

The Narragansett Electric Company  
d/b/a Rhode Island Energy

## **2022 Rhode Island Offshore Wind Request For Proposal**

Pre-Filed Direct Testimony of:

James M. Rouland,  
Ninad N. Kumthekar,  
Bradford Labine, and  
Mark A. Stevens, P.E.

**REDACTED**

September 27, 2023

Submitted to:  
Rhode Island Public Utilities Commission

RIPUC Docket No. 23-32-EL

Submitted by:



**Rhode Island Energy™**

a PPL company



September 27, 2023

**VIA HAND DELIVERY AND ELECTRONIC MAIL**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: Docket No. 23-32-EL - The Narragansett Electric Company d/b/a Rhode Island Energy 2022 Request for Proposals (“RFP”) for Long-Term Contracts for Offshore Wind Energy (“OSW RFP”) Pursuant to R.I. Gen. Laws § 39-31-10**

Dear Ms. Massaro:

Enclosed for filing with the Public Utilities Commission (“PUC”) is an original and nine copies<sup>1</sup> of Rhode Island Energy’s<sup>2</sup> filing pursuant to the Affordable Clean Energy and Security Act (“ACES”), R.I. Gen. Laws § 39-31-10(d), and its supporting testimony explaining why the Company determined that the single bid received through the OSW RFP is unlikely to lead to a contract that meets all the requirements of Section 6 and Section 10 of ACES<sup>3</sup>, and, therefore, it should not be required to negotiate a contract with the bidder, Bay State Wind, LLC (“Bay State Wind” or the “Bidder”).<sup>4</sup> With this filing, the Company requests that the PUC issue a ruling affirming the Company’s decision, thereby concluding the OSW RFP under Section 10 of ACES.

This filing consists of the following testimony and supporting materials:

**Book 1**

- Pre-Filed Direct Testimony of James M. Rouland, who provides an explanation of the OSW RFP including development of the quantitative and qualitative criteria; a summary description of the bid; and an overview of Rhode Island Energy’s evaluation process and conclusions - **CONFIDENTIAL**.
- Pre-Filed Direct Testimony of Ninad N. Kumthekar of Tabors Caramanis Rudkevich Inc. (“TCR”), who provides an overview of the engineering and economic analysis that TCR performed for Rhode Island Energy in its evaluation of the bid - **CONFIDENTIAL**.

---

<sup>1</sup> Per discussions with PUC counsel, the Company is submitting one copy of the redacted attachments contained in Book 2 of the filing.

<sup>2</sup> The Narragansett Electric Company d/b/a Rhode Island Energy (“Rhode Island Energy” or the “Company”).

<sup>3</sup> R.I. Gen. Laws § 39-31-6 sets forth the requirements for solicitations and PUC approval of long-term contracts under ACES.

<sup>4</sup> Bay State Wind, LLC is a joint venture of Ørsted N/A and Eversource Energy.

- Pre-Filed Direct Testimony of Bradford Labine, who describes Rhode Island Energy’s evaluation of certain siting and environmental issues associated with the bid-**CONFIDENTIAL**.
- Pre-Filed Direct Testimony of Mark A. Stevens, P.E., who describes Rhode Island Energy’s evaluation of certain transmission and interconnection issues with the bid -**CONFIDENTIAL**.

## **Book 2**

- OSW RFP & Appendices (Attachment JMR-1)
- Bid Proposal (Attachment JMR-2) – **CONFIDENTIAL**
- Bidder Conference Presentation (Attachment JMR-3)
- FAQ Responses to Developer Questions (Attachment JMR-4)
- 2022 RI OSW RFP Quantitative Evaluation Report & Appendices (Attachment NNK-1) – **CONFIDENTIAL**

## **Background and Pre-Bidding History**

The development and issuance of the OSW RFP arose out of an amendment to ACES that was passed into law on July 6, 2022, and incorporated a new Section 10 into Chapter 31 of Title 39. Specifically, Section 10(a) required Rhode Island Energy to develop and issue an RFP for at least 600 MW and no more than approximately 1,000 MW of newly developed offshore wind capacity, in consultation with the Rhode Island Office of Energy Resources (“OER”) and the Rhode Island Division of Public Utilities and Carriers (the “Division”) no later than October 15, 2022, and prior to issuance, to file the RFP with the PUC for public comment.<sup>5</sup> The amendment also provided that if the Company determined that the bids are unlikely to lead to contracts that meet the requirements of Section 6 and Section 10 of ACES, the Company must submit a filing to the PUC together with supporting testimony to explain why it should not be required to negotiate a contract.<sup>6</sup> This filing addresses that requirement.

In compliance with the Company’s statutory obligation, Rhode Island Energy issued the OSW RFP on October 14, 2022, following the required 30-day public comment period. The OSW RFP included terms and criteria to allow the Company to evaluate bids for commercial reasonableness and consistency with the overall purposes of ACES, as well as the requirements of Section 10. Following issuance of the OSW RFP, the Company communicated with prospective bidders through a variety of channels, such as through its website and a virtual Bidders’ Conference held on November 1, 2022, which enabled the Company to provide an overview of the OSW RFP and solicit questions from prospective developers.

---

<sup>5</sup> The Company filed the draft OSW RFP with the PUC on September 6, 2022 for public comment in Docket No. 22-22- EL.

<sup>6</sup> R.I. Gen. Laws § 39-31-10(d).

## **Summary of the Bid**

Bay State Wind was the only bidder who submitted a response to the OSW RFP. The single bid was comprised of a primary, physical proposal for an 884MW offshore wind project named “Revolution Wind 2” (the “Project”) and consisted of six alternative price offerings (collectively, the “Proposal”). The pricing terms are summarized in the confidential version of Mr. Rouland’s pre-filed direct testimony, and further detailed in the confidential Bid Proposal, provided as Attachment JMR-2. Rhode Island Energy determined that the Proposal was unlikely to lead to a contract that met the requirements of Section 6 and Section 10 of ACES, as further explained in the Company’s supporting testimony. Based on Rhode Island Energy’s evaluations, it determined that the none of the price offerings were commercially reasonable, as defined in ACES, the Proposal failed to meet certain minimum threshold requirements in the OSW RFP, and the Project lacked a credible operation date, all of which undermines the viability of the Project and compounds the associated risk for the Project.

## **Quantitative Evaluation**

Rhode Island Energy’s quantitative evaluation consisted of the development of the Pricing Factor, used to score, and rank each of the six price offerings (each is referred to in the evaluation as a “bid” or a “Proposal Case”).<sup>7</sup> The Pricing Factor is comprised of the Base Case model inputs<sup>8</sup> and the Quantitative Protocol, which establishes the specific categories of quantitative metrics that would be used to evaluate each of the bids, and describes the methodology and inputs used to calculate the costs and benefits associated with each of the quantitative metrics. The economic analysis is discussed in more detail in Mr. Rouland’s and Mr. Kumthekar’s respective pre-filed direct testimony.

The Company evaluated the bids by comparing the results of each Proposal Case against the Base Case, and then used the Quantitative Protocol to calculate the levelized net unit benefit in 2023 \$/MWh, which was further converted to points used to score the Project. The total net benefit of each bid is an estimate of the total dollar value of benefits to the Company’s customers resulting from the procurement of incremental offshore wind energy and environmental attributes through the OSW RFP. A positive total net benefit attributed to a bid indicates selecting that offshore wind project could result in long-term savings that exceed the projected contract costs of that bid; whereas a negative total net benefit indicates that a particular bid could result in a net increase in costs to the Company’s customers.

---

<sup>7</sup> Proposal Cases are comprised of those inputs and assumptions, using the details provided by the bidder in its bid proposal, which are then entered into the economic models and the results are compared to the Base Case to determine the benefits or costs of the proposal. TCR created a Proposal Case for each of the six bids, as discussed in Mr. Kumthekar’s pre-filed direct testimony.

<sup>8</sup> The Base Case is a counterfactual projection of capacity mix, generation, emissions, and prices associated with Rhode Island electricity consumption under a scenario in which the Company does not enter into long term contracts for energy and environmental attributes. The purpose of the Base Case is to serve as a common reference point to measure the incremental benefits and costs of bids received in response to the OSW RFP.

The Pricing Factor analysis concluded that all six bids resulted in substantial negative net benefits for customers, indicating a cost to customers over the life of the contract of more than \$3 billion on a net present value basis (2023\$). Even after modeling substantial sensitivities, the net benefits to customers of all six bids were still substantially negative, with estimated costs to customers at approximately -\$1.78 billion over the life of the contract. The Company determined the Project was not commercially reasonable, as required by R.I. Gen. Laws §§ 39-31-6(a)(1)(vii)(A) and 39-31-10(c), nor was it consistent with the overall purpose of ACES.<sup>9</sup>

### **Qualitative Evaluation**

The Company's qualitative evaluation was comprised of eight separate factors: Economic Development, Siting & Permitting, Environmental, Interconnection & Transmission, Financing, Contract Risk, Project Development & Operational Viability, and Energy Security & Reliability. The Company evaluated the six bids against each factor separately, considering the criteria established under each factor to determine the points value to assign to each bid. The Company's qualitative evaluation determined that the Project did not have a credible project operation date, as required by ACES, because the Bidder's siting and permitting plan, and its interconnection and transmission plan failed to comply with certain requirements under the OSW RFP and did not support that the Project could be built as proposed, among other risks. Mr. Labine and Mr. Stevens describe these issues in detail in their respective pre-filed direct testimony.

As a result of the combined quantitative and qualitative evaluations, the Company determined that the costs of the Proposal outweigh the estimated benefits, and, therefore, declined to conditionally select the Project for contract negotiations.

This filing also includes a Motion for Protective Treatment in accordance with Rule 1.3(H)(3) of the PUC's Rules of Practice and Procedure, and R.I. Gen. Laws § 38-2-2(4)(B). The Company seeks protection from public disclosure of certain highly sensitive and proprietary bid information that the Bidder included at the time of its bid submission, which is contained in the confidential versions of the pre-filed direct testimony of the Company's witnesses and in Attachment JMR-2, as well as certain highly sensitive and proprietary analysis provided by TCR and contained in the confidential version of Attachment NNK-1. Accordingly, the Company has provided the PUC with one (1) complete, unredacted copy of the confidential documents in a sealed envelope marked "**Contains Privileged Information – Do Not Release,**" and has included redacted copies of these materials for the public filing. In addition, Confidential Attachment JMR-2 includes two Excel files that the Bidder included in the confidential version of its bid. Because of the size and voluminous nature of these Excel files, the Company is providing the PUC with the confidential Excel files via an encrypted link and has not included redacted copies of this material for the public filing.

---

<sup>9</sup> One of the stated purposes of ACES is to provide cost-effective, strategic investments in energy resources and infrastructure and enhance economic competitiveness by reducing energy costs. See R.I. Gen. Laws § 39-31-2.

Luly E. Massaro, Commission Clerk  
Docket No. 23-32-EL – 2022 Offshore Wind RFP  
September 27, 2023  
Page 5 of 5

Thank you for your time and attention to this matter. If you have any questions, please contact Jennifer Brooks Hutchinson at 401-316-7429.

Very truly yours,



Jennifer Brooks Hutchinson

Enclosures

cc: John Bell, Division  
Christy Hetherington, Esq., Division  
Leo Wold, Esq., Division  
Christopher Kearns, Office of Energy Resources  
Albert Vitali, Esq., Office of Energy Resources

**STATE OF RHODE ISLAND**

**RHODE ISLAND PUBLIC UTILITIES COMMISSION**

\_\_\_\_\_) )  
In Re: The Narragansett Electric Company )  
d/b/a Rhode Island Energy’s 2022 Offshore )  
Wind Request for Proposal )  
\_\_\_\_\_)

Docket No. 23-32-EL

**MOTION OF THE NARRAGANSETT ELECTRIC  
COMPANY D/B/A RHODE ISLAND ENERGY FOR PROTECTIVE  
TREATMENT OF CONFIDENTIAL INFORMATION**

The Narragansett Electric Company d/b/a Rhode Island Energy (“Rhode Island Energy” or the “Company”) respectfully requests that the Rhode Island Public Utilities Commission (“PUC”) provide confidential treatment and grant protection from public disclosure to certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by Rule 1.3(H)(3) of the PUC Rules of Practice and Procedure, 810-RICR-00-00-1-1.3(H)(3) (“Rule 1.3(H)”), and R.I. Gen. Laws § 38-2-2(4)(B). Specifically, the Company requests confidential treatment of limited portions of the pre-filed direct testimony of Company witnesses James M. Rouland, Ninad N. Kumthekar, Bradford Labine, and Mark A. Stevens, P.E., as well as in Attachment JMR-2 and Attachment NNK-1, all of which the Company has filed contemporaneously with this motion as part of its filing in this proceeding. The Company also requests that, pending entry of a ruling on this motion, the PUC preliminarily grant the Company’s request for confidential treatment pursuant to Rule 1.3(H)(2).



## **I. BACKGROUND**

On September 27, 2023, Rhode Island Energy submitted a filing pursuant to the Affordable Clean Energy and Security Act (“ACES”), R.I. Gen. Laws § 39-31-10(d), with supporting testimony explaining why the Company determined that the single bid received through the 2022 Request for Proposals (“RFP”) for Long-Term Contracts for Offshore Wind Energy (“OSW RFP”) issued pursuant to Section 10(a) of ACES is unlikely to lead to a contract that meets all the requirements of Section 6 and Section 10 of ACES, and, that Rhode Island Energy should not be required to negotiate a contract with the bidder, Bay State Wind, LLC (“Bay State Wind” or the “Bidder”). In that filing, Rhode Island Energy submitted the pre-filed direct testimony of four Company witnesses: James M. Rouland, Ninad N. Kumthekar, Bradford Labine, and Mark A. Stevens, P.E. (collectively, the “Testimony”), together with supporting attachments, including the Bidder’s confidential Bid Proposal as Attachment JMR-2, and the Quantitative Evaluation Report & Appendices prepared by the Company’s third-party consultant, Tabors Caramanis Rudkevich Inc. (“TCR”) as Attachment NNK-1 (collectively, the “Confidential Attachments”). Certain portions of the Company’s Testimony and the Confidential Attachments (collectively, the “Confidential Information”) contain confidential, competitively sensitive, and proprietary information that is exempt from disclosure under APRA. To the extent possible, the Company has protected the Confidential Information with limited and targeted redactions.

### **A. Information Contained in the Company’s Testimony and Confidential Attachment JMR-2**

Portions of the Company’s Testimony contain certain highly sensitive, proprietary, and confidential bid and bid evaluation information that the Bidder designated as proprietary and competitively sensitive in its bid submission, provided in Confidential Attachment JMR-2. This

information includes the specific pricing and other commercial terms for the proposed 884MW offshore wind project (referred to as “Revolution Wind 2” or the “Project”) that have not been previously disclosed with the same level of granularity. In preparing the Testimony, Rhode Island Energy endeavored to include as much information as possible to explain the OSW RFP process, the bid received, and the Company’s bid evaluation and its conclusions to enable the PUC and other stakeholders to review the Company’s decision not to proceed with contract negotiations under ACES. To present this information in the most complete and understandable format, it was necessary to reference certain limited confidential information included in the Bidder’s Bid Proposal; therefore, the Company has applied limited and targeted redactions to those sections of the Testimony.

Likewise, Attachment JMR-2 is the Bidder’s confidential Bid Proposal. The Bidder applied redactions to the public version of Attachment JMR-2 at the time of its bid submission; therefore, the Company is providing redacted and unredacted versions of Attachment JMR-2 in the same form as was provided by the Bidder. Rhode Island Energy requests that the PUC give the information contained in the unredacted versions of its Testimony and Confidential Attachment JMR-2 confidential treatment.

**B. Information Contained in Confidential Attachment NNK-1**

The unredacted version of Attachment NNK-1 contains confidential and proprietary bid information and bid evaluation information, as well as confidential and proprietary market forecasts of energy and renewable energy certificate (“RECs”) prices prepared by the Company’s consultant, TCR for evaluation of the bids. The Company has reviewed this attachment and redacted only those portions necessary to protect TCR’s commercially sensitive and proprietary modeling analysis and pricing forecasts. The information for which the Company seeks

confidential treatment has been identified by TCR as highly sensitive in that it includes the Bidder's confidential data, pricing, and other bid components contained in Appendices A.1 through A.4, as well as certain market forecasts of energy and RECs contained in the charts in Appendix C Attachment NNK-1. Rhode Island Energy requests that the PUC give the information contained in the unredacted version of Attachment NNK-1 confidential treatment.

