.J.A.C. 14:8-6.5(a)(13)).

#### 3.12 Interconnection Plan

Section 12 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A plan for interconnection, including engineering specifications and costs (N.J.A.C. 14:8-6.5(a)(14));
- A description of the point(s) of interconnection the Project intends to use (N.J.A.C. 14:8-6.5(a)(2));
- Applicants shall show that they are currently in the PJM queue or that the Project is PJM queue eligible (N.J.A.C. 14:8-6.5(a)(10)(ii));<sup>48</sup>
- Document tasks required and discuss issues associated with electrical interconnection, including the distance between the Project and a suitable point to interconnect with the electrical grid (N.J.A.C. 14:8-6.5(a)(14)(i));<sup>49</sup>
- Land acquisition requirements, new equipment to be installed, upgrades to existing equipment required, and any feasibility studies required and the timeframe for review must be identified (N.J.A.C. 14:8-6.5(a)(14)(ii));
- Detailed description of how the Project will address and mitigate load constraints in the electrical distribution and PJM transmission system for each point of interconnection (N.J.A.C. 14:8-6.5(a)(14)(iii));
- Demonstrate to the greatest extent possible how the Project will address current or potential future load pocket or constraint problems with the electric distribution system and the PJM transmission system (N.J.A.C. 14:8-6.5(a)(14)(iv));
- Indicate the location of transmission lines and all points of interconnection to the PJM system serving New Jersey (*N.J.A.C.* 14:8-6.5(a)(14)(v)); and
- Information for costs associated with network upgrades that flow from the Project even if not directly caused by the interconnection (N.J.A.C. 14:8-6.5(a)(14)(vi)).

<sup>&</sup>lt;sup>47</sup> Include this information for wind turbine generators, foundations, undersea cables, and all other key Project components.

<sup>&</sup>lt;sup>48</sup> This can be demonstrated by providing the Project's PJM queue position or evidence that the Project has applied for a PJM queue position.

<sup>&</sup>lt;sup>49</sup> Each proposed point of interconnection shall be discussed.

Section 12 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- Address how the interconnection plan and design can support the State's future offshore development goals, including discussion of the following:
  - Ability for the Project to work synergistically with any future offshore transmission grid, including willingness to make its interconnection facilities available to future integrated offshore wind transmission solutions willing to refund its *pro rata* share of any upgrades costs, as well as reach commercially reasonably terms on indemnification;
  - Ability to make some portion of its interconnection facilities available to future Qualified Projects willing to refund its *pro rata* share of any upgrade costs, as well as reach commercially reasonably terms on indemnification;
  - o Potential sharing of offshore or onshore substations with future Qualified Projects through creation of additional substation bays or laying extra unused conduit; and
  - Other means by which the Project's interconnection plan may aid the State in meeting its goal of achieving 7,500 MW of offshore wind by 2035 in a cost effective manner.

Attachments to Section 12 of the Application Narrative must include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- Supporting documentation for the P50 and P90 estimates of Transmission System Upgrade Costs ("TSUC") reported in the Application Form; and 50,51
- Any draft or final interconnection studies conducted by PJM or by a third party, including the Feasibility Study, System Impact Study, and Facility Study relating to the proposed Project.<sup>52</sup>

#### 3.13 Permitting Plan

Section 13 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- A list of all State, and Federal regulatory agency approvals, permits, or other authorizations required pursuant to State, and Federal law (N.J.A.C. 14:8-6.5(a)(10));
- Identify all applicable Federal and State statutes and regulations and municipal code requirements, with the names of the Federal, State, and local agencies to contact for compliance (N.J.A.C. 14:8-6.5(a)(2)(iv));

<sup>&</sup>lt;sup>50</sup> TSUC are the onshore transmission owner upgrades necessitated by the Project's interconnection request. They do not include the offshore substation and all associated facilities up to the transmission owner's point of interconnection.

<sup>&</sup>lt;sup>51</sup> The P90 estimate of TSUC represents a worse case estimate of required system upgrade costs to accommodate the Project injection at one or more points of interconnection as set forth in the Application. The Applicant is responsible for defining the operating conditions that would be likely to materially increase TSUC relative to the P50 estimate of TSUC.