## **II. LEGAL STANDARD**

Rule 1.3(H) provides that access to public records shall be granted in accordance with the Access to Public Records Act ("APRA"), R.I. Gen. Laws § 38-2-1, *et seq.* APRA establishes the balance between "public access to public records" and protection "from disclosure [of] information about particular individuals maintained in the files of public bodies when disclosure would constitute an unwarranted invasion of personal privacy." Gen. Laws § 38-2-1. Per APRA, "all records maintained or kept on file by any public body" are "public records" to which the public has a right of inspection unless a statutory exception applies. *Id.* § 38-2-3. The definition of "public record" under APRA specifically excludes "trade secrets and commercial or financial information obtained from a person, firm, or corporation that is of a privileged or confidential nature." *Id.* § 38-2-2(4)(B). Under the statute, such records "shall not be deemed public." *Id.*

The Rhode Island Supreme Court has held that when documents fall within a specific APRA exemption, they "are not considered to be public records," and "the act does not apply to them." *Providence Journal Co. v. Kane*, 577 A.2d 661, 663 (R.I. 1990). Further, the court has held that "financial or commercial information" under APRA includes information "whose disclosure would be likely to either (1) impair the Government's ability to obtain necessary information in the future, or (2) cause substantial harm to the competitive position of the person from whom the information was obtained." *Providence Journal Co. v. Convention Ctr. Auth.*,

774 A.2d 40, 47 (R.I. 2001) (internal quotation marks omitted). The first prong of the test is satisfied when information is provided voluntarily to the governmental agency, and that information is of a kind that would not customarily be released to the public by the person from whom it was obtained. *Id.* at 47.

### **III. BASIS FOR CONFIDENTIALITY**

The Confidential Information contains “trade secrets and commercial or financial information” such that the information does not fall within APRA’s definition of a public record. *See Gen. Laws § 38-2-2(4)(B); Kane, 577 A.2d at 663.* Specifically, the Confidential Information includes the Bidder’s confidential bid and bid evaluation information, as well as proprietary market forecast information prepared by the Company’s consultant, TCR for use with their modeling analysis in evaluating the Bidder’s proposal.

#### **A. Proprietary Information Regarding the Bid and Bid Evaluation Should Be Protected From Public Disclosure.**

Attachment JMR-2 contains the unredacted version of the Bidder’s Bid Proposal submitted in response to the OSW RFP. The Bidder designated certain information in its Bid Proposal as proprietary and commercially sensitive. Under the terms of the OSW RFP, the Company agreed to protect the Bidder’s confidential information in regulatory proceedings. Section 3.4 of the OSW RFP states,

Rhode Island Energy agrees to use commercially reasonable efforts to treat the non-public information it receives from bidders in a confidential manner. . . . Rhode Island Energy will not, except as required by law or in a regulatory proceeding, disclose such information to any third party other than the DEM, the Commerce Corporation, OER, and the Division and their respective agents and/or consultants (i.e., these state agencies will be independently reviewing the evaluation process), or use such information for any purpose other than in connection with this RFP, and it may use a non-disclosure agreement with these agencies and individuals; provided that, **in any future regulatory, administrative or**

**jurisdictional proceeding in which confidential information is sought, Rhode Island Energy shall take reasonable steps to limit disclosure and use of said confidential information through the use of non-disclosure agreements or orders seeking protective treatment, and shall inform bidders that their confidential information has been sought in such proceeding.** (Emphasis added.)

The process was designed in this manner to encourage participation, promote competition in the bidding process, and maximize the value of the bids received. Any disclosure of proprietary commercial and financial information reasonably designated as confidential by the Bidder would undermine the process and potentially discourage bidding by others in future solicitations. Thus, the Company is requesting confidential treatment of the unredacted version of Attachment JMR-2.

In addition, the unredacted versions of the Company's Testimony and Attachment NNK-1 contain excerpts of confidential information, such as pricing and other commercially sensitive information that is derived directly from Attachment JMR-2. Specifically, Table 3 in the pre-filed direct testimony of James M. Rouland contains the Bidder's pricing proposals, including the price for the energy (per MWh) and RECs and that same information is carried over into Appendices A.1 through A.4 of Attachment NNK-1. Also, the Testimony and Attachment NNK-1 includes other bid information that the Bidder designated as proprietary and commercially sensitive in its bid submission, which the Company and its consultant, TCR, used in evaluating the Bidder's proposal.

Unlike prior long-term contracting solicitations in which the Company filed a power purchase agreement ("PPA") with the PUC for review and approval with unredacted pricing and other commercial terms, the Company did not select the Project with which to negotiate a contact. Disclosing the Bidder's specific pricing information and other bid terms now could

adversely impact participation in future solicitations, as well as the Company's ability to negotiate favorable PPA terms following future bid selections.<sup>1</sup> In addition, the confidential bid information contained in the Testimony and the Confidential Attachments is the type that the Bidder does not typically disclose to the public, and has not been previously disclosed with the same level of granularity as contained in this filing.<sup>2</sup>

For these reasons, the confidential bid and bid evaluation information contained in the Testimony and Confidential Attachments should be protected.

**B. Proprietary Information Regarding Market Forecasts Should Be Protected From Public Disclosure.**

The market forecasts of energy and REC prices contained in Confidential Attachment NNK-1 are commercially sensitive information that should be protected from public disclosure. The forecasts were used by the Company to evaluate the net benefits of the Project and are considered proprietary by the Company's consultant, TCR, who provided these forecasts to the Company as part of the economic analysis of the Bidder's proposal. These projections must be protected from public disclosure because the Company may continue to use this forecast, or similar forecasts, to evaluate future bids for renewable generation services. If the redacted portions of Attachment NNK-1 and the assumptions regarding future energy and REC prices

---

<sup>1</sup> The Company notes that it filed an unexecuted power purchase agreement ("PPA") with Deepwater Wind Block Island, LLC ("Deepwater Wind") on October 15, 2009 in Docket No. 4111, which contained unredacted pricing and other commercial terms. This OSW RFP filing is distinguishable from the Deepwater Wind filing in Docket No. 4111, in that Deepwater Wind had been selected as the State of Rhode Island's preferred developer pursuant to a separate solicitation process that resulted in a Joint Development Agreement for Deepwater Wind to develop offshore wind projects. That PPA was the subject of special legislation under the Town of New Shoreham Act, R.I. Gen. Laws 39-26.1-7, and was not the result of a competitive solicitation, like the OSW RFP. At the time of the unexecuted PPA filing, there were several terms that were still in negotiation, one of which was price. In the case of this OSW RFP, the Company did not select the Bidder and there is no PPA for the PUC to consider in this proceeding.

<sup>2</sup> The Company acknowledges that a price range for the Bidder's proposal was made public in a GoLocalProv article in July 2023; however, that information was high level and did not reveal the Bidder's specific pricing terms or any other inputs to those prices, for which the Company seeks confidential treatment in this filing.

contained therein are publicly disclosed, the Company's ability to negotiate the best deals possible on behalf of customers in the future would be compromised. Also, the PUC has protected proprietary confidential bid evaluation material in prior long-term contracting solicitations.<sup>3</sup> Accordingly, the PUC should protect the energy forecast information contained in the charts in Appendix C of Attachment NNK-1 from public disclosure.

The proposed protections of the Confidential Information in this filing are narrow. The Company seeks to use redactions to protect from public disclosure those limited portions of the Company's Testimony and the Confidential Attachments that the Bidder has designated as confidential and which the Company has agreed to protect. The proposed redactions fall squarely within APRA's exemption for "trade secrets and commercial or financial information." Gen. Laws § 38-2-2(4)(B).

Accordingly, Rhode Island Energy respectfully requests that the PUC grant protective treatment to the identified portions of the Testimony and Confidential Attachments and take the following actions to preserve the confidentiality of those documents: (1) maintain the identified portions of the Testimony and Confidential Attachments as confidential indefinitely; (2) not place unredacted versions of the Testimony and the Confidential Attachments on the public docket; and (3) disclose the unredacted versions of the Testimony and Confidential Attachments to the PUC, its attorneys, and staff as necessary to review this docket.

#### **IV. CONCLUSION**

For the foregoing reasons, Rhode Island Energy respectfully requests that the PUC grant its Motion for Protective Treatment of Confidential Information.

---

<sup>3</sup> See Docket No. 4764 Hearing on Motion for Protective Treatment (November 20, 2017). The Company also sought protective treatment of similar bid evaluation information in Docket No. 4929.

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC  
COMPANY d/b/a RHODE ISLAND ENERGY**

By its attorney,



---

Jennifer Brooks Hutchinson, Esq. (#6176)  
The Narragansett Electric Company d/b/a  
Rhode Island Energy  
280 Melrose Street  
Providence, RI 02907  
(401) 784-7288

Dated: September 27, 2023



**Testimony of  
James M. Rouland**

REDACTED

THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a RHODE ISLAND ENERGY  
RIPUC DOCKET NO. 23-32-EL  
IN RE: 2022 RHODE ISLAND OFFSHORE WIND RFP  
WITNESS: ROULAND

---

**PRE-FILED DIRECT TESTIMONY**

**OF**

**JAMES M. ROULAND**

**September 27, 2023**

**Table of Contents**

I. Introduction & Background ..... 1

II. ACES Requirements ..... 9

III. OSW RFP Development ..... 13

IV. Pricing and Qualitative Factor Criteria Development ..... 24

    A. Pricing Factor ..... 28

    B. Qualitative Factors ..... 31

V. Bidding Process & Description of Bids Received ..... 47

VI. Bid Evaluation ..... 49

    A. Pricing Factor Evaluation ..... 50

    B. Additional Evaluations ..... 55

    C. Evaluation of Qualitative Factors ..... 60

VII. Evaluation Results ..... 69

VIII. Conclusion ..... 73

1 **I. Introduction & Background**

2 **Q. Mr. Rouland, please state your full name and business address.**

3 A. My name is James M. Rouland. My business address is 827 Hausman Rd, Allentown,  
4 PA 18104.

5  
6 **Q. Please describe by whom you are employed and in what capacity.**

7 A. I was recently promoted to Director Regulatory Policy & Energy Procurement for PPL  
8 Services Corporation (“PPL Services”). My responsibilities include managing the open  
9 enrollment process for the Renewable Energy Growth Program, Long-term Clean Energy  
10 Program, and related renewable energy contracts. Further, I managed the procurement of  
11 electricity, capacity and related services for The Narragansett Electric Company d/b/a  
12 Rhode Island Energy (“Rhode Island Energy” or the “Company”) Last Resort Service  
13 Procurement Plan, including the purchase and sale of renewable energy certificates  
14 (“RECs”). In addition to my responsibilities for Rhode Island Energy, I also manage the  
15 procurement of the PPL Electric Utilities Corporation (“PPL Electric”) Default Service  
16 Program Plan and Alternative Energy Credit Programs, regulatory policy and compliance  
17 activities, and various strategic initiatives for PPL Electric.

18

19 **Q. Please describe your professional and educational background.**

20 A. I graduated from Albright College in 2005 with a Bachelor of Arts in Environmental  
21 Policy and a Bachelor of Science in Environmental Science. I graduated from the

1 University of Phoenix in 2008 with a Master of Business Administration. I began my  
2 career in 2005 with PPL Services, in the PPL Environmental Management Department,  
3 as an Environmental Auditor and was later promoted to Lead Environmental Auditor in  
4 2007. In 2008, I joined PPL Development Company and was promoted to the position of  
5 Senior Energy and Climate Change Professional. In 2009, I joined the Energy  
6 Acquisition Department within PPL Electric as a Senior Analyst of Business Operations  
7 Analysis. In 2012, I was promoted to Supervisor of Energy Procurement within the  
8 Distribution Regulatory and Business Affairs Department of PPL Electric. In 2016, my  
9 role expanded to include the management of PPL EU Services Corporation's Settlement  
10 and Scheduling Team. In 2018, I assumed the role of Regulatory Policy Manager at PPL  
11 Services. In July 2022, I was promoted to Manager-Regulatory Policy, and effective,  
12 September 4, 2023, I was promoted to Director Regulatory Policy & Energy  
13 Procurement, which is the position I currently hold.

14  
15 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**  
16 **(“PUC”)?**

17 A. Yes. I testified on behalf of the Company for the 2023 Renewable Energy Growth  
18 Program in Docket No. 22-39-REG, the 2023 Renewable Energy Standard Procurement  
19

1 Plan in Docket No. 22-43-EL,<sup>1</sup> and the 2023 Last Resort Service Winter Rate Filing in  
2 Docket No. 23-01-EL.  
3

4 **Q. Have you testified before any other state regulatory agencies?**

5 A. Yes, I have previously testified before the Pennsylvania Public Utility Commission (“PA  
6 PUC”). Most recently, I testified before the PA PUC concerning PPL Electric’s Petition  
7 for Approval of its Default Service Plan for the Period of June 1, 2021 through May 31,  
8 2025 in Docket No. P-2020-3019356. Further, I have testified before the PA PUC in  
9 support of: PPL Electric’s Petition for the Approval of a Pilot Time-of-Use Program in  
10 Docket No. P-2013-2389572; PPL Electric’s Default Service Program and Procurement  
11 Plan for the Period June 1, 2015 through May 31, 2017, in Docket No. P-2014-2417907;  
12 PPL Electric’s 2015 base rate case, in Docket No. R-2015-2469275; a net metering  
13 complaint in Docket No. C-2013-2375440; PPL Electric’s Default Service Program and  
14 Procurement Plan for the Period of June 1, 2017 through May 31, 2021, in Docket No.  
15 P-2016-2526627; and PPL Electric’s Time-of-Use Program in Docket No.  
16 P-2016-2578051.  
17

18 **Q. What is the purpose of your testimony?**

19 A. This filing is being made pursuant to the Affordable Clean Energy Security Act  
20

---

<sup>1</sup> The hearing for Docket No. 22-43-EL was a joint hearing that also included Docket Nos. 23-03-EL (2023 Annual Retail Rate Filing), 23-01-EL (Last Resort Service Summer Rate Filing), and 4978 (Proposal to Recover Deferred Customer Charge).

1 (“ACES”), R.I. Gen. Laws § 39-31-10(d), as amended.<sup>2</sup> The purpose of my testimony is  
2 to explain and provide support for Rhode Island Energy’s determination that the single  
3 bid received through Rhode Island Energy’s October 2022 Request for Proposals for  
4 Long-Term Contracts for Offshore Wind Energy (“OSW RFP”) pursuant to subsection  
5 10(a) of ACES is unlikely to lead to a contract that complies with all the requirements of  
6 R.I. Gen. Laws § § 39-31-10 and 39-31-6.

7  
8 In support of the Company’s decision, my testimony addresses the following:

- 9 • An overview of the statutory requirements pursuant to which the Company issued  
10 the OSW RFP;
- 11 • An explanation of the development of the RFP including development of  
12 Quantitative Base Case Model and Quantitative Protocol, and Qualitative Factor  
13 criteria;
- 14 • A summary of the bid received;
- 15 • An overview of Rhode Island Energy’s bid evaluation process and conclusions;  
16 and

---

<sup>2</sup> R.I. Gen. Laws § 10(d) provides that,

If the electric distribution company determines that the bids are unlikely to lead to contracts that meet all of the requirements of this section and § 39-31-6, it shall submit a filing to the commission together with testimony to explain why it should not be required to negotiate a contract. The commission shall review and rule on the filing within ninety (90) days, which review shall include soliciting input from the agencies required to provide advisory opinions to the commission, and public comment. If the electric distribution company fails to show that the bids are unlikely to lead to a contract that meets all the requirements of this section and § 39-31-6 the commission may order the utility to proceed with negotiations as set forth in subsection (c) of this section.

- 1           • The resulting decision not to pursue contract negotiations with the Bidder  
2            (defined below).

3  
4           Further, details and support for the quantitative analysis are provided in the pre-filed  
5           direct testimony of Ninad N. Kumthekar of Tabors Caramanis Rudkevich Inc. (“TCR”),  
6           consultant to Rhode Island Energy. Details regarding the evaluation of certain siting and  
7           environmental issues, and the evaluation of certain interconnection issues are addressed  
8           in the pre-filed direct testimony of Company witnesses Bradford Labine and Mark A.  
9           Stevens, P.E., respectively.

10  
11   **Q.    Please provide an overview of the OSW RFP and the submitted bids.**  
12    A.    As explained in greater detail below, the Company issued the OSW RFP for at least  
13           600MW and no more than approximately 1,000 MW of newly developed offshore wind  
14           capacity in compliance with R.I. Gen. Laws § 39-31-10(a). The OSW RFP resulted in a  
15           single bid package submitted by Bay State Wind, LLC (the “Bidder”), a joint venture of  
16           Ørsted N/A (“Ørsted”) and Eversource Energy (“Eversource”). This bid was comprised  
17           of a primary, physical proposal for an 884MW offshore wind project (the “Project”)  
18           consisting of six alternative pricing offers (collectively, the “Proposal”). Details of the  
19           Proposal are set forth in the Confidential Bid Proposal provided as Attachment JMR-2 of  
20           my testimony. The Bidder named the Project “Revolution Wind 2”. I discuss the Project  
21           in more detail in Section V of my testimony.



1 **Q. Why did the Company decline to select the Proposal for contract negotiations?**

2 A. As described in greater detail in Section VI (Bid Evaluation) and Section VII (Evaluation  
3 Results) of my testimony, the Company's evaluation of the Proposal found it failed to  
4 meet the statutory obligations under ACES and certain Minimum Threshold requirements  
5 under the OSW RFP. Specifically, the Quantitative Evaluation determined that the net  
6 benefits of all price offerings were negative, resulting in a cost to customers over the life  
7 of the contract of more than \$3 billion. After the Company completed a sensitivity  
8 analysis to evaluate the potential benefits of transmission system upgrades beyond what  
9 the Bidder originally proposed, and to account for substantial negative revenues due to  
10 negative locational marginal prices ("LMPs") – which would contractually be the  
11 responsibility of the Bidder – and the result was still an estimated \$1.78 billion cost to  
12 customers over the life of the contract. Said another way, even after substantial  
13 sensitivities were modeled, the Company determined that moving forward with the  
14 Project would add an estimated \$1.78 billion in costs to customers. As a result, the  
15 Company determined that the Proposal was not commercially reasonable and was not in  
16 the best interest of Rhode Island customers.

17  
18 Additionally, the Company, through its evaluation of various Qualitative Factor criteria –  
19 interconnection, siting and permitting, and environmental assessments – found the  
20 proposed project failed to provide adequate plan documentation, descriptions, and  
21 supporting information. In some instances, the Company also found the Proposal failed

1 to meet the Minimum Threshold requirements of the OSW RFP. As a result, the  
2 Project’s proposed operation date was not credible.

3

4 **Q. Has the Company found any additional information concerning this project since**  
5 **the decision not to proceed?**

6 A. Yes, the Company learned recently that the Bidder has withdrawn the Project from the  
7 ISO New England (“ISO-NE”) interconnection queue, making it unlikely that the Project  
8 will be able to meet its proposed commercial operation date, and therefore, no longer a  
9 viable project.<sup>3</sup>

10

11 **Q. What is the Company requesting from the PUC?**

12 A. Pursuant to Section 10(d) of ACES, the Company is required to submit a filing to the  
13 PUC together with testimony to explain why it should not be required to negotiate a  
14 contract with the Bidder. Based upon the information provided in my testimony and the  
15 testimony of the Company witnesses Bradford Labine, Mark A. Stevens, P.E., , and  
16 Ninad N. Kumthekar, the Company requests that the PUC issue a ruling affirming the  
17 Company’s determination that the Bidder’s Proposal is unlikely to lead to a contract that  
18 meets all the requirements of R.I. Gen. Laws §§ 39-31-6 and 39-31-10, thereby  
19 concluding the OSW RFP.

20

<sup>3</sup> As of this filing, the Bidder has not formally withdrawn its Proposal from the OSW RFP.

1 **Q. What attachments are you sponsoring in your testimony?**

2 A. The following attachments are included in support of my testimony:

- 3 • **Attachment JMR-1** – RFP & Appendices
- 4 • **Attachment JMR-2** – Bidder Proposal - **CONFIDENTIAL**
- 5 • **Attachment JMR-3** – Bidder Conference Presentation
- 6 • **Attachment JMR-4** – FAQ Responses to Developer Questions

7

8 **Q. Please explain how you have organized your testimony.**

9 A. Section I is the Introduction and Background and presents an overview of the OSW RFP  
10 and the Company’s request to the PUC. Section II provides an overview of the statutory  
11 obligations under which the Company conducted the OSW RFP. Section III describes  
12 the process to develop and issue the OSW RFP. Section IV discusses the quantitative and  
13 qualitative evaluation process, specifically development of the Qualitative Factor and  
14 Pricing Base Case Model and Quantitative Protocol. Section V provides an overview of  
15 the bidding process and a description of the Bidder’s Proposal. Section VI discusses the  
16 bid evaluation process and scoring. Section VII is a summary of the bid evaluation  
17 results and the Company’s conclusions. Section VIII is the Conclusion.

18

1 **II. ACES Requirements**

2 **Q. What is the basis for the Company developing and issuing the OSW RFP?**

3 A. On July 6, 2022, Rhode Island Governor McKee signed into law an amendment to  
4 ACES,<sup>4</sup> requiring Rhode Island Energy to issue a request for proposals for at least  
5 600MW and no more than 1,000 MW of newly developed offshore wind capacity no later  
6 than October 15, 2022, among other requirements.<sup>5</sup>

7  
8 **Q. Did the Company comply with this provision of ACES?**

9 A. Yes, the Company developed and issued the OSW RFP on October 14, 2022 in  
10 compliance with R.I. Gen. Laws § 39-31-10, following the required 30-day public  
11 comment period. I provide details of this public comment in Section III of my testimony.  
12 The amendment also provided that if the Company determines that the bids are unlikely  
13 to lead to contracts that meets the requirements of ACES, the Company must submit a  
14 filing to the PUC together with testimony to explain why it should not be required to  
15 negotiate a contract.<sup>6</sup> It is this provision under which the Company is making the instant  
16 filing.

17

<sup>4</sup> <https://governor.ri.gov/press-releases/governor-mckee-signs-legislation-requiring-offshore-wind-procurement-600-1000>

<sup>5</sup> R.I. Gen. Laws § 39-31-10(a).

<sup>6</sup> R.I. Gen. Laws § 39-31-10(d).

1 **Q. Please summarize the key requirements of ACES applicable to the OSW RFP.**

2 A. Section 10 requires that proposals meet all the requirements of that section and § 39-31-6  
3 (utility filings with the PUC). In order for the PUC to approve a contract under ACES, it  
4 must find the following: (1) the contract is commercially reasonable; (2) the  
5 requirements for the solicitation have been met; (3) the contract is consistent with  
6 achievement of the state’s greenhouse gas reduction targets as specified in chapter 6.2 of  
7 title 42 (the “2021 Act on Climate”); and (4) the contract is consistent with the purposes  
8 of this chapter. *See* R.I. Gen. Laws § 39-31-6(a)(1)(vii). ACES defines “commercially  
9 reasonable” to mean,

10 terms and pricing that are reasonably consistent with what an  
11 experienced power market analyst would expect to see in  
12 transactions involving regional energy resources and regional  
13 energy infrastructure. Commercially reasonable shall include  
14 having a credible project operation date, as determined by the  
15 commission, [and] shall require a determination by the commission  
16 that the benefits to Rhode Island exceed the cost of the project.  
17 R.I. Gen. Laws § 39-31-3.

18  
19 In addition, the purpose of ACES is stated, in part, to provide cost-effective, strategic  
20 investments in energy resources and infrastructure and enhance economic  
21 competitiveness by reducing energy costs. *See* R.I. Gen. Laws § 39-31-2.

22

23 The Company developed the OSW RFP to meet these requirements and the requirements  
24 for bids as set forth in R.I. Gen Laws § 39-31-10.

25

1 In summary, the OSW RFP included terms and criteria to allow the Company to evaluate  
2 bids for commercial reasonableness and consistency with the overall purpose of ACES,  
3 and the requirements under § 39-31-10, including, among others:

- 4     ▪ Nameplate capacity of contracted offshore wind between 600 and 1,000 MWs;
- 5     ▪ That any selected project must be newly-developed offshore wind;
- 6     ▪ Requiring bidders to submit specific information, which was considered during bid  
7 evaluation through the established scoring criteria, such as:
  - 8         ○ Potential environmental impacts through submission of an Environmental and  
9         Fisheries Mitigation Plan (“EFMP”);
  - 10         ○ Site layout plan and maps that illustrate location of all on-shore and offshore  
11         equipment;
  - 12         ○ An EFMP including data transparency requirements;
  - 13         ○ Annualized estimates for all economic benefits;
  - 14         ○ A diversity, equity, and inclusion plan;
  - 15         ○ Identification of Rhode Island vendors and other domestic offshore wind supply  
16         chain opportunities; and,
  - 17         ○ A plan outlining the bidder’s intentions with respect to negotiating of a project  
18         labor agreement
    - 19             ▪ Developers enter into a labor peace agreement with at least one bona fide  
20             labor organization; and,
    - 21             ▪ Developer must meet certain employee wage and benefit requirements.

1 The Company considered these requirements when making its decision that the single bid  
2 received through the OSW RFP was unlikely to lead to a contract that met the  
3 requirements of ACES. I discuss the results of the Company’s evaluation in more detail  
4 in Section VII of my testimony.

5

6 **Q. Does ACES require the Company to enter into a long-term Power Purchase**  
7 **Agreement (“PPA”) with a developer?**

8 A. No, it does not. Section 39-31-10 requires the Company to issue a request for proposals,  
9 evaluate bids relative to the OSW RFP terms and ACES, and either: 1) enter into  
10 negotiations of and execute a PPA with one or more developers, and file said PPA with  
11 the PUC for review and approval; or 2) file an unexecuted PPA with the PUC noting  
12 which items have mutual agreement and providing the parties’ preferred terms for terms  
13 that remain in dispute; or 3) if the Company determines that bids are unlikely to lead to  
14 contracts that meet the requirements of the ACES Act, the Company must make a filing  
15 with the PUC including supporting testimony explaining why it should not be required to  
16 negotiate a contract.

17

18 **Q. Which action did the Company take with respect to the OSW RFP?**

19 A. As explained above, and in more detail below, the Company determined that the Proposal  
20 was unlikely to result in a contract that met the requirements of ACES and the OSW

1 RFP. Accordingly, the Company did not select the Project to negotiate a contract and is  
2 now making this filing with the PUC in accordance with R.I. Gen. Laws § 39-31-10.  
3

4 **Q. Does this filing have any potential impacts on the 2021 Act on Climate's**  
5 **requirements for reduction in carbon emissions?**

6 A. No. While the Project may potentially be consistent with the achievement of the State's  
7 greenhouse gas reduction targets as specified in R.I. Gen. Laws § 42-6.2 et seq., this is  
8 merely one requirement that must be met under ACES for a contract to be approved. The  
9 Project failed to meet the other requirements of ACES, including commercial  
10 reasonableness, as discussed above and later in my testimony. Given the substantial  
11 concerns surrounding the viability of the Project, it is unknown at this time whether the  
12 Project can contribute to the state meeting the economy-wide emission reduction targets  
13 set forth in R.I. Gen. Laws § 42-6.2-2 and - 9. Any analysis of the 2021 Act on Climate  
14 with respect to the Project would be impossible at this time.  
15

16 **III. OSW RFP Development**

17 **Q. Please provide an overview of the OSW RFP process.**

18 A. The Company originally divided this OSW RFP process into five phases as follows:  
19

- 20 • Phase 1 – OSW RFP development, filing with the PUC for public comment, and  
21 public issuance;
- 22 • Phase 2 – Qualitative Factor, and Pricing Base Case Model and Quantitative Protocol  
23 development;

24



- 1           • Phase 3 – Bid evaluation and scoring;
- 2
- 3           • Phase 4 – Contract negotiation with developer(s) in pursuit of a fully executed
- 4           contract; and,
- 5
- 6           • Phase 5 – Filing a fully executed contract and supporting materials with the PUC,
- 7           litigation, and a PUC Final Order.
- 8

9           Following Phase 3, the Company determined that the Proposal was unlikely to lead to a  
10           contract that complies with the requirements of ACES. This resulted in Phase 4 being  
11           altered from contract negotiation to the development of this filing, and Phase 5 is  
12           subsequently altered to include the PUC’s review and ruling on the Company’s filing.

13

14   **Q.    Briefly summarize the Phase 1 OSW RFP development process.**

15    A.    The OSW RFP development process consisted of three major steps: 1) drafting of the  
16           OSW RFP and accompanying documents – such as the bidder response forms, template  
17           PPA, and OSW RFP schedule; 2) filing of the OSW RFP with the PUC, followed by a  
18           30-day comment period, and consideration of all comments provided; and 3) revision of  
19           the OSW RFP and accompanying documents as necessary following the public comment  
20           period. The culmination of these steps resulted in the Company’s public issuance of the  
21           OSW RFP on October 14, 2022.

22

1 **Q. Did the Company consult with any state agencies during the development of the**  
2 **RFP?**

3 A. Yes, in accordance with R.I. Gen. Laws § 39-31-10(a) the Company consulted with the  
4 Rhode Island Office of Energy Resources (“OER”) and Rhode Island Division of Public  
5 Utilities and Carriers (“DPUC”). In addition, the Company briefly consulted with the  
6 Rhode Island Department of Environmental Management (“DEM”), and the Rhode  
7 Island Commerce Corporation (“RI Commerce”). After initial verbal discussions were  
8 held with each agency about its desired roles and responsibilities in supporting the OSW  
9 RFP process, the Company began active collaboration with the OER and DPUC to  
10 develop the OSW RFP that was submitted to the PUC for public comment on  
11 September 1, 2022, and ultimately issued on October 14, 2022.

12  
13 **Q. Please explain the process the Company undertook to develop the OSW RFP and**  
14 **accompanying documents.**

15 A. The Company initially leveraged the RFP utilized in the 2018 Request for Proposals for  
16 Long-term Contracts for Renewable Energy (“2018 LTC RFP”), approved by the PUC in  
17 Docket No. 4822, as a starting point. While the 2018 LTC RFP did not contain all the  
18 same requirements under which the OSW RFP bidders would be required to meet, it did  
19 include many similar sections and general organization that the OSW RFP should follow  
20 and, therefore, served as a solid foundation for which to start the OSW RFP drafting  
21 process. The Company regularly collaborated with OER and DPUC during the updating

1 of the 2018 LTC RFP and accompanying documents throughout July and August 2022.

2 The Company filed the draft OSW RFP with the PUC in September 2022 for public  
3 comment, which included a public comment hearing on September 21, 2022.

4  
5 **Q. Did the Company accept any public comment proposals before finalizing the OSW  
6 RFP?**

7 A. Yes, the Company considered all comments submitted by the public and stakeholders and  
8 incorporated many comments into the final OSW RFP.

9  
10 **Q. What were the major themes of the public comments the Company received relating  
11 to the draft OSW RFP?**

12 A. The Company received written comments submitted to the PUC relating to the OSW RFP  
13 from a broad array of stakeholders, covering many different topics. The comments  
14 included proposed edits to the OSW RFP documents, including the OSW RFP schedule,  
15 proposed changes to how the EFMP is incorporated into the OSW RFP, changes to site  
16 and data transparency from bidders, proposals around site control, research and  
17 monitoring recommendations, recommendations that the Company not include  
18 remuneration, inclusion of broader terms surrounding jobs and apprenticeships,  
19 recommendations to adjust terms surrounding bid non-price evaluations, cost recovery,  
20 transmission interconnection provisions, diversity, equity and inclusion (“DEI”) and  
21 environmental justice, and impacts and opportunities for low-income communities.

1 **Q. How did the Company determine which proposals and comments to incorporate**  
2 **into the OSW RFP?**

3 A. As previously noted, the Company incorporated many of the proposed changes into the  
4 OSW RFP in some fashion. More generally, the Company first evaluated the comments  
5 relative to ACES to determine if the proposed changes to the OSW RFP were permitted  
6 under the law. Some comments, such as expanding the OSW RFP size beyond 1,000  
7 MWs, not proceeding with the OSW RFP, or mandating the inclusion of energy storage  
8 facilities, were not consistent with ACES. As such, they were not included in the final  
9 OSW RFP. Some proposals were already incorporated or otherwise addressed in the  
10 OSW RFP, and, therefore, did not need to be incorporated in the final OSW RFP.  
11 Finally, some proposed changes were not included in the final OSW RFP as they were  
12 best addressed elsewhere – such as in the bid evaluation process or under a memorandum  
13 of understanding (“MOU”) with the relevant agency.

14  
15 **Q. How was the issuance of the OSW RFP made available to the public and prospective**  
16 **developers?**

17 A. First, the OSW RFP and accompanying documents were published publicly on the  
18 Company’s website on October 14, 2022.<sup>7</sup> These documents can also be found in  
19 Attachment JMR-1 to my testimony. This website was created to support the 2018 LTC  
20 RFP and was updated to accommodate the OSW RFP. This allowed any stakeholders

---

<sup>7</sup> <https://ricleanenergyrfp.com/2022-offshore-wind-rfp/2022-offshore-wind-rfp-documents>

1 already connected with this website to seamlessly view the new OSW RFP documents.

2 Further, through this website, the Company was able to issue a “post” to all stakeholders  
3 who had already signed-up to follow the site’s posts. On October 14, 2022, the Company  
4 issued a post that the “Request for Proposals for Long-Term Contracts for Offshore Wind  
5 Energy Projects” had been issued. The Company also communicated with Rhode Island  
6 agencies, including the PUC, DPUC, OER and DEM, on the OSW RFP’s issuance.

7 Lastly, the Company issued a press release regarding the OSW RFP’s issuance on  
8 October 14, 2022.<sup>8</sup>

9  
10 **Q. Please describe how the Company communicated with prospective bidders**  
11 **regarding the issuance of the OSW RFP.**

12 A. In addition to the communications described above, the Company utilized a series of  
13 media to effectively communicate with prospective bidders to the OSW RFP. First, the  
14 Company leveraged its website as the initial means to communicate with stakeholders –  
15 providing documents, schedules, and FAQs regarding the OSW RFP. Through the  
16 website, the Company also issued posts when major updates occurred such as registration  
17 for the Bidder Conference, changes to the OSW RFP schedule, updated FAQs, and the  
18 posting of new documents.