<sup>&</sup>lt;sup>52</sup> Any Critical Energy Infrastructure Information ("CEII") may be filed subject to the confidentiality claims discuss in Section 2.5.

- Identify all local, State and/or Federal permits and/or approvals required to build and operate
  the Project and the expected time to obtain such permits and/or approvals (N.J.A.C. 14:86.5(a)(10)(iii));
- Identify the nature of the Applicant's ocean lease and land ownership requirements for all aspects of the Project, including all required interconnection areas (N.J.A.C. 14:8-6.5(a)(10)(iv));
- Progress must be demonstrated in securing leases and land required, and Applicants shall propose a plan for accomplishing remaining steps toward acquiring leases or land ownership  $(N.J.A.C.\ 14:8-6.5(a)(10)(v))$ ;
- Indicate the type and number of entities securing leases or owning land (N.J.A.C. 14:8-6.5(a)(10)(v));
- A plan for accomplishing remaining steps toward acquiring leases or land ownership (N.J.A.C. 14:8-6.5(a)(10)(v));
- Identify each appropriate State or Federal agency the Applicant will be contacting for land acquisition issues and provide a summary of the required arrangements (N.J.A.C. 14:8-6.5(a)(10)(vi)); and
- Demonstrate adequate financial resources to acquire any land and/or leases needed to undertake the Project (N.J.A.C. 14:8-6.5(a)(10)(vii)).

Section 13 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- A list of all local regulatory agency approvals, permits, or other authorizations required pursuant to local law;
- A strategy, including the expected timeline (aligned with the Project Timeline described in Section 3.11), to obtain each required permit and/or approval;
- Identify the land ownership requirements for the port facilities included in the Project; and
- Identify each appropriate State or Federal agency the Applicant has contacted for land acquisition issues and provide a summary of the required arrangements.

Attachments to Section 13 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Copies of all submitted permit applications and any issued approvals and permits (N.J.A.C. 14:8-6.5(a)(10)); and
- Filings made to any other regulatory or governmental administrative agency including, but not limited to, any compliance filings or any inquiries by these agencies (N.J.A.C. 14:8-6.5(a)(10)(ix)).

An award to build a Qualified Project is contingent upon the successful Applicant obtaining all required local, State and/or Federal permits and/or approvals (N.J.A.C. 14:8-6.5(a)(10)(i)). The books and records of the Applicant shall be subject to review and audit by the Board, or any other State entity or State designee (N.J.A.C. 14:8-6.5(a)(10)(viii)). Applicants shall provide the Board with copies of each permit or approval within 14 days of receipt by the Applicant. This is a continuing obligation upon the Applicant and shall serve as a condition of any OREC award (N.J.A.C. 14:8-6.5(a)(10)(iii)).

#### 3.14 **O&M Plan**

Section 14 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- An O&M plan for the 20-year contract term for each phase of the Project (N.J.A.C. 14:8-6.5(a)(7));
- Detail routine, intermittent, and emergency protocols (N.J.A.C. 14:8-6.5(a)(7)(i));
- Demonstrate that the Applicant has the financial capacity and technical expertise to perform all necessary upkeep/maintenance over the life of the Project (N.J.A.C. 14:8-6.5(a)(7)(ii));
- Identify the primary risks to the built infrastructure and how the potential risks, including, but not limited to, hurricanes, lightning, fog, rogue wave occurrences, and exposed cabling, shall be mitigated (N.J.A.C. 14:8-6.5(a)(7)(iii));<sup>53</sup>
- Describe the emergency shut down provisions in the event of a need for the immediate stoppage of turbine blades ( $N.J.A.C.\ 14:8-6.5(a)(7)(iv)$ );
- Identify specific and concrete elements to ensure both construction and operational cost controls (N.J.A.C. 14:8-6.5(a)(7)(v)); and
- Identify the projected plan for the subsequent operational term, assuming any necessary Federal lease agreements are maintained and renewed (N.J.A.C. 14:8-6.5(a)(7)(vii)).