---

<sup>8</sup> <https://news.pplweb.com/Rhode-Island-Energy-Announces-Latest-Milestone-to-Bring-More-Offshore-Wind-to-Rhode-Island>

1 The Company also held a virtual Bidder Conference on November 1, 2022, open to all  
2 interested stakeholders, but focused on prospective developers who may be interested in  
3 submitting bids to the OSW RFP. The Bidder Conference allowed the Company to  
4 provide an overview of the OSW RFP and solicit feedback from prospective developers.

5  
6 Between October 14, 2022 and November 30, 2022, prospective developers were  
7 permitted to submit questions to the Company for any additional clarifications,  
8 explanations, and guidance related to the OSW RFP. Questions were submitted to the  
9 Company's electronic mailbox. The Company responded to questions to all prospective  
10 developers through updates to the OSW RFP website. To maintain confidentiality,  
11 questions and responses were anonymized. This ensured all prospective developers  
12 would receive the same information at the same time, without advantage.

13  
14 **Q. Please summarize the topics covered in the Bidder Conference.**

15 A. Three major topic areas were covered in the presentation to developers at the Bidder's  
16 Conference: 1) background surrounding the OSW RFP, 2) the OSW RFP timeline, and  
17 3) the Products, Pricing, and Evaluation process that was to be employed in the OSW  
18 RFP. The background information discussed during the Bidder's Conference included  
19 summaries of the ACES Act and its evolution, the OSW RFP drafting process, and  
20 information on bid proposals and pricing transparency.

21

1 The timeline section focused on the schedule of the RFP, key milestones, and  
2 deliverables, and sought specific feedback on the bid proposal due date. During the OSW  
3 RFP development and public comment phase, the Company became aware of a delay in a  
4 peer offshore wind solicitation bid due date, from December 2022 to January 2023,<sup>9</sup>  
5 which held the risk of impacting prospective bidder participation in the OSW RFP. As  
6 such, the Company specifically asked developers to comment on whether a delay to the  
7 bid proposal date would be helpful. Further, the Company sought input from developers  
8 on whether special provisions should be added to the OSW RFP allowing bidders to  
9 withdraw their proposals prior to Conditional Selection should their project be selected in  
10 another offshore wind solicitation.

11  
12 Finally, the Bidder Conference presentation provided summaries of the OSW RFP  
13 process, including the product terms and conditions, bid fees, allowable forms of pricing,  
14 the evaluation methodology, information on non-pricing factors, contract negotiations  
15 and the regulatory approval process, and an overview on agencies' MOUs that would be  
16 executed with a winning bidder to memorialize certain economic development benefits to  
17 the State of Rhode Island. A copy of the Bidder Conference presentation is provided as  
18 Attachment JMR-3 to my testimony.

---

<sup>9</sup> <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Offshore-Wind-Solicitations/2022-Solicitation>

1 **Q. Did prospective developers provide the Company with any recommendations**  
2 **concerning the bid proposal requirements?**

3 A. Yes, four prospective bidders confidentially submitted comments on the proposed bid due  
4 date change and proposed language changes to accommodate contingent bidding.

5  
6 Regarding the bid due date, each party supported the extension of the bid proposal  
7 window. Most parties supported either a one-month extension or a return to the  
8 originally drafted due date of March 13, 2023. One party expressly recommended that  
9 the bid window not be extended beyond March 13, 2023.

10  
11 Concerning the proposed language change, one party expressly recommended the  
12 Company not pursue the change as it was not in Rhode Island's best interest, could create  
13 other market complications, and would not necessarily support developers in their bids in  
14 other markets. A second party strongly recommended the Company disallow contingent  
15 bidding to ensure such proposals were evaluated and compared accurately. Two  
16 developers declined to comment on the language change proposal.

17



1 **Q. Did the Company make any changes to the OSW RFP following developer**  
2 **comments?**

3 A. Yes, as explained previously, the Company chose to delay the bid proposal due date to  
4 March 13, 2023; however, the Company did not make any language changes to the OSW  
5 RFP concerning contingent bidding.

6  
7 **Q. Did prospective developers submit any questions to the Company during the Bidder**  
8 **Conference? Please summarize.**

9 A. Yes. Prospective developers submitted 10 clarifying questions during the Bidder  
10 Conference, which generally covered topics such as availability of slides from the Bidder  
11 Conference, confidentiality of prices and questions asked, if bid fees would be returned if  
12 a developer withdrew a proposal, when the Company would update OSW RFP  
13 documents if changes were made, and how the PUC will assess the non-pricing  
14 provisions of the OSW RFP. Some additional questions were submitted concerning  
15 specific OSW RFP terms such as if the Company can define where “regional” is included  
16 in the Economic Benefits file, a request to explain the “deliverability” requirement, and if  
17 the developer is required to pay transmission and congestion into Rhode Island from  
18 wherever the project is interconnected.

19

1 **Q. How did the Company respond to the questions submitted by developers during the**  
2 **Bidder Conference?**

3 A. Questions asked live at the Bidder Conference were generally responded to live by the  
4 Company team at the conference, with responses focusing on clarity around due dates,  
5 confidentiality, and OSW RFP provisions.<sup>10</sup> The Company also communicated that any  
6 party submitting questions would be maintained as anonymous. Oral responses to  
7 questions posed by prospective developers during the Bidder Conference were only  
8 general in nature and subject to formal review and posting on the OSW RFP website.  
9 This approach ensured all parties, especially those not participating in the Bidder  
10 Conference, received the same information.

11  
12 **Q. Did prospective bidders issue any questions directly to the Company during the**  
13 **Question and Answer (Q&A) period following the Bidder Conference?**

14 A. Yes, the Company received a total of 27 questions from 2 prospective bidders by or  
15 before November 30, 2022. These questions were reviewed and responded to through a  
16 public posting on the Company’s OSW RFP website. A copy of all questions and  
17 responses is provided as Attachment JMR-4 to my testimony.

18

<sup>10</sup> Other topics included responses that: regionality was determined to be New England; bid fees are non-refundable; that proposed generation from any project must be delivered to the ISO-NE pricing node and interconnect at the network capability interconnection standard and other relevant standards and protocols; and that the developer is required to pay for transmission and congestion into Rhode Island from wherever the project is interconnected in ISO-NE.

1 **Q. Did the Company receive any additional questions from prospective bidders after**  
2 **the November 30, 2022 deadline to submit questions?**

3 A. Yes. The Company received seven additional questions from prospective bidders, with  
4 the Company issuing two additional sets of responses through its website – the first set of  
5 questions was received as of February 24, 2023 (4 questions) and the second set of  
6 questions was received as of March 8, 2023 (3 questions). Please see Attachment JMR-4  
7 which provides the questions and responses received during the post-Bidder Conference  
8 period through the Bid Due Date.

9

10 **Q. Did the Company make any changes to the OSW RFP as a result of any developer**  
11 **questions?**

12 A. No. The questions received from bidders were seeking clarifications on the OSW RFP,  
13 not proposing changes or alterations to the live OSW RFP.

14

15 **IV. Pricing and Qualitative Factor Criteria Development**

16 **Q. Please summarize the primary factors of Phase 2 of the OSW RFP process.**

17 A. Phase 2 of the OSW RFP process included developing the Qualitative Factors and their  
18 associated criteria, and the Pricing Factor, which began immediately following the  
19 issuance of the OSW RFP on October 14, 2022. The Pricing Factor was comprised of  
20 two separate but related elements – the creation of Base Case inputs, and the Quantitative  
21 Protocol, which were entered into the models being created to evaluate the market results

1 of the Base Case and those of the Proposal Case(s).<sup>11</sup> The Pricing Factor includes two  
2 models – the Capacity Expansion model and the Energy and Ancillary Services  
3 (“E&AS”) model – which I discuss below and are discussed in greater detail in Mr.  
4 Kumthekar’s pre-filed direct testimony. All Pricing Factor inputs were locked prior to  
5 the opening of any bids to ensure the fairness and impartiality of the evaluation of any  
6 received bids.

7  
8 **Q. Please describe how the Capacity Expansion and E&AS models are utilized in the**  
9 **Company’s evaluation of bids.**

10 A. The Capacity Expansion model analyzes those generation assets that are interconnected  
11 and those that are expected to be interconnected in ISO-NE and New York Independent  
12 System Operator (“NYISO”) throughout the life of the contract. This generation  
13 portfolio informs the E&AS model, which simulates the hourly operation of the grid, and  
14 is used to generate projections of ISO-NE market prices for energy on an hourly basis  
15 throughout that same contract life. The Company reviewed the inputs and assumptions of  
16 both models throughout the Phase 2 period while also generating a Base Case. The Base  
17 Case inputs includes assumptions surrounding the ISO-NE generation portfolio and  
18 associated hourly energy and REC pricing over the term of the contract, evaluating the  
19 status quo; that is, what ISO-NE is expected to look like if no new proposals were

---

<sup>11</sup> Proposal Cases are comprised of those inputs and assumptions, as provided by the bidder in their bid proposal, that will be entered into the models; the results of which will be compared against the results of the Base Case outputs into the same model to determine the benefits or costs of the proposal. See the pre-filed direct testimony of Company witness Ninad N. Kumthekar for additional details regarding the Proposal Cases.

1 received under the OSW RFP. Proposal Case models included elements such as the  
2 project size, interconnection location, proposed transmission upgrades, and price for  
3 energy and RECs, and were entered into the Capacity Expansion and E&AS models after  
4 bid(s) were received. The Company evaluated all Proposal Cases against the Base Case,  
5 and then used the Quantitative Protocol to calculate the levelized net unit benefit in 2023  
6 \$/MWh, which was further converted to points used to score the Project.

7

8 **Q. Please describe the scoring methodology.**

9 A. In addition to defining the Base Case inputs, the Company also developed a methodology  
10 for how the net benefit or cost of the Proposal Case results, defined in dollars per MWh,  
11 would be converted into a score to enable the Company to evaluate each Proposal Case  
12 against each another. The resulting score from the Pricing Factor and Qualitative Factors  
13 evaluations are then summed to create a total score for each Proposal Case. I discuss the  
14 scoring methodology in more detail below.

15

16 **Q. Please describe the Qualitative Factor (non-pricing) criteria in the evaluation of**  
17 **bids.**

18 A. The Qualitative Factors are comprised of a series of factors and sub-factors (or criteria)  
19 covering all non-price related elements of the OSW RFP. The Company worked  
20 collaboratively with the OER and DPUC to develop the criteria within each factor, to  
21 ensure that the criteria met the requirements of ACES and the OSW RFP, and to

1 effectively evaluate areas such as project viability and other economic benefits. Table 1  
2 below summarizes the Qualitative Factors and associated criteria.

3 **Table 1 – Qualitative Factors.**

Factor	Sub-Criteria Considered Within Factor
A. Economic Development	<i>A1. Direct Project-Attributed Employment</i>
	<i>A2. Expenditures &amp; Investments</i>
	<i>A3. Diversity, Equity, and Inclusion Plan</i>
B. Siting & Permitting	<i>B1. Site Status</i>
	<i>B2. Permits and Approvals</i>
C. Environmental	<i>C1. Environmental Assessment &amp; Mitigation</i>
	<i>C2. Fisheries Mitigation Plan</i>
D. Interconnection & Transmission	<i>D1. Interconnection &amp; Transmission</i>
E. Financing	<i>E1. Financing</i>
F. Contract Risk	<i>F1. Contract Risk</i>
G. Project Development & Operational Viability	<i>G1. Critical Path Schedule</i>
	<i>G2. Project Development Experience</i>
H. Energy Security & Reliability	<i>H1. Energy Security &amp; Reliability</i>

4

5 **Q. Did the Company employ/consult with any stakeholders or other third-parties on**  
6 **the pricing and/or qualitative factors?**

7 A. Yes, the Company consulted with both the OER and DPUC throughout the pricing and  
8 qualitative factor criteria development phase.

9

10 Additionally, the Company employed TCR, a third-party economic modeling consultant,  
11 to support bid evaluation and creation of the Pricing Base Case Model and Quantitative  
12 Protocol. TCR helped to evaluate bid-related costs and benefits provided in response to

1 the OSW RFP. TCR, with support of the Company, used the ENELYTIX modeling  
2 software to execute the Capacity Expansion and E&AS model runs, described above, to  
3 complete pricing analyses of a series of Proposals Cases and established a Base Case  
4 (against which to evaluate Proposal Cases). Additional details regarding the pricing  
5 analyses are contained in the pre-filed direct testimony of Company witness Ninad N.  
6 Kumthekar.

7  
8 Internally, the Company leveraged its subject matter experts from various departments to  
9 support the development of qualitative factor criteria and pricing criteria, as well as to  
10 conduct both pricing and qualitative factor evaluation or received bids.

11

12 **A. Pricing Factor**

13 **Q. Please summarize the Company’s approach to developing the Pricing Factor.**

14 A. As summarized above, the Pricing Factor was subdivided into two major elements: Base  
15 Case development and Quantitative Protocol considerations. The Company, in  
16 conjunction with TCR, and with input from the OER, and the DPUC, first constructed the  
17 Base Case inputs as it would be used to “test” the economic model assumptions and  
18 ultimately be used to evaluate the costs or benefits of the Proposal Cases. TCR engaged  
19 the Company to consider various inputs into the Base Case, including in areas such as  
20 inflation, natural gas pricing, load forecasts, existing generation fleet and contracted  
21 additions, costs and other assumptions related to generic generator additions, production

1 and investment tax credits assumptions, greenhouse gas (“GHG”) inventory and emission  
2 constraints, and emissions costs.

3  
4 The Company, OER, DPUC, and TCR established a weekly cadence to discuss Base  
5 Case inputs and dependency criteria, starting in October through early December 2022,  
6 followed by economic model discussions that continued until March 7, 2023 –  
7 approximately one week before bids were due. At this time, the Company and TCR  
8 locked down model inputs prior to opening any bid.

9  
10 **Q. Describe the major assumptions that were used when developing the Base Case for**  
11 **this OSW RFP?**

12 A. Please refer to the pre-filed direct testimony of Company witness Ninad N. Kumthekar  
13 which provides greater detail into the methodology, inputs, and analysis employed  
14 throughout this quantitative bid evaluation. However, in general, the Company and TCR  
15 considered ten major categories of input assumptions to model the Base Case and each  
16 Proposal Case. There were:

- 17 • Generating Unit Capacity Additions
- 18 • Generating Unit Retirements
- 19 • Transmission Topology
- 20 • Load Forecast
- 21 • Installed Capacity Requirements



- 1           • RPS Requirements
- 2           • Massachusetts CES and annual cap on Carbon Emissions
- 3           • Emission Allowance Prices
- 4           • Generating Unit Operational Characteristics
- 5           • Fuel Prices

6           The team also considered other supplemental inputs such as inflationary and interest  
7           rates.

8

9   **Q.   How did the team determine the Quantitative Protocol to evaluate proposals**  
10   **quantitatively using the Base Case?**

11   A.   The Company and TCR developed a Quantitative Protocol to evaluate the bids by  
12       comparing the results of each Proposal Case to the Base Case to determine the net benefit  
13       or cost of each bid in dollars per MWh and translating that value into points scored in the  
14       evaluation. Mr. Kumthekar discusses the Quantitative Protocol in more detail in his pre-  
15       filed direct testimony.

16

17   **Q.   Please describe the point scoring system used with the Pricing Factor.**

18   A.   Through the OSW RFP, the Company assigned a maximum of 75 points to the Pricing  
19       Factor analysis. The bid with the highest levelized Net Benefit (2023\$/MWh) scored a  
20       total of 75 points, with each bid having a lower levelized Net Benefit value scoring  
21       incrementally below the highest benefit bid. The incremental point assignment for each

1 other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh  
2 levelized Net Benefit that the bid was below the top bidder.

3  
4 For example, if a bid had a levelized net benefit of \$15/MWh and was the bid with the  
5 highest relative levelized net benefit, that bid would score 75 points. If another bid had a  
6 levelized net benefit of \$13/MWh, that project would receive 69 points. This  
7 methodology was used to rank all bids submitted through this OSW RFP. It is important  
8 to note that an award of 75 points under the Pricing Factor does not signify the proposal  
9 complies with the requirements of ACES or the OSW RFP or is a benefit (or cost) to  
10 customers; simply that it has the greatest relative levelized Net Benefit in comparison to  
11 other submitted bids.

12  
13 As described later in my testimony, in the case of the Proposal, each bid's Pricing Factor  
14 points were then added to the Qualitative Points for that bid to create a combined point  
15 total and cumulative ranking.

16  
17 **B. Qualitative Factors**

18 **Q. Please summarize the Company's approach to developing the Qualitative Factors.**

19 A. As explained and shown in Table 1, above, the Qualitative Factors are comprised of eight  
20 separate factors: Economic Development, Siting & Permitting, Environmental,  
21 Interconnection & Transmission, Financing, Contract Risk, Project Development &

1 Operational Viability, and Energy Security & Reliability. The Company evaluated bid  
2 proposals against each factor separately – specifically considering the sub-factor/criteria  
3 established under each factor to determine the points value to assign to each bid.

4  
5 Each Qualitative Factor included at least three thresholds that aligned with a Company-  
6 specified number of points. These thresholds, in order of lowest points to highest points,  
7 were: Minimum Threshold, Preferable, and Superior. The Interconnection &  
8 Transmission factor included one additional threshold given the complexity of that factor.  
9 As a result, this factor’s thresholds were: Minimum Threshold, Preferable, Highly  
10 Preferable, and Superior. Each threshold contained specific criteria against which to  
11 evaluate each bid. The Minimum Threshold requirements of the Qualitative Factors  
12 typically aligned with the Minimum Threshold requirements of the OSW RFP. A  
13 proposal must first meet all elements of the Minimum Threshold, to then be evaluated  
14 against the next set of threshold criteria for the opportunity to be awarded points. In  
15 effect, the Minimum Threshold criteria acts as a gateway to the next stage of evaluation  
16 and for the proposal to receive higher points for any given factor.

17  
18 Programmatically, to develop the criteria for each factor, the Company utilized a  
19 combination of weekly, collaborative meetings with its subject matter experts, OER  
20 experts, and DPUC experts, as well as Company-only meetings with its subject matter  
21 experts to consider specific criteria. These meetings were used to initially develop the

1 Minimum Threshold criteria that each factor must consider in a bid, and then expanded to  
2 include development of the Preferable and Superior criteria that should be “valued” at a  
3 higher level.

4  
5 **Q. Please summarize each of the qualitative factors.**

6 A. A summary of each factor is as follows:

7 • **Economic Development** – Focused on three key elements: the jobs and job growth  
8 for Rhode Island residents, the economic expenditures and investments supporting  
9 Rhode Island communities, and the details behind the included DEI plan.

10 ▪ *Direct Project-Attributed Employment* – the sub-factor sought to evaluate the  
11 annualized estimate for all economic benefits (i.e., in-state employment) during  
12 all stages of the project; and, the details surrounding the bidder’s intentions with  
13 regards to the project’s labor agreements.

14 ▪ *Expenditures and Investments* – the sub-factor sought to evaluate the annualized  
15 estimate of all economic benefits (i.e., in-state expenditures); and, evaluate the  
16 details provided by the bidder concerning its Rhode Island vendors and related  
17 domestic offshore wind supply chain opportunities.

18 ▪ *DEI Plan* – the sub-factor evaluated the bidder’s proposed strategy to promote  
19 and enable access to employment and contracting opportunities for historically  
20 marginalized communities through the inclusion of a Workforce Diversity Plan  
21 and Supplier Diversity Plan.

- 1       • **Siting & Permitting** – Evaluates both site status and the received and required  
2       permits and approvals associated with the project. This factor considers the site  
3       control and real property rights by the bidder as well as the current status of efforts to  
4       secure site control and the necessary property rights, including property rights for  
5       transmission and interconnection facilities. Further, this criterion evaluates the  
6       credibility of the bidder’s plan to obtain the required permits and approvals, status of  
7       the permitting process, degree of certainty in securing the necessary permits and  
8       approvals, and the ability of the project to comply with permitting requirements.  
9       Finally, the factor evaluates the extent to which the bidder has undertaken effective  
10      stakeholder engagement and outreach efforts to address economic, social, and  
11      environmental concerns related to offshore wind, including environmental justice  
12      communities.
- 13      • **Environmental** – Evaluates the extent to which the bidder demonstrates an  
14      understanding of potential adverse environmental and fisheries impacts during  
15      construction and operation of the offshore wind generation facility. This includes an  
16      evaluation of the completeness and credibility of the bidder’s environmental  
17      assessment and identification of environmental impacts (biological, ecological, and  
18      physical); and, the specific measures the bidder will take to avoid, minimize, and/or  
19      mitigate those impacts. Further, this factor evaluates the bidder’s past and current  
20      relationship with applicable stakeholders and its track record of avoiding, minimizing,  
21      and mitigating environmental impacts in response to stakeholder groups from projects

- 1 similar to the proposed. This includes the impact of facilities on environmental  
2 justice communities and the measures to mitigate those impacts.
- 3 • **Interconnection & Transmission** – Addresses the credibility of the proposed  
4 interconnection plan, and assesses the status of the bidder addressing the ISO-NE  
5 interconnection requirements.
  - 6 • **Financing** – Addresses the comprehensiveness and reasonableness of the financial  
7 plan for the project. It evaluates the details provided behind the financial plan such as  
8 project ownership, capital costs and structure, sources of debt and equity, and the  
9 evidence that the project is financeable.
  - 10 • **Contract Risk** – Considers the proposed changes to the template PPA, and how  
11 much risk is proposed to be shifted from the bidder to the Company and its  
12 customers.
  - 13 • **Project Development & Operational Viability** – Evaluates the bidder’s proposed  
14 schedule, whether the schedule proposed is complete and reasonable to meet the  
15 proposed construction start date and commercial operation date, and the experience of  
16 the bidder in the successful development, construction, interconnection, operation,  
17 and maintenance of projects that are comparable in nature and scope to the proposed  
18 project.
  - 19 • **Energy Security & Reliability** – Evaluates the quality of the wind energy resource  
20 plan proposed; considering whether the project clearly demonstrates the availability  
21 of the required wind resource and the credibility of the proposed delivery profile.

This includes the availability and quality of the resource data and other supporting information to determine the likelihood of the project meeting its projected production estimates.

**Q. Please describe the point scoring system used for the Qualitative Factors.**

A. Combined, the Qualitative Factors were assigned a total of 25 points. Each factor and sub-factor were then assigned different individual point values. The points assigned can be viewed in Table 2 below.

**Table 2 –Points Allocation for Qualitative Factors**

Factor	Sub-Criteria Considered Within Factor	Points Allocation
A. Economic Development	<i>A1. Direct Project-Attributed Employment</i>	2.0
	<i>A2. Expenditures &amp; Investments</i>	3.0
	<i>A3. Diversity, Equity, and Inclusion Plan</i>	1.0
B. Siting & Permitting	<i>B1. Site Status</i>	2.0
	<i>B2. Permits and Approvals</i>	3.0
C. Environmental	<i>C1. Environmental Assessment &amp; Mitigation</i>	2.0
	<i>C2. Fisheries Mitigation Plan</i>	1.0
D. Interconnection & Transmission	<i>D1. Interconnection &amp; Transmission</i>	4.0
E. Financing	<i>E1. Financing</i>	1.0
F. Contract Risk	<i>F1. Contract Risk</i>	2.0
G. Project Development & Operational Viability	<i>G1. Critical Path Schedule</i>	2.0
	<i>G2. Project Development Experience</i>	1.0
H. Energy Security & Reliability	<i>H1. Energy Security &amp; Reliability</i>	1.0
		<b>25.0</b>

The Company assigned a point value to each Qualitative Factor based upon the significance of the factor or sub-factor to the project’s viability. As such, the weight of

1 each Qualitative Factor’s points was designed to assess the likelihood of a project coming  
2 to fruition based upon those qualitative factors that are critical to the successful project  
3 development and the project’s compliance with ACES, as well as the likelihood of the  
4 project meeting its proposed commercial operation date. The qualitative factors that were  
5 important to project viability are: Siting & Permitting, Environmental, Interconnection &  
6 Transmission, and Project Development & Operational Viability. For the Economic  
7 Development factor, the Company assigned a greater point value (6 points total) to this  
8 factor to reflect the emphasis the legislature placed on the importance of economic  
9 considerations for the OSW RFP in ACES.

10  
11 **Q. Please describe the sub-criteria considered within the Economic Development**  
12 **Factor and summarize the primary considerations evaluated when considering the**  
13 **bid proposals.**

14 A. For Direct Project-Attributed Employment, at a minimum, bidders are required to provide  
15 an annualized estimate of all economic benefits including in-state expenditures and  
16 employment proposed during development, construction and operations and maintenance  
17 (“O&M”) phases of the project must be provided, bidder must have a plan to enter a  
18 Labor Peace Agreement for construction activities on the project and ensure that  
19 employees and apprentices are provided with wage and benefits requirements as  
20 described in ACES. To obtain a Superior score, the net present value of the ratio of  
21 proposed Total Wage-Related Expenditures of Direct Project Employment in Rhode



1 Island relative to the offshore wind project size must be substantial and the bidder must  
2 have a detailed and credible plan to enter into a Labor Peace Agreement with at least one  
3 bona fide labor organization actively representing employees.

4  
5 For Expenditures & Investments, at minimum, bidders must provide annualized estimates  
6 for all economic benefits including in-state expenditures and employment proposed  
7 during development, construction, and O&M phases of project. A bidder is also required  
8 to identify Rhode Island vendors and other domestic offshore wind supply chain  
9 opportunities associated with the project. To obtain a Superior score, bidders must  
10 provide Expenditure and Investment economic spend data that provided significant  
11 economic benefit to Rhode Island and provide detailed documentation supporting  
12 commitments. The net present value ratio of proposed Expenditure and Investment spend  
13 relative to offshore wind project size also needed to be credible and substantial.

14  
15 For DEI, at minimum, bidders were required to include a Supplier Diversity  
16 Program/Plan and a Workforce Diversity Plan. To obtain a Superior score, both  
17 submitted plans must have a highly comprehensive Supplier Diversity Program and  
18 Workforce Diversity Plan, respectively, with detailed information. For the Supplier  
19 Diversity Plan, this should include detailed descriptions of business opportunities for  
20 diverse businesses including subcontracting, vendors, and investors, supported by  
21 information that demonstrates the bidder’s commitment to Supplier Diversity. Bidders

1 must also describe project impacts on each stakeholder group, engagement activities for  
2 each group, comprehensive and detailed goals for each stakeholder group along with  
3 highly credible plans to achieve goals, and community partnerships. For the Workforce  
4 Diversity Plan, this could include DEI goals, integrated best practices, recruitment  
5 methodology, how bidders would try to avoid recruitment biases, and educational and  
6 mentorship programs.

7  
8 **Q. Please describe the sub-criteria considered within the Siting & Permitting Factor**  
9 **and summarize the primary considerations evaluated when considering the bid**  
10 **proposals.**

11 A. Overall, the Site Status criterion within the Siting & Permitting Factor evaluates the  
12 status of the bidder's site control and real property rights, as well as the current status of  
13 efforts to secure site control and real property rights necessary for the project. At a  
14 minimum, it requires the bidder have a federal lease for the offshore wind energy  
15 generation site, a valid lease or option to lease marine terminal facilities necessary for  
16 staging and deployment of major project components to the project site, a reasonable,  
17 achievable, and detailed plan to acquire the sufficient rights to locate its Offshore  
18 Delivery Facilities where proposed, and a map of the Eligible Facility site, the proposed  
19 water routes to the project site, and all onshore transmission and interconnection  
20 locations.

21

1 In order to be awarded points, some of the key criteria that the Company considered  
2 includes: the likelihood of access to onshore and offshore site control rights for the  
3 Offshore Delivery Facilities, having a clear identification of and either obtaining or  
4 having a detailed and low risk plan describing how the bidder plans to obtain all  
5 necessary real property rights, a detailed plan related to zoning, and if the bidder  
6 conducted assessment work that identifies environmental resource areas and public lands  
7 and uses has been conducted and utilized in the selection of sites. Company witness  
8 Bradford Labine provides greater detail behind the criteria considerations for this factor  
9 in his pre-filed direct testimony.

10  
11 The Permits and Approvals criterion within the Siting & Permitting Factor evaluates the  
12 credibility of the bidder's plan to obtain the required permit approval, the status of the  
13 permitting process, and the degree of certainty offered by the bidder in securing the  
14 necessary permits and approvals. It also evaluates the extent to which the bidder has  
15 undertaken effective stakeholder engagement and outreach efforts. At a minimum, this  
16 factor requires the bidder demonstrate knowledge of the required permits and approvals,  
17 provide a permitting plan and timeline for securing the necessary permits and approvals,  
18 and provide a stakeholder engagement plan.

19 In order to be awarded points, some of the criteria that the Company considered includes:  
20 if the bidder identified all of the required permits and approvals and either having the  
21 required permits and approvals or having a highly credible plan for obtaining them,

1 having initiated productive discussions with the applicable permit authorities,  
2 understanding site-specific permit requirements, having a robust stakeholder engagement  
3 plan, and demonstrating local support for the project.

4

5 **Q. Please describe the sub-criteria considered within the Environmental Factor and**  
6 **summarize the primary considerations evaluated when considering the bid**  
7 **proposals.**

8 A. The Environmental Assessment & Mitigation criterion evaluates the extent to which a  
9 bidder demonstrates an understanding of potential adverse environmental impacts during  
10 construction and operation of the offshore wind generation facility. The Minimum  
11 Threshold requirements in the OSW RFP include a preliminary environmental  
12 characterization of the site, and identification of specific adverse impacts and providing  
13 proposed mitigation measures. To score Superior score, a bidder must provide a highly  
14 comprehensive preliminary environmental characterization; provide a comprehensive  
15 identification of specific adverse impacts; and focus on avoidance of impacts, especially  
16 pertaining to adverse impacts on the environment, environmental justice communities,  
17 and historically marginalized communities.

18

19 The Fisheries Mitigation Plan criterion evaluates bidder commitment and expertise  
20 towards the protection of commercial and recreational fisheries. To meet the Minimum  
21 Threshold requirements, a bidder must reasonably characterize the fisheries resources

1 potentially impacted by the project, identify potential impacts to commercial and  
2 recreational fishing, and agree to the requirements of Section 2.3.3.3 of the OSW RFP.  
3 The evaluation included evaluating a characterization of the fisheries resources  
4 potentially impacted; determining the viability of a strategy to avoid or minimize  
5 environmental impacts on fisheries; gauging a plan for compensation of commercial  
6 fishing gear loss and communication thereof; assessing the capacity to maintain  
7 appropriate stakeholder engagement, whereby incorporating feedback into mitigation and  
8 safety plans; and establishing the willingness to lessen risk to fisheries with noise  
9 mitigation efforts.

10  
11 **Q. Please describe the sub-criteria considered within the Interconnection &**  
12 **Transmission Factor and summarize the primary considerations evaluated when**  
13 **considering the bid proposals.**

14 A. The Interconnection & Transmission criterion evaluates the credibility of the proposed  
15 interconnection plan, as well as the status of the bidder's plan for addressing the ISO-NE  
16 interconnection requirements. At a minimum, the bidder must detail the status of  
17 interconnection application(s) and studies, have submitted an ISO-NE interconnection  
18 application under the Capacity Capability Interconnection Standard ("CCIS"), submit a  
19 plan that clearly demonstrates how generation will be delivered from or by the proposed  
20 eligible project to the delivery point that is a Pool Transmission Facility ("PTF") node,  
21 demonstrate that the interconnection/transmission facilities can be built and operated as

1 proposed and that the costs of any required system upgrades are included in the submitted  
2 pricing, and that studies submitted are consistent with the ISO-NE standards.

3  
4 In order to be awarded points, some of the criteria that the evaluation team considered  
5 include: the credibility of the bidder’s plan for the successful design and operation of the  
6 transmission and interconnection facilities, how far along the bidder is in their ISO-NE  
7 interconnection studies, and if the bidder has clearly identified and is well prepared for  
8 the cumulative cost and risk of interconnection network upgrades caused by or required  
9 by earlier queued projects with the same or related interconnection point as the proposed  
10 project and if they adequately addressed the risk that network upgrade costs may be  
11 higher than projected. Refer to the testimony of Mr. Stevens which provides greater  
12 detail behind the criteria considerations and reasoning for this factor.

13  
14 **Q. Please describe the sub-criteria considered within the Financing Factor and**  
15 **summarize the primary considerations evaluated when considering the bid**  
16 **proposals.**

17 A. The Financing Factor criterion evaluates the credibility of the proposed financial plan for  
18 the bidder’s proposed project. At a minimum, the bidder must demonstrate the financial  
19 viability of the project. In order to score points, a bidder will be evaluated on their  
20 financial plan’s level of detail; level of support behind the project’s financing (e.g.  
21 details behind the project’s financial structure, form of financing, and overall strategy);

1 information surrounding equity participants in support of the project and ownership  
2 throughout the lifecycle of the project; information surrounding bidder net worth and  
3 financial performance ratings; and, bidder experience financing projects of a similar type  
4 and size.

5  
6 **Q. Please describe the sub-criteria considered within the Contract Risk Factor and**  
7 **summarize the primary considerations evaluated when considering the bid**  
8 **proposals.**

9 A. The Contract Risk Factor criterion evaluates the bidder edits made to the template PPA  
10 and Commitment Agreement. At a minimum, the bidder must provide a redlined PPA  
11 and Commitment Agreement for the Company to evaluate; however, for a bidder to  
12 obtain a Superior score, the proposed changes to the draft PPA and the Commitment  
13 Agreement must have no impact on the risk allocation to the Company and its customers.