Section 14 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

- If the Applicant has selected an O&M contractor, identify the contractor and demonstrate that it
  has the financial capacity and technical expertise to perform all necessary upkeep/maintenance
  over the life of the Project;
- Identification of the port(s) that will be used to support O&M of the Project and the activities that will be conducted at each port;
- Describe how the built infrastructure will be made climate resilient to withstand expected climate impacts;
- Address the potential for cable exposure over the lifetime of the project and provide plans for reburial if necessary; and
- A detailed description of the vessels that will be used for the O&M of the Project, and how Jones Act compliance will be addressed for each vessel and/or vessel class.

Attachments to Section 14 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- Proof of insurance typical of the industry (N.J.A.C. 14:8-6.5(a)(7)(vi)); and
- A complete O&M plan for the life of the plant (N.J.A.C. 14:8-6.5(a)(7)(viii)).

#### 3.15 Decommissioning Plan

Section 15 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

• A decommissioning plan for the Project including provisions for financial assurance for decommissioning and which complies with any applicable State and Federal statutes and/or regulations (N.J.A.C. 14:8-6.5(a)(9));

<sup>&</sup>lt;sup>53</sup> Climatic risks should also be included in the identification of risks.

- Estimate an expected useful economic life for the technology and installation area proposed (N.J.A.C. 14:8-6.5(a)(9)(i));
- Specify a Project decommissioning plan for the technology and installation area proposed (N.J.A.C. 14:8-6.5(a)(9)(i));
- Include the anticipated cost of decommissioning the Project based on applicable and/or anticipated regulatory and engineering requirements (N.J.A.C. 14:8-6.5(a)(9)(ii)); and
- Provide for the necessary future funding. Segregated decommissioning funds shall be required (N.J.A.C. 14:8-6.5(a)(9)(ii)).

# 3.16 Cost-Benefit Analysis

Section 16 of the Application Narrative must include the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

- The cost-benefit analysis for the Project, to show net benefits for the State (N.J.A.C. 14:8-6.5(a)(11));
- Ratepayer net costs with explicit listing of foundations, assumptions and conditions, consistent with the Project's financial analysis (see Section 3.4), revenue plan (see Section 3.7) and values submitted in the Application Form (N.J.A.C. 14:8-6.5(a)(11)(ii));<sup>54</sup>
- Direct, indirect and induced effects of the economic development plan described in Section 3.8 (N.J.A.C. 14:8-6.5(a)(11)(ix));
- Environmental net benefits, quantified and monetized as described in Section 3.9, with explicit listing of foundations, assumptions and conditions (N.J.A.C. 14:8-6.5(a)(11)(iii));
- Provide information on any State grants or other subsidies from the New Jersey Economic Development Authority or other agencies associated with the Project and include the subsidy as part of the Project cost-benefit analysis (N.J.A.C. 14:8-6.5(a)(11)(viii)); and
- An analysis of the potential positive and negative impacts on residential and industrial ratepayers of electricity rates over the life of the Project that may be caused by OREC requests (N.J.A.C. 14:8-6.5(a)(11)(xv)).

Section 16 of the Application Narrative must also include the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

 Monetization of the direct, indirect, and induced effects of the economic development plan shown as a present value in dollars discounted to December 31, 2020 at a 7% nominal discount rate.

#### 3.17 Application Form

The Application Form requires entry of the following information required under N.J.A.C. 14:8-6.5(a) et seq.:

• Full business information, including the Applicant's name, primary contact person, website, telephone numbers, e-mail address and street address (N.J.A.C. 14:8-6.5(a)(1));

<sup>&</sup>lt;sup>54</sup> Ratepayer net costs must not include the value of potential decreases in market prices attributable to the Project.