14  
15 **Q. Please describe the sub-criteria considered within the Project Development and**  
16 **Operational Viability Factor and summarize the primary considerations evaluated**  
17 **when considering the bid proposals.**

18 A. The Critical Path Schedule criterion within the Project Development and Operational  
19 Viability Factor evaluates the completeness of the schedule, the credibility of the  
20 operation date, the identification of the critical path tasks and potential impediments to  
21 project development, and the reasonability of the plan to mitigate potential impediments.

1 At a minimum, the bidder must provide a critical path schedule that includes the major  
2 milestone dates for all aspects of the project, demonstrate that the project has a credible  
3 operation date, and demonstrate that the project does not have any fatal flaws that would  
4 prevent development of the project

5  
6 In order to be awarded points, some of the key criteria that the evaluation team  
7 considered includes the amount of progress made towards meeting the various project  
8 milestones, the identification of all significant project risks, and the amount and  
9 credibility of the information and documentation supporting the schedule.

10  
11 The Project Development Experience criterion within the Project Development and  
12 Operational Viability Factor evaluates the experience of the bidder in the successful  
13 development, construction, interconnection, operations, and maintenance of projects  
14 which are comparable in nature and scope to the proposed project, as well as the  
15 experience the bidder has operating within the ISO-NE market or similar North American  
16 Electric Reliability Corporation (“NERC”)-classified regional transmission organization  
17 (“RTO”) markets. At a minimum, the bidder must demonstrate that it has sufficient  
18 relevant experience and expertise to successfully develop, finance, construct, operate, and  
19 maintain its proposed project, and must provide supporting information on past projects  
20 that were successfully developed and constructed.

21



1 In order to be awarded points, some of the criteria that the evaluation team considered  
2 includes the bidder’s experience in the successful development, construction, operations,  
3 and maintenance of offshore wind projects similar to the proposed project, as well as  
4 their experience in the successful development, construction, and interconnection of  
5 power generation projects in the ISO-NE market or another NERC-classified RTO  
6 market.

7  
8 **Q. Please describe the sub-criteria considered within the Energy Security and**  
9 **Reliability Factor and summarize the primary considerations evaluated when**  
10 **considering the bid proposals.**

11 A. The Energy Security and Reliability criterion evaluates the quality of the wind energy  
12 resource plan proposed and the credibility of the wind resource data and the proposed  
13 delivery profile. At a minimum, the bidder must submit a detailed energy resource plan,  
14 including as least one year of hourly wind resource data, and include an analysis of the  
15 available wind data which shows the relationship between wind data and project  
16 output/generation, as well as an identification of when and how the wind data was  
17 collected.

18  
19 Furthermore, the bidder must describe their assumptions. In order to be awarded points,  
20 some of the criteria that the evaluation team considered includes how detailed the energy  
21 resource plan is that shows the relationship between energy resource availability and

1 projected output/generation profile of the project, the quality and location of the data  
2 provided, and if the assumptions were identified, have a sound basis, and are well  
3 supported.

4  
5 **Q. When were qualitative criteria elements determined? Describe the process.**

6 A. All qualitative criteria and support documentation were determined on March 10, 2023.  
7 This was done following a final review by all Company subject matter experts and with  
8 input and concurrence from both OER and DPUC experts.

9  
10 **V. Bidding Process & Description of Bids Received**

11 **Q. Please provide an overview of the bidding process.**

12 A. The bidding process includes two major components: 1) the submission of bid proposals  
13 by bidders to the Company, and 2) the transfer of bid fees by bidders to the Company in  
14 association with bids submitted. The Company provided bid transfer instructions to aid  
15 prospective bidders with the rules and requirements to submit bids in support of the OSW  
16 RFP. Wire transfer instructions and a bid fee form was provided to bidders upon request.

17

1 **Q. How many bids were submitted in response to the OSW RFP?**

2 A. As discussed earlier in my testimony, the Bidder submitted a single bid package  
3 comprised of a primary, physical proposal and six alternative pricing offers. The bid  
4 package was comprised of both a confidential and public-version narrative of the Project,  
5 as well as the required Bidder Response Package – including the CPPD form, redline of  
6 the template PPA, and economic development summary sheet, all of which are provided  
7 in Attachment JMR-2 of my testimony.

8  
9 **Q. Did the Company receive any information pertaining to why only one developer  
10 submitted a bid in response to the OSW RFP?**

11 A. No, nothing of substance. The Company contacted those developers that participated in  
12 the Bidder Conference to confirm that they had indeed chosen not to submit a bid and  
13 requested insight into the reason. Three developers confirmed they chose not to submit  
14 bids, and only one of them communicated that they had considered many factors and  
15 ultimately determined that the market conditions did not support submitting a proposal.  
16 No other information or explanation was provided.

17  
18 **Q. Please provide a summary of the Proposal.**

19 A. The Revolution Wind 2 Project was bid as an 884MW offshore wind project. The  
20 attributes of the Project are more particularly described in the Confidential Bid Proposal

1 in Attachment JMR-2 of my testimony. Beyond the summary attributes, the bid included  
2 6 alternative price offerings which are summarized in Table 3.

3  
4 **Table 3 – Pricing Proposals**

Bid ID	Price Structure	Escalators	Price (per MWh)*	REC Price (per REC)*
A1				
A2				
A3				
B1				
B2				
B3				

5 *\*Values are as bid - not levelized nominal prices.*

6 The only difference between bids “A” and “B” in Table 3 above was the inclusion of an

7 [REDACTED] Specifically, the “B”  
8 proposals include [REDACTED]

9 [REDACTED] This [REDACTED] is the  
10 reason for the Bidder’s [REDACTED] Additional details regarding the [REDACTED]

11 [REDACTED] are contained in the Confidential Bid Proposal provided as Attachment JMR-2 to  
12 my testimony.

13  
14 **VI. Bid Evaluation**

15 **Q. Describe the process followed to evaluate the bid received.**

16 A. The bid evaluation process is generally conducted in three stages: Stage 1 – evaluation of  
17 minimum threshold criteria; Stage 2 – bid proposal evaluation (Pricing Factor and

1 Qualitative Factors); Stage 3 – additional evaluation. The qualitative factor criteria is  
2 used during Stage 1 and 2. However, the Company found that Stage 1 and 2 were  
3 effectively conducted simultaneously. The Company had to evaluate the various  
4 components of the bid package to determine if it met the minimum threshold  
5 requirements, which also enabled the Company to complete the Stage 2 analysis. No  
6 Stage 3 analysis was completed for Qualitative Factors; however, the Company did  
7 complete additional Quantitative sensitivities based upon receipt of additional  
8 information from the developer near the end of the bid evaluation phase.

9  
10 **A. Pricing Factor Evaluation**

11 **Q. Please summarize how the Company evaluated the costs and benefits of the**  
12 **Proposal?**

13 A. The Company modeled each of the Bidder’s six price offerings (each referred to as a  
14 “Proposal Case”) to compare against the Base Case. As explained earlier in my  
15 testimony, the Proposal Case was developed using the bid details, and in this instance,  
16 included the Eligible Facility capacity, estimated hourly production data, point of  
17 interconnection, price, and transmission upgrades. Company witnesses Mark A. Stevens,  
18 P.E., and Ninad N. Kumthekar provide additional details regarding the bid data and  
19 assumptions that TCR used as inputs to their economic model to support the Pricing  
20 Factor evaluation.

1 The Company then ran each Proposal Case through the Capacity Expansion model and  
2 E&AS model (described earlier in my testimony) to calculate the Direct Costs and  
3 Benefits and the Indirect Costs and Benefits to obtain what is referred to as the “Gross”  
4 results, in 2023 \$/MWh. During this process, the Company found significant negative  
5 LMP pricing. Per Section 2.2.4.2.2 of the OSW RFP, in the event that the applicable  
6 Real-Time or Day-Ahead Locational Marginal Price for the energy at the delivery point  
7 is less than \$0 per MWh in any hour, the PPA price will be reduced during that period of  
8 time by the absolute value of the negative LMP, essentially ensuring that the Company  
9 does not pay more than the contract price for energy. As a result, the TCR team used the  
10 “Gross” results, and netted out the negative revenues in hours with negative LMPs at the  
11 point of interconnection to calculate six “Net” results, one for each Proposal Case. The  
12 “Net” results estimate what the cost or benefit to customer would be under an executed  
13 PPA.

14  
15 **Q. Please elaborate on how the Company calculated the Direct Costs and Benefits and**  
16 **the Indirect Costs and Benefits to obtain the “Gross” results.**

17 A. The calculation of the Direct Costs and Benefits included two metrics. The first metric  
18 was a mark-to-market comparison of the total contract cost of the energy compared to the  
19 projected market prices at the delivery point using the project in-service date. The  
20 second metric was a comparison of the total forecasted cost of RECs created as a result of  
21 the proposed Project compared to the avoided compliance cost as a result of not having to

1 procure those RECs to comply with future Rhode Island Renewable Energy Standard  
2 obligations, and the forecasted projected market value of any excess RECs being sold  
3 into the market if not used for compliance.

4  
5 The calculation of Indirect Cost and Benefits included two metrics. The first metric was  
6 the impact of the proposed Eligible Facility on the LMP paid by Rhode Island Energy  
7 customers and essentially quantifies the impact of energy market prices not directly  
8 related to the project’s purchased energy. The second metric is the impact on RES  
9 compliance costs paid by Rhode Island Energy customers, and essentially quantifies the  
10 impact the proposed Eligible Facility has on the REC market for RECs not purchased  
11 from this project.

12  
13 **Q. Please summarize the results of the analyses in Stage 2.**

14 A. In the Stage 2 “Gross” result rankings, the A3 and B3 bids scored the highest, having the  
15 least negative net benefit in dollars per MWh. These bids also have the most risk, in that  
16 Bids A3 and B3 used a 2023 price, [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] The “Gross” results for the A1  
21 and A2 bids scored slightly lower, followed by the B1 and B2 bids.

1 For the Stage 2 “Net” result rankings, which were calculated and scored separately due to  
2 the different assumptions regarding negative LMP cost sharing, the Company ranked the  
3 bids in the same order as the “Gross” results rankings. Although the “Net” result  
4 rankings had the same relative order among the bids, the net benefit for the “Net” results  
5 was better than for the “Gross” results for all bids, because the cost of negative LMPs  
6 was assumed to be paid by the Bidder in these calculations, not by the Company or its  
7 customers.

8  
9 **Q. For Stage 2, please provide the calculated net benefit in dollars per MWh, and the**  
10 **associated points awarded for each bid.**

11 A. Tables 4 and 5, below show the calculated net benefits in USD per MWh in the second  
12 column for the Gross Results and the Net Results of Stage 2. Since the net benefits of all  
13 bids are negative, these numbers represent the cost to customers over the life of the  
14 contract, which for all bids exceeds \$3 billion over the life of the contract for the Gross  
15 Results, as shown in the third column. As described above, the difference between the  
16 Gross Results and the Net Results is that the Net Results assume the Bidder is paying for  
17 the negative revenues during periods of negative LMPs.

18



1

**Table 4 – Quantitative Evaluation Gross Results**

Revolution Wind 2 Quantitative Evaluation Stage 2 - Gross Results			
Bid	Net Benefit (USD/MWh)	Net Benefit (USD)	Quantitative Score
A3	-\$98.86	-\$3,043,050,854	75.00
B3	-\$104.48	-\$3,217,857,410	58.15
A1	-\$106.61	-\$3,283,727,365	51.74
A2	-\$107.45	-\$3,310,642,605	49.22
B1	-\$112.70	-\$3,473,738,815	33.47
B2	-\$113.42	-\$3,496,897,674	31.33

\*The bid proposal with the greatest Net Benefit receives a score of 75. The incremental point assignment for each other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh levelized Net Benefit that the bid was below the top bidder.

2

3

4

**Table 5 – Quantitative Evaluation Net Results**

Revolution Wind 2 Quantitative Evaluation Stage 2 - Net Results			
Bid	Net Benefit (USD/MWh)	Net Benefit (USD)	Quantitative Score
A3	-\$64.13	-\$1,974,130,145	75.00
B3	-\$68.69	-\$2,115,510,559	61.35
A1	-\$70.38	-\$2,167,816,550	56.25
A2	-\$71.08	-\$2,189,899,853	54.17
B1	-\$75.37	-\$2,322,934,530	41.30
B2	-\$75.96	-\$2,341,950,045	39.53

\*The bid proposal with the greatest Net Benefit receives a score of 75. The incremental point assignment for each other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh levelized Net Benefit that the bid was below the top bidder.

5

6

1           **B.     Additional Evaluations**

2   **Q.     Did the Company perform any additional quantitative evaluations as part of**  
3           **Stage 3?**

4   A.     Yes, the Company performed a sensitivity analysis for Bid A1 in Stage 3. Similar to  
5           Stage 2, the Company calculated a “Gross” Result and “Net” Result for the “Sensitivity  
6           Case.”

7  
8   **Q.     Why did the Company perform the Stage 3 sensitivity analysis?**

9   A.     The Bidder’s Third-Party Feasibility Analysis identified certain overloads with the  
10          proposed Eligible Facility in service but did not provide a solution towards remedying  
11          those overloads in the required upgrades for the project. Since the Bidder identified the  
12          overloads, the Company, with TCR’s assistance, modeled additional transmission system  
13          upgrades to mitigate the identified overloads, as these transmission system upgrades  
14          would probably be made if the proposed Eligible Facility proceeded through the ISO-NE  
15          interconnection process. Refer to Mr. Stevens’ pre-filed direct testimony for additional  
16          information on the issues identified and the analysis performed, including those issues  
17          that remain outstanding relative to the Bidder proposal and subsequent updates through  
18          Rhode Island Energy’s clarifying questions.

19

1 **Q. Please summarize the results of the Sensitivity Case in Stage 3.**

2 A. For Stage 3, the Sensitivity Case scored the best of the “Gross” Results rankings,  
3 showing that the additional transmission network upgrades modeled led to higher energy  
4 market prices, further offsetting some cost of the energy purchased. However, the overall  
5 ranking of the Proposal Cases remained the same relative to the results of the Stage 2  
6 analysis.

7  
8 Similarly, the Sensitivity Case also scored the best of the “Net” results rankings, with the  
9 remainder of the Proposal Cases ranked in the same order as in Stage 2 as well.

10

11 **Q. For Stage 3, please provide the calculated net benefit in dollars per MWh, and the**  
12 **associated points awarded, for each bid.**

13 A. Tables 6 and 7 below show the calculated net benefit in United States Dollars (“USD”)  
14 per MWh found in the second column, for the Gross Results and Net Results of Stage 3,  
15 respectively. Even with the sensitivity analysis, the net benefits are entirely negative,  
16 resulting in a net cost to customers over the life of the contract. As described above, the  
17 difference between the Gross Results and the Net Results is that the Net Results assumes  
18 the Bidder essentially is paying for the negative revenues during periods of negative  
19 LMPs.

20

1

**Table 6 - Quantitative Evaluation Stage 3 Gross Results**

Revolution Wind 2 Quantitative Evaluation Stage 3 - Gross Results			
Bid	Net Benefit (USD/MWh)	Net Benefit (USD)	Quantitative Score
A1 Sensitivity	-\$82.57	-\$2,543,539,830	75.00
A3	-\$98.86	-\$3,043,050,854	26.12
B3	-\$104.48	-\$3,217,857,410	9.27
A1	-\$106.61	-\$3,283,727,365	2.86
A2	-\$107.45	-\$3,310,642,605	0.35
B1	-\$112.70	-\$3,473,738,815	-15.41
B2	-\$113.42	-\$3,496,897,674	-17.55

\*The bid proposal with the greatest Net Benefit receives a score of 75. The incremental point assignment for each other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh levelized Net Benefit that the bid was below the top bidder.

2

3

4

5

**Table 7- Quantitative Evaluation Stage 3 Net Results**

Revolution Wind 2 Quantitative Evaluation Stage 3 - Net Results			
Bid	Net Benefit (USD/MWh)	Net Benefit (USD)	Quantitative Score
A1 Sensitivity	-\$57.76	-\$1,779,481,352	75.00
A3	-\$64.13	-\$1,974,130,145	55.89
B3	-\$68.69	-\$2,115,510,559	42.24
A1	-\$70.38	-\$2,167,816,550	37.15
A2	-\$71.08	-\$2,189,899,853	35.06
B1	-\$75.37	-\$2,322,934,530	22.19
B2	-\$75.96	-\$2,341,950,045	20.42

\*The bid proposal with the greatest Net Benefit receives a score of 75. The incremental point assignment for each other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh levelized Net Benefit that the bid was below the top bidder.

6

1 **Q. How does the difference between the Gross Results and the Net Results impact the**  
2 **Project's viability?**

3 A. The difference between the Gross results and the Net results are the negative revenues  
4 occurring during periods of negative LMPs. While Section 2.2.4.2.2 of the OSW RFP  
5 and the Model PPA provide protections to the Company and its customers by requiring  
6 the Bidder to assume the impacts of negative pricing events, should negative pricing be  
7 prevalent throughout the facility's contracted life, it calls into question the efficacy of the  
8 Project and the ability of the Bidder to manage such costs. Even after the Company  
9 issued a series of clarifications concerning interconnection upgrades, the Bidder only  
10 agreed to some of the proposed upgrades. As a result, the \$764 million difference  
11 between the Sensitivity Case in the Gross Results and the Net Results represents a loss of  
12 revenue to the Bidder as a result of this PPA provision. These result in turn begin to call  
13 into question whether the Bidder anticipates the financial hardship of the negative  
14 pricing, running the risk of undermining the financial viability of the Project and in turn  
15 casting further concern onto the efficacy of the Project, as proposed.

16  
17 **Q. During the bid evaluation process, did the Company issue any clarification**  
18 **questions concerning the data and information provided by the Bidder?**

19 A. Yes, the Company issued a total of 53 clarification questions as part of four clarifying  
20 question requests, with approximately 11 questions related to pricing.

21

1 **Q. Were any bids re-ranked or otherwise re-ordered based on additional information**  
2 **from the Bidder or additional evaluations?**

3 A. No.

4

5 **Q. Did the Company consult with OER and DPUC representatives to obtain their input**  
6 **into the analysis of the Proposal Cases, including the sensitivity analysis in Stage 3?**

7 A. Yes, the Company had discussions with TCR, OER representatives, and DPUC  
8 representatives to discuss the Proposal Cases, results, and concept of “Gross” and “Net”  
9 evaluations, and then the following results. OER and DPUC representatives had access  
10 to the TCR workbooks and other forms of documentation, including the results, and had  
11 the opportunity to provide comments throughout the process. After the completion of the  
12 Stage 2 analysis, the Company, TCR, and OER and DPUC representatives met to discuss  
13 if any Stage 3 analyses should be conducted, and OER and DPUC representatives were  
14 given the opportunity to provide ideas, concepts, and recommendations.

15

16 **Q. Did the OER and DPUC representatives agree with the Company’s conclusions**  
17 **regarding the results and scoring?**

18 A. The OER and DPUC representatives agreed with the Company’s Quantitative Evaluation  
19 methodology; however, they refrained from commenting on, evaluating, or otherwise  
20 scoring the model results.

21

1        **C.     Evaluation of Qualitative Factors**

2        **Q.     Please describe how the Company scored the bids for each qualitative factor.**

3        A.     While most qualitative factors were the same for the six bids, there were differences  
4        between the “A” and “B” bids, which led the Company to score the “A” and “B”  
5        proposals independently for the [REDACTED] As discussed above, the  
6        difference between bids “A” and “B” was [REDACTED]  
7        [REDACTED] for the “B” bids.

8  
9                                                *Economic Development Factor Evaluation*

10       **Q.     Please describe how the Company scored the Economic Development Factor.**

11       A.     For both the “A” and “B” bids, the Bidder scored a total of 4.5 points for the Economic  
12       Development Factor Evaluation section. The sub-factor/criteria for Direct Project-  
13       Attributed Employment received 1 point (Preferable).

14  
15       The Company found for both of these bids, that the net present value of the ratio of  
16       proposed total wage-related expenditures of direct project-related employment in the state  
17       of Rhode Island relative to offshore wind project size was substantial due to incremental  
18       jobs associated with [REDACTED] Total wage-related  
19       expenditures of direct project-related employment was deemed to be reasonable and  
20       supported by the information provided by the Bidder, and labor compensation was found  
21       to be on par or above for similar job roles. The ratio of proposed [REDACTED]

1 [REDACTED] was deemed to be “considerable” job creation and was one of the major  
2 factors leading to the award of a Preferable score.

3  
4 Expenditure & Investments received 3 points (Superior scoring). The Bidder is a leader  
5 in OSW development and has significant global experience. Investment levels are  
6 superior compared to other OSW projects under development after review of publicly  
7 available data. The bid proposal included significant documentation of efforts made to  
8 date, including letters of support for most of the investments provided from multiple  
9 Rhode Island-based organizations, adding additional credibility to the bid. Both the “A”  
10 and “B” bids included spend data that provides significant economic benefits to Rhode  
11 Island, including a series of binding commitments, and includes significant spend to  
12 support various areas, which are discussed in more detail in the Confidential Bid Proposal  
13 provided as Attachment JMR-2 to my testimony.

14  
15 The Diversity, Equity and Inclusion criterion received 0.5 points (Preferable). The  
16 Bidder’s Stakeholder Engagement Plan and Workforce Diversity Plan were both “Highly  
17 Credible;” however, the Supplier Diversity Program was found to be “Credible,” which  
18 prevented the proposal from achieving the maximum points available. Review of the  
19 proposal also found a lack of a method for monitoring and measuring success against  
20 Supplier Diversity goals kept Supplier Diversity from being Superior.



*Siting/Permitting Factor Evaluation*

**Q. Please describe how the Company scored the Siting & Permitting Factor.**

A. The Site Status criterion within the Siting & Permitting Factor evaluates the status of site control and real property rights by the Bidder, as well as the current status of efforts to secure site control and real property rights necessary for the project. At a minimum, it requires that the bidder have a federal lease for the offshore wind energy generation site, a valid lease or option to lease marine terminal facilities necessary for staging and deployment of major project components to the project site, a reasonable and achievable detailed plan to acquire the sufficient rights to locate its Offshore Delivery Facilities where proposed, and a map of the Eligible Facility site, the proposed water routes to the project site, and all onshore transmission and interconnection locations. The Bidder did not meet the Minimum Threshold for this criterion and was awarded 0 points because the Bidder did not sufficiently provide information on the Project’s siting from the Eligible Facility to the point of interconnection.

The Permits and Approvals criterion within the Siting & Permitting Factor evaluates the credibility of the Bidder’s plan to obtain the required permit approval, the status of the permitting process, and the degree of certainty offered by the Bidder in securing the necessary permits and approvals. It also evaluates the extent to which the Bidder has undertaken effective stakeholder engagement and outreach efforts. In order to be awarded points, some of the criteria that the evaluation team considered was if the

1 Bidder identified all of the required permits and approvals and either having the required  
2 permits and approvals or having a highly credible plan for obtaining them; having  
3 initiated productive discussions with the applicable permit authorities; understanding site-  
4 specific permit requirements; having a robust stakeholder engagement plan; and  
5 demonstrating local support for the Project. The Bidder met the Preferable threshold for  
6 this criterion and was awarded 1 out of a possible 2 points.

7  
8 *Interconnection & Transmission Factor Evaluation*

9 **Q. Please describe how the Company scored the Interconnection and Transmission**  
10 **factor.**


11 A. The Interconnection & Transmission criterion evaluates the credibility of the proposed  
12 interconnection plan, as well as the status of the bidder for addressing the ISO-NE  
13 interconnection requirements. At a minimum, the bidder must detail the status of  
14 interconnection application(s) and studies, must have submitted an ISO-NE  
15 interconnection application under the CCIS, must submit a plan that clearly demonstrates  
16 how generation will be delivered from or by the proposed eligible project to the delivery  
17 point that is a PTF node, must demonstrate that the interconnection/transmission facilities  
18 can be built and operated as proposed and that the costs of any required system upgrades  
19 are included in the submitted pricing, and that studies submitted are consistent with the  
20 ISO-NE standards. The Bidder did not meet the Minimum Threshold for this criterion  
21 and was awarded 0 points because the Bidder did not have any completed ISO-NE

1 interconnection studies, and the Third-Party Feasibility Analysis did not approximate the  
2 ISO-NE interconnection process or demonstrate that the interconnection / transmission  
3 facilities can be built and operated as proposed.

4

5 *Environmental Factor Evaluation*

6 **Q. Describe how the Company scored the Environmental Factor.**

7 A. The Environmental Assessment & Mitigation criterion, within the Environmental Factor  
8 was awarded a Preferable score of 1 point. The Bidder provided a thorough preliminary  
9 environmental characterization. The Bidder demonstrated a proactive approach to  
10 identifying adverse impacts to natural and cultural resources and provides proposed  
11 measures that apply an avoidance philosophy where feasible and reasonable minimization  
12 or mitigation measures when not feasible. However, the preliminary environmental  
13 characterization cannot be considered highly comprehensive because it did not take into  
14 consideration the 

15

16 Regarding the proposed EFMP, one of the minimum requirements for all proposals under  
17 Section 10 of ACES is that all bidders provide information on potential environmental  
18 impacts through the submission of an “environmental and fisheries mitigation plan,  
19 which shall include site and environmental data transparency requirements; a site layout  
20 plan and maps that illustrate the location of all on-shore and offshore equipment and  
21 facilities and clearly delineates the perimeter of the area in which offshore wind turbines

1 will be placed.” R.I. Gen. Laws § 39-31-10(a). The requirement for an EFMP was  
2 included in Section 2.3.3.3 of the OSW RFP as one of the Minimum Threshold  
3 requirements; however, the Proposal failed to meet all requirements of the OSW RFP and  
4 was awarded 0 points.

5

6 **Q. Please elaborate regarding the issues with the EFMP.**

7 A. Upon a detailed review of the Proposal, the Company found no agreement to record  
8 vibrations in the sediment or to detect particle motion. The Bidder’s plan failed to  
9 include detailed characterization of the existing fisheries resources specific to the Project  
10 location or region, or sufficiently identify the adverse impacts to commercial and  
11 recreational fishing specific to the proposed location of the Project. Furthermore, there  
12 was not sufficient evidence that appropriate stakeholders were engaged, such as local  
13 communities and environmental groups. The Company sought clarification with the  
14 Bidder and provided the Bidder with an opportunity to cure the deficiencies, but the  
15 Bidder failed to do so.

16

17 *Financing Factor Evaluation*

18 **Q. Please describe how the Company scored the Financing factor.**

19 A. The Financing factor was determined to be Preferable, being awarded a score of 0.5  
20 points out of a possible 1 point. The Company found a basic financial plan, which  
21 included certain critical details of the plan (i.e., capital structure, debt-equity structure,

1 etc.); however, the Bidder did not provide other critical details of their financing plan. In  
2 addition, the Bidder did not sufficiently explain the timing of the construction costs. The  
3 Company found that the equity participants in the Project are strong financially based  
4 upon evaluation of the Bidder’s financial statements.

5

6 ***Contract Risk Factor Evaluation***

7 **Q. Please describe how the Company scored the Contract Risk factor.**

8 A. The Contract Risk factor was determined to be Preferable, being awarded a score of 1  
9 point out of a possible 2 points. The Company found that the Bidder proposed multiple  
10 edits to the template PPA that shifted additional risk to the Company and its customers.  
11 As a result, the edits to the PPA were deemed to be substantive and resulted in a  
12 Preferable score instead of Superior.

13

14 ***Project Development & Operational Viability Factor Evaluation***

15 **Q. Please describe how the Company scored the Project Development and Operational**  
16 **Viability factor.**

17 A. Evaluation of the Proposal against the Project Development Experience criterion found  
18 the Bidder met the Superior threshold for this criterion and was awarded 1 point out of a  
19 possible 1 point. Ørsted has [REDACTED]

20 [REDACTED]

21 [REDACTED] Eversource has substantial experience in building

1 and maintaining large transmission and distribution projects, including submarine and  
2 underground transmission lines.

3  
4 Evaluation of Proposal against the Critical Path Schedule criterion found the Bidder did  
5 not meet the Minimum Threshold requirement for this criterion and was awarded 0 points  
6 out of a possible 2 points. The Company found the Bidder did not have a credible  
7 operation date because of the substantive issues with the proposed interconnection and  
8 transmission plan and the substantial ambiguity and immaturity in the landfall and  
9 onshore substation location selection. These two factors indicate that the Project cannot  
10 be built as proposed. More specifically, the Bidder did not have any completed ISO-NE  
11 interconnection studies and the Third-Party Feasibility Analysis did not approximate the  
12 ISO-NE interconnection process or demonstrate that the interconnection/transmission  
13 facilities can be built and operated as proposed. In addition, upon review of the Third-  
14 Party Feasibility Analysis, the Company identified multiple transmission line overloads  
15 that were not properly addressed and other transmission line overloads that were not  
16 identified by the Bidder. The interconnection and transmission issues are further  
17 discussed in Mr. Stevens' pre-filed direct testimony. The ambiguity in landfall location  
18 and onshore substation location, and the related impacts on route selection,  
19 environmental assessments, and permitting, contribute to the Project not having a  
20 credible operation date since there are numerous unknown variables that increase project  
21 risk.

1 *Energy Security & Reliability Factor Evaluation*

2 **Q. Please describe how the Company scored the Energy Security and Reliability factor.**

3 A. Review of the Proposal against the Energy Security and Reliability criterion found the  
4 Proposal met the Preferable threshold and received a score of 0.5 points out of a possible  
5 1 point. The Company found that the Bidder had submitted a detailed energy resource  
6 plan, provided by an unaffiliated independent third-party with experience in the modeling  
7 of offshore wind generation resources and that the Bidder provided site-relevant  
8 information. The Company found that while some of the assumptions contained a  
9 detailed explanation, others did not provide a sufficient explanation, such as why there  
10 will be no grid curtailment and why the balance of plant availability is based on generic  
11 standards instead of reflecting the information provided throughout the bid.

12  
13 **Q. Please provide a summary of all points awarded for each Qualitative Factor.**

14 A. Please see Table 8 below for each Factor, sub-criteria, points awarded per bid, and  
15 maximum points available.  
16

1

**Table 8 – Qualitative Evaluation Scoring**

Revolution Wind 2 - Qualitative Evaluation				
Qualitative Factors	Qualitative Criteria	Threshold	Points Awarded	Max Points
Economic Development	Direct Project-Attributed Employment	Preferable	1.0	2.0
	Expenditures & Investments	Superior	3.0	3.0
	Diversity, Equity, & Inclusion Plan	Preferable	0.5	1.0
Siting & Permitting	Site Status	Lower than Minimum	0.0	2.0
	Permits & Approvals	Preferable	1.5	3.0
Environmental	Environmental Assessment & Mitigation	Preferable	1.0	2.0
	Fisheries Mitigation Plan	Lower than Minimum	0.0	1.0
Interconnection & Transmission	Interconnection & Transmission	Lower than Minimum	0.0	4.0
Financing	Financing	Preferable	0.5	1.0
Contract Risk	Contract Risk	Preferable	1.0	2.0
Project Development & Operational Viability	Critical Path Schedule	Lower than Minimum	0.0	2.0
	Project Development Experience	Superior	1.0	1.0
Energy Security & Reliability	Energy Security & Reliability	Preferable	0.5	1.0
<b>Total:</b>			<b>10.0</b>	<b>25.0</b>

2

3

4 **VII. Evaluation Results**

5 **Q. Please provide a combined summary of all points awarded for each bid, including**  
6 **both Pricing Evaluation and Qualitative Factor Evaluation points.**

7 A. Please see Table 9 below, which includes the Stage 3 Net Results for the Quantitative  
8 Evaluation, the Quantitative Score, the Qualitative Score, and the Total Score. The  
9 maximum Quantitative Score is 75 points and awarded to the proposal with the greatest  
10 relative “benefit”. Each subsequent proposal is awarded a value below 75 points based  
11 upon the criteria provided in Section IV above. The maximum Qualitative Score is 25  
12 points and is the sum of the Factors and sub-factors/criteria, each with their own scores,



as found in Table 8 above. It is important to note that Qualitative Scores were the same for all 6 bids. The "A" and "B" bids both scored the same number of points under the Economic Development Factor.

**Table 9- Stage 3 Evaluation Total Scores.**

Revolution Wind 2 - Stage 3 Evaluation Total Scores					
Stage 3 - Net Results					
Bid	Net Benefit (USD/MWh)	Net Benefit (USD)	Quantitative Score	Qualitative Score	Total Score
A1 Sensitivity	-\$57.76	-\$1,779,481,352	75.00	10.00	85.00
A3	-\$64.13	-\$1,974,130,145	55.89	10.00	65.89
B3	-\$68.69	-\$2,115,510,559	42.24	10.00	52.24
A1	-\$70.38	-\$2,167,816,550	37.15	10.00	47.15
A2	-\$71.08	-\$2,189,899,853	35.06	10.00	45.06
B1	-\$75.37	-\$2,322,934,530	22.19	10.00	32.19
B2	-\$75.96	-\$2,341,950,045	20.42	10.00	30.42

\*The bid proposal with the greatest Net Benefit receives a score of 75. The incremental point assignment for each other bid was based upon a methodology of subtracting 3 points for each \$1.00/MWh levelized Net Benefit that the bid was below the top bidder.

\*\*Qualitative Scores were the same for all 6 bid proposals. The "A" and "B" bids both scored the same on the Economic Development Factor.

**Q. Based upon bid evaluation results, please explain why the Company declined to conditionally select a bid or series of bids for negotiation of a contract.**

A. After the evaluation of the bids and the additional information provided through the four sets of clarifying questions, the Company determined that all six bids failed to meet the requirements of R.I. Gen. Laws §§ 39-31-6 and 39-31-10. All 6 bids resulted in substantial negative net benefits for customers and, thus, were not commercially reasonable, as required by R.I. Gen. Laws §§ 39-31-6 (1)(vii)(A) and 39-31-10(c).