- Proposed nameplate capacity for the entire Project (N.J.A.C. 14:8-6.5(a)(2)(v), N.J.A.C. 14:8-6.5(a)(12)(viii)(5));55
- Assumed capacity factor (N.J.A.C. 14:8-6.5(a)(2)(v), N.J.A.C. 14:8-6.5(a)(12)(viii)(7));<sup>56</sup>
- Projected electrical output for the Project (N.J.A.C. 14:8-6.5(a)(6), N.J.A.C. 14:8-6.5(a)(6)(iv), N.J.A.C. 14:8-6.5(12)(viii)(6));<sup>57,58</sup>
- Net yearly energy output for the Project, accounting for losses (N.J.A.C. 14:8-6.5(a)(2)(v)); 59,60
- The number of ORECs to be produced by the Project (N.J.A.C. 14:8-6.5(a)(12)(viii)(7));<sup>61</sup>
- A proposed OREC pricing method and schedule for the Board to consider, including the price per OREC necessary to make the Project commercially viable. The Board requires a fixed, flat OREC price for the proposed term or a fixed price for every contract year. All proposals must include a total price that reflects capacity, energy, and other elements of generation (N.J.A.C. 14:8-6.5(a)(12), N.J.A.C. 14:8-6.5(a)(12), N.J.A.C. 14:8-6.5(a)(12)(viii)(8));62,63
- Anticipated market prices over the anticipated life of the Project, including a forecast of electricity revenues from the sale of energy derived from the Project and capacity, as well as revenues anticipated by the sale of ORECs, RECs, air emissions credits or offsets, or any tradable environmental attributes created by the Project (N.J.A.C. 14:8-6.5(a)(6));<sup>64</sup> and
- Specific assumptions and inputs used in the input-output modeling, sufficient for replication of the results  $(N.J.A.C.\ 14:8-6.5(a)(11)(x))$ . 65

The Application Form also requires entry of the following information deemed necessary by the Board in order to conduct a thorough review of the Application, per N.J.A.C. 14:8-6.5(a)(16):

<sup>&</sup>lt;sup>55</sup> N.J.A.C. 14:8-6.5(a)(6)(iv) refers to "installed capacity." For purposes of this Solicitation Guidance Document, the terms "nameplate capacity" and "installed capacity" are used synonymously, and represent the total installed wind turbine capacity.

<sup>&</sup>lt;sup>56</sup> Calculated automatically based on expected generation profile as a fraction of installed capacity by month and hour of day.

<sup>&</sup>lt;sup>57</sup> N.J.A.C. 14:8-6.5(a)(6)(iv) refers to "energy production." N.J.A.C. 14:8-6.5(12)(viii)(6) refers to "energy output." For purposes of this Solicitation Guidance Document, the terms "electrical output," "energy production," "energy output," and "generation" are used synonymously.

<sup>&</sup>lt;sup>58</sup> Calculated automatically based on expected generation profile as a fraction of installed capacity by month and hour of day and installed capacity by month and calendar year.

<sup>&</sup>lt;sup>59</sup> Net yearly energy output should reflect the projected electrical output, and also be net of learning and degradation effects.

<sup>&</sup>lt;sup>60</sup> Calculated automatically based on expected generation and delivered energy as a fraction of expected generation by month and calendar year.

<sup>&</sup>lt;sup>61</sup> Calculated automatically based on expected delivered energy over the contract term.

<sup>&</sup>lt;sup>62</sup> The All-In OREC Purchase Price must be entered for each Energy Year of the 20-year contract period in nominal \$/OREC, levelized for 20 years or escalated at a fixed rate not exceeding 3% and consistent with the financial analysis presented in Section 3.4.

<sup>&</sup>lt;sup>63</sup> The same OREC Purchase Price for an Energy Year will apply to all ORECs generated within that Energy Year regardless of the capacity phase with which the OREC is associated.

<sup>&</sup>lt;sup>64</sup> The Application Form requires a monthly forecast of energy prices and an annual forecast of capacity prices.

<sup>&</sup>lt;sup>65</sup> Board Staff may ask the Applicant to re-run the model with other assumptions and inputs to be provided by Board Staff (*N.J.A.C.* 14:8-6.5(a)(11)(xi)). Board Staff may test an Applicant's cost-benefits analysis on its own model, by replicating the analysis using the model inputs supplied by the Applicant (*N.J.A.C.* 14:8-6.5(a)(11)(xii)).

- Secondary contact person and contact information;
- BOEM lease area;
- Number of capacity installation phases;
- Wind turbine generator nameplate capacity and COD for each capacity installation phase;<sup>66</sup>
- 12x24 profile of expected generation as a fraction of installed capacity by month and hour of day, consistent with the energy production estimate (see Section 3.3);
- Delivered energy as a fraction of expected generation by month and calendar year;
- Expected delivered energy by month and calendar (accounting for losses);<sup>67</sup>
- Annual OREC Allowance, consistent with the estimated energy output;
- Parameters to determine Buyer's share of PJM's final TSUC, including:
  - Tier 1 Cost Limit (Nominal \$): Seller will absorb 100% of the TSUC up to this limit within the All-In OREC Purchase Price;
  - Tier 2 Cost Limit (Nominal \$) and Tier 2 Seller Share (percentage): Seller will absorb the Tier 2 Seller Share of TSUC between the Tier 1 Cost Limit and the Tier 2 Cost Limit within the All-In OREC Purchase Price;
  - Tier 3 Cost Limit (Nominal \$) and Tier 3 Seller Share (percentage): Seller will absorb the Tier 3 Seller Share of TSUC between the Tier 2 Cost Limit and the Tier 3 Cost Limit within the All-In OREC Purchase Price;<sup>68</sup>
  - Required rate of return for annuitization of Buyer's share of PJM's final TSUC;
- A P50 estimate for the required TSUC for the Project;
- A P90 estimate for the required TSUC for the Project;
- The portion of the All-In OREC Purchase Price in nominal \$/OREC for the first Energy Year that represents Seller's Share of TSUC;<sup>69</sup>
- Interconnection zone;
- Expected annual direct in-state jobs creation, labor expenditures, and total expenditures by phase (development, construction, operation, and decommissioning);<sup>70</sup>
- Guaranteed minimum total in-state jobs creation, labor expenditures, and total expenditures by phase (development, construction, operation, and decommissioning);
- Expected total annual in-state indirect and induced economic impacts, including jobs creation, labor expenditures, and total expenditures, as calculated by the input-output model;
- Annual direct emissions of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> from vessels, vehicles, equipment, and other sources during development, construction, operation, and decommissioning of the Project;
- Annual avoided emissions of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> during operation of the Project; and
- If the Applicant plans to include storage capability, the following information must be provided:
  - Storage nameplate capacity for each capacity installation phase;
  - Energy storage capacity for each capacity installation phase;

<sup>&</sup>lt;sup>66</sup> Each Project phase will have a distinct 20-year term beginning on the phase's COD.

<sup>&</sup>lt;sup>67</sup> Calculated automatically based on expected generation and delivered energy as a fraction of expected generation by month and calendar year.

<sup>&</sup>lt;sup>68</sup> Buyer will be responsible for 100% of TSUC greater than the Tier 3 Cost Limit. The Buyer's Share of the TSUC and resultant increase, if any, to the OREC Purchase Price will be determined after PJM has finalized the TSUC calculations for an awarded Project.

<sup>&</sup>lt;sup>69</sup> This value may be used to adjust the OREC Purchase Price downward in the event that a ratepayer funded transmission investment reduces or eliminates the Project's TSUC.

<sup>&</sup>lt;sup>70</sup> Total in-state expenditures must include the expenditures related to jobs.

- Maximum discharge rate;
- Maximum charge rate;
- Maximum generation duration at full output; and
- Average annual cycle efficiency.

#### 4 CRITERIA FOR EVALUATION OF APPLICATIONS

To be eligible to win an award for the sale of ORECs, an Applicant must:

- 1. Submit an Application found to be administratively complete by the BPU;
- 2. Submit an OREC Purchase Price offer that meets all requirements of OWEDA and N.J.A.C. 14:8-6.5 et seq.;
- 3. Demonstrate a positive net benefit, subject to confirmation by Board Staff, reflecting in-State economic and environmental benefits;
- 4. Have a reasonable ratepayer impact in the eyes of the BPU; and
- 5. Demonstrate that the Project is viable and is likely to begin commercial operation on time.