1 In addition, the bids failed to meet the Minimum Threshold requirements of the OSW  
2 RFP for several qualitative factors and only scored a total of 10 points out of a maximum  
3 of 25 points for the Qualitative Evaluation. Regarding the EFMP, which is required by  
4 Section 10(a) of ACES, the Proposal scored less than the Minimum Threshold  
5 requirements under the OSW RFP, with 0 points.

6  
7 **Q. Please elaborate regarding the provisions of ACES that the Proposal failed to meet.**

8 A. As detailed in the testimony above, the Quantitative Evaluation found that even when  
9 negative revenues from negative LMPs are paid for by the Bidder in the Net Results  
10 calculation, and with additional transmission system upgrades above and beyond what the  
11 Bidder originally proposed, the net benefit to customers using the Sensitivity Case was  
12 estimated to be approximately -\$1.78 billion over the life of the contract. The Company  
13 determined that moving forward with contract negotiations for a project that would add  
14 an additional, approximately \$1.78 billion cost to customers would not be commercially  
15 reasonable, nor would it consistent with the overall purpose of ACES, which is, in part, to  
16 provide cost-effective, strategic investments in energy resources and infrastructure and  
17 enhance economic competitiveness by reducing energy costs. *See R.I. Gen. Laws*  
18 *§ 39-31-2.* Based on the quantitative evaluation, none of the six bids discussed above  
19 met this purpose.

20

1 In addition, for the PUC to make a finding of commercial reasonableness, it must also  
2 find that the Project has a credible project operation date. *See* R.I. Gen. Laws § 39-31-3.  
3 As discussed earlier in this testimony, the Company's qualitative evaluation determined  
4 that the Project does not have a credible project operation date because of the lack of  
5 credibility identified within the Bidder's interconnection and transmission plan, as well as  
6 in their siting and permitting plan, which does not support that the Project can be built as  
7 proposed. Regarding the interconnection and transmission plan, the Bidder did not have  
8 any completed ISO-NE interconnection studies, and the Third-Party Feasibility Analysis  
9 did not approximate the ISO-NE interconnection process or demonstrate that the  
10 interconnection / transmission facilities can be built and operated as proposed. In  
11 addition, in reviewing the Third-Party Feasibility Analysis, the Company identified  
12 multiple transmission line overloads that were not properly addressed and other  
13 transmission line overloads that were not identified by the Bidder. The ambiguity in  
14 landfall location and onshore substation location, and the related impacts on route  
15 selection, environmental assessments, and permitting contribute to the lack of a credible  
16 operation date, increased Project risk, and made it impossible for the Company to  
17 determine if there were any additional issues or considerations that could otherwise  
18 impact the viability of this Project.

19

1 **Q. When and how were the communications issued to the Bidder and any external**  
2 **stakeholders concerning the Bid evaluation results?**

3 A. All stakeholders were notified on July 18, 2022 via email, with the Company also holding  
4 a call with the Ørsted team. Following the call with Ørsted, the Company issued a public  
5 news release.

6  
7 **VIII. Conclusion**

8 **Q. Please summarize the Company's conclusions regarding the Revolution Wind 2**  
9 **Project and Proposal.**

10 A. As explained throughout my testimony and in the pre-filed direct testimony of the  
11 Company's other witnesses – Bradford Labine, Mark A. Stevens, P.E., and Ninad N.  
12 Kumthekar- the Company's evaluation of the Revolution Wind 2 Project and Proposal  
13 failed to meet several statutory requirements under ACES. The Company's quantitative  
14 analysis, including subsequent sensitivity analyses, resulted in substantial costs to  
15 customers – with the least costly result being a net cost of an estimated \$1.78 billion over  
16 the term of the contract. Further, the Company found failures to submit a credible project  
17 schedule – as required by ACES – among other identified areas of weakness and risk in  
18 the Bidder's Proposal. As a result, the Company chose not to proceed with the  
19 conditional selection of the Project, and summarily submitted this filing to the PUC for  
20 review and approval to conclude the OSW RFP.

21

1 Q. Does this conclude your testimony?

2 A. Yes.

**Testimony of  
Ninad N. Kumthekar**

REDACTED

THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a RHODE ISLAND ENERGY  
RIPUC DOCKET NO. 23-32-EL  
IN RE: 2022 RHODE ISLAND OFFSHORE WIND RFP  
WITNESS: KUMTHEKAR

---

**PRE-FILED DIRECT TESTIMONY**

**OF**

**NINAD N. KUMTHEKAR**

**September 27, 2023**

**Table of Contents**

I. Introduction ..... 1

II. Overview of the Price Analysis ..... 4

III. Phases of the Price Analysis ..... 11

    A. Phase 1A – Development of the Base Case ..... 11

    B. Phase 1B – Development of the Quantitative Protocol ..... 27

    C. Phase 2 – Bid Evaluation ..... 34

IV. Conclusion ..... 43



1 **I. Introduction**

2 **Q. Please provide your full name and business address.**

3 A. My name is Ninad N. Kumthekar. I work for Tabors Caramanis Rudkevich Inc. (“TCR”)  
4 and my business address is 300 Washington Street, Newton, MA 02458.

6 **Q. Please describe by whom you are employed and in what capacity.**

7 A. I am employed as an Associate at TCR. During my employment at TCR, I have been  
8 closely involved in asset valuation services provided in support of clean energy  
9 procurements for utilities in Massachusetts and Rhode Island. I was involved in the  
10 analysis and bid evaluation for large scale renewables in Massachusetts under section  
11 83D of the Massachusetts Green Communities Act in 2017 as well as the analysis and bid  
12 evaluation of three rounds of offshore wind procurements under section 83C of the  
13 Massachusetts Green Communities Act from 2018 through 2021. I was involved in the  
14 analysis used for the procurement of 400 megawatts (MW) of offshore wind in Rhode  
15 Island under the Affordable Clean Energy Security Act, R.I. Gen. Laws §39-31 *et seq.*  
16 (“ACES”) in 2018, as well as in the analysis for bid evaluation of clean energy resources  
17 for Rhode Island under the Long-Term Contracting Standard for Renewable Energy, R.I.  
18 Gen. Laws §39-26.1 *et seq.* in 2018.

19

1 **Q. Please describe your professional and educational background.**

2 A. I graduated from the National Institute of Technology (Surat) India in 2012 with a  
3 Bachelor's of Technology degree in Mechanical Engineering. I graduated from  
4 Dartmouth College in 2017 with a Master's Degree in Engineering Management. I began  
5 my career in 2012 as a graduate engineer at a UK-based engineering consulting firm,  
6 Mott MacDonald, with their power generation division in Abu Dhabi, United Arab  
7 Emirates. At Mott MacDonald I was trained in the role of a thermal modeler and assisted  
8 project teams delivering technical advisory, engineering consultancy and design services  
9 to developers, regulatory bodies, lenders and electric utilities in the Middle East. In 2014  
10 I was promoted to the position of a mechanical engineer as my involvement expanded  
11 into additional cross functional roles involving economics and business development  
12 roles. I joined TCR in 2017 as an Analyst and was promoted to Senior Analyst in 2018.  
13 My responsibilities at TCR are to assist the team in various consulting and litigation  
14 projects in the capacity of an analyst, with a focus on asset valuation and market  
15 operation assignments which rely heavily on utilizing proprietary energy market  
16 modeling tools. I served in the capacity of lead analyst, project manager and project  
17 coordinator. I was promoted to the position of Associate in March 2022, which is the  
18 position I currently hold.

19

1 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**  
2 **(the “PUC”)?**

3 A. Yes. I testified on behalf of The Narragansett Electric Company d/b/a National Grid in  
4 2019 in connection with the procurement of 400 MW of offshore wind generation from  
5 Revolution Wind in Docket No. 4929.

6

7 **Q. What is the purpose of your testimony?**

8 A. The purpose of my testimony is to provide an overview of the engineering economic  
9 support TCR provided to The Narragansett Electric Company d/b/a Rhode Island Energy  
10 (the “Company”) in connection with the review of the bids submitted in response to the  
11 Request For Proposals for Long-Term Contracts for Offshore Wind Energy (the “OSW  
12 RFP”) issued by the Company on October 14, 2022 in accordance with R.I. Gen. Laws  
13 §39-31-10. In addition, I will provide a detailed discussion of both the methodology  
14 employed and the results of the economic analyses undertaken of those bids.

15

16 **Q. Please describe your role with respect to TCR’s analysis of bids submitted in**  
17 **response to the OSW RFP.**

18 A. I served as the project manager and lead analyst supporting TCR’s engineering and  
19 economic analysis of the bids.

20

1 **Q. How is your testimony organized?**

2 A. Section I is the Introduction. Section II provides an overview of the objectives and  
3 structure of TCR’s economic analysis (the “Price Analysis”) as a whole. Section III  
4 discusses each of the two phases of that Price Analysis, specifically the development of  
5 the Base Case (Phase 1A) and the Quantitative Protocol (Phase 1B) which occurred prior  
6 to the opening of bids, and TCR’s bid evaluation (Phase 2) carried out according to the  
7 three-Stage evaluation process described in the OSW RFP. Section IV is the Conclusion.

8

9 **Q. What attachments are you sponsoring in your testimony?**

10 A. The following attachment is included in support of my testimony:

- 11 • Attachment NNK-1 – 2022 RI OSW RFP Quantitative Evaluation Report and
- 12 Appendices - **CONFIDENTIAL**.

13

14 **II. Overview of the Price Analysis**

15 **Q. What was the objective of TCR’s Price Analysis?**

16 A. The objective of TCR’s Price Analysis was to assist Rhode Island Energy in the  
17 evaluation of bids received in response to the OSW RFP and to identify the most cost-  
18 effective offshore wind proposal for Rhode Island.

19

20 Section 2.3 of the OSW RFP outlines the Stage Two evaluation process which  
21 distinguishes between the assessment of the quantifiable aspects of the bids, called the

1 Price Analysis, and the assessment of various qualitative aspects of the bid, called the  
2 Non-Price Analysis. Section 2.4 of the OSW RFP outlines the further analysis of the  
3 Proposal in Stage Three of the process using the Stage Two results and additional criteria  
4 TCR was engaged to assist with the Price Analysis over Stage Two and Stage Three of  
5 the evaluation process in accordance with the evaluation frameworks outlined in the  
6 OSW RFP.

7  
8 The ultimate outcome of the TCR analysis was the development and calculation of both  
9 direct and indirect metrics that together would quantify the benefits attributable to each  
10 bid on a unitized \$/MWh basis. TCR calculated the benefits for each bid received in the  
11 Stage Two evaluation process, as well as any additional analysis that was required during  
12 the Stage Three process. The calculated benefits derived from TCR's quantitative Price  
13 Analysis were scored out of a maximum of 75 points and combined with the outcomes of  
14 the Company's qualitative Non-Price Analysis, which calculate corresponding scores for  
15 each qualitative factor and sub-criteria out of a maximum of 25 points. The combined  
16 scores out of 100 were used to determine the overall score and relative ranking order of  
17 bids evaluated.

18

1 **Q. What quantitative metrics were used in the Price Analysis, and what do they**  
2 **represent?**

3 A. The OSW RFP defines two categories of quantitative metrics, called the Direct Contract  
4 Costs and Benefits and the Indirect Costs and Benefits, which cumulatively represent the  
5 total net benefits associated with a particular bid. The total net benefit is an estimate of  
6 the total dollar value of benefits to the Company's customers resulting from the  
7 procurement of incremental offshore wind energy and environmental attributes through  
8 this solicitation. These costs and benefits are measured relative to a counterfactual  
9 scenario where no bids are selected as part of the solicitation, a "but for" alternative  
10 called the "Base Case".

11  
12 A positive total net benefit attributed to a proposal indicates selecting that offshore wind  
13 project bid could result in long-term savings that exceed the projected contract costs of  
14 that bid, whereas a negative total net benefit indicates that a particular bid could result in  
15 a net increase in costs to the Company's customers.

16  
17 In the context of this analysis, the total net benefit is used as a metric to estimate the  
18 benefits and costs of bids relative to each other and to the counterfactual Base Case.

19

1 **Q. How were these quantitative metrics calculated?**

2 A. TCR analyzed bids by first running a market simulation model for the counterfactual  
3 Base Case scenario, followed by individual market simulation models for each bid  
4 received, known as “Proposal Cases”. Resulting market projections from each Proposal  
5 Case were then compared against the Base Case to calculate the Direct Contract Costs  
6 and Benefits and the Indirect Costs and Benefits, for that Proposal Case. Market  
7 projections include physical measurable attributes, such as hourly energy generation and  
8 emissions of specific units, as well as economic factors, such as the cost to serve load and  
9 the nodal hourly energy prices.

10

11 The exact steps used to calculate the quantitative metrics, and assign quantitative scores  
12 are detailed in the Quantitative Protocol document, provided as Appendix B to  
13 Attachment NNK-1 to my testimony (referred to herein as the “Quantitative Protocol”).  
14 The Quantitative Protocol provides both a broad overview as well as specific details of  
15 the input assumptions, approach and framework that would be applied in the quantitative  
16 evaluation process. The Quantitative Protocol as well as the Base Case projections were  
17 finalized prior to opening of bids.

18

19 **Q. How were the market simulation models run?**

20 A. TCR uses ENELYTIX market model simulation software to develop and run market  
21 models for the Base Case and for each Proposal Case. ENELYTIX is a cloud-based

1 power market modeling and analytics environment developed by Newton Energy Group  
2 (“NEG”) and licensed by TCR.

3  
4 All ENELYTIX market models are built upon a defined set of modeling inputs developed  
5 specifically for this evaluation process. These inputs reflect the best available  
6 information at a point in time prior to the opening of bids. The underlying market and  
7 physical assumptions (described below) that were initially developed for the Base Case  
8 are then common to all Proposal Case models.

9  
10 Each Proposal Case includes the bid-specific inputs such as the size, operating profile,  
11 and onshore interconnection location of the offshore wind generator and the associated  
12 changes to the transmission network incorporated in the proposal. The ENELYTIX  
13 model generates, for the Base Case and for each Proposal Case, hourly projections over  
14 the period from 2027 through 2052, simulating the long-term capacity expansion and  
15 hourly nodal dispatch of energy delivered to ISO New England (“ISO-NE”) and the New  
16 York Independent System Operator (“NYISO”) footprints.

17  
18 I will describe the specifics of the ENELYTIX model runs for this procurement in further  
19 detail below.

20



1 **Q. How was the TCR analysis managed and organized?**

2 A. TCR's efforts on the quantitative evaluation commenced following the issuance of the  
3 OSW RFP with a kickoff meeting on October 27, 2022, which included members of  
4 TCR, the Company and representatives and consultants to the Rhode Island Office of  
5 Energy Resources ("OER") and the Rhode Island Division of Public Utilities and Carriers  
6 ("DPUC"). Representatives from the Company, OER and the DPUC jointly formed the  
7 Quantitative Evaluation Team.

8

9 TCR worked closely with the Quantitative Evaluation Team on all aspects of the Price  
10 Analysis, facilitated by weekly quantitative meetings led by TCR. Each week TCR  
11 would develop an agenda for discussion and circulate materials ahead of the meetings.  
12 During the meetings TCR would present, discuss and gain feedback on analysis inputs at  
13 various decision points in the process. The topics covered by TCR were broadly divided  
14 into (a) evaluation input discussions – these are inputs that provided a broad framework  
15 for the economic analysis such as the finalization of the study period, inflation  
16 assumptions, and the discount rate that would be used for a net present value analysis,  
17 (b) evaluation framework discussions – these addressed the establishment of the core  
18 metric for the evaluation, how and what data would be used to calculate that metric, and  
19 how that metric would be used to calculate quantitative points, and (c) modeling input  
20 and result discussions – these focused on the finalization of key inputs to the market  
21 models, such as the finalization of load and fuel forecasts, generation mixes, capital costs

1 etc., and subsequently the presentation of results and calibration of models to ensure  
2 reasonableness of model projections. Additional concerns or issues raised by the  
3 members of the Quantitative Evaluation Team during these meetings were addressed and  
4 resolved through achieving consensus among the relevant stakeholders.  
5

6 **Q. Please describe the approach to TCR's Price Analysis.**

7 A. The TCR Price Analysis was organized into two discrete phases. The first phase focused  
8 on establishing the basis for bid evaluation prior to the opening of bids. This included the  
9 development of the Quantitative Protocol, which was an evaluation framework that  
10 detailed the specific quantitative criteria that would be used for bid evaluation, as well as  
11 the development of a Base Case reference model against which the incremental benefits  
12 of bids would be measured. The second phase involved the detailed review and  
13 assessment of bids against the Base Case, using the Quantitative Protocol, that was  
14 developed in the first phase. This phase involved the development of Proposal Case  
15 models for each bid being evaluated and comparing market projections from each of  
16 those models to the Base Case in order to measure the net benefits that would be  
17 attributed to each bid.

18  
19 I describe the specifics of the Quantitative Protocol for this procurement in further detail  
20 below.  
21

1 **Q. Why was the Price Analysis organized into two phases?**

2 A. The Price Analysis was organized into two phases to compartmentalize