The Applications will be evaluated by six criteria which reflect the requirements of OWEDA, the Board's rules and the goals of New Jersey's OSW policy. The goals are: to promote economic development by jump-starting an OSW supply chain in the State; to combat the threat of global climate change to New Jersey; and to achieve these first two goals at the lowest reasonable cost and lowest risk to New Jersey ratepayers. The six criteria are:

- OREC Purchase Price This includes meeting the requirement for a fixed pay-for-performance
  price, and the implied subsidy above market prices, as well as plans for maximizing revenue
  from the sales of energy, capacity, and ancillary services, which are credited back to ratepayers.
- 2. **Economic impacts** This includes, among other metrics, the number of jobs created by the Project, increase in wages, taxes, receipts, in-state expenditures, and state gross product for each MW of capacity constructed, including development of the New Jersey offshore wind supply chain and utilization of port and existing supply chain facilities.
- 3. **Ratepayer impacts** This includes the average increase in residential and industrial customer bills. The Board will also consider the timing of any rate impacts.
- 4. Environmental and fisheries impacts This includes the net reductions of pollutants for each MWh generated and the feasibility and strength of the Applicant's plan to avoid, minimize, or mitigate onshore and offshore impacts created by Project construction and operation, including the impact on surrounding land use, communities, environmentally and culturally sensitive areas, and commercial and recreational fishing. This evaluation criterion also includes consideration of Project design elements that will facilitate future expansion of OSW delivery capability and avoid, minimize, or mitigate future incremental environmental and fisheries impacts, such as reducing the area of seafloor or shoreline disturbance, the number of cable landfalls, or the footprint of the onshore right-of-way or interconnection facilities.
- 5. The strength of guarantees for economic impacts This includes all measures proposed to assure that claimed in-state expenditures and jobs commitments will materialize, as well as the relevance of the consequences for shortfalls to the nature of the shortfalls, e.g., mitigating jobs shortfalls by investing in workforce development.
- 6. **Likelihood of successful commercial operation** This includes feasibility of Project timelines, permitting plans, equipment and labor supply plans, feasibility of port facilities and marshalling plans, and the current progress displayed in achieving these plans.

Ranking and weighting of the six criteria by the BPU will reflect the goals of the solicitation especially as stated in EO8 and EO92. Those goals include: (a) contributing to a stronger New Jersey economy by anchoring an offshore wind supply chain in the State; (b) combating global climate change to protect New Jersey and also to protect New Jersey's natural resources; (c) providing added reliability for the transmission network and transmission rate relief for ratepayers; and (d) achieving all of this at the lowest reasonable cost and risk to New Jersey ratepayers. To this end, the following weighting will be applied in the evaluation:

**Table 3. Weighting of Evaluation Criteria** 

Criterion	Weight
OREC Purchase Price and Ratepayer Impacts	50%
Economic Impacts and Strength of Guarantees for Economic Impacts	20%
Environmental and Fisheries Impacts	20%
Likelihood of Successful Commercial Operation	10%

The evaluation of OREC Purchase Prices will be based on the levelized price per MWh. The quantitative impact of the total award capacity on the level of Ratepayer Impacts will be considered in the selection of Qualified Projects.

In the evaluation of Economic Impacts and Strength of Guarantees for Economic Impacts, guaranteed employment impacts and in-State spending will be given more weight than planned, but not guaranteed, employment and spending. Non-guaranteed direct employment and spending will be given more weight than indirect and induced economic impacts. Further, Board Staff's evaluation will consider whether there is a clear nexus between any shortfall in a particular class of economic benefits and the mitigation measures that are designed to make up for that shortfall.

Per N.J.A.C. 14:8-6.5(a)(12), if the pricing proposal satisfies the cost-benefit standards set forth in the statute and the Board's regulations, the Board may approve the Application subject to the Application satisfying other required conditions. The Board may conditionally approve an Application at a lower OREC price if that OREC price would allow the Applicant to satisfy the cost-benefit standards. The Applicant may then accept or reject the lower OREC price.

The BPU may reflect in its evaluation the possible benefit of having a diversity of selected Applicants, technology types, and wind resource locations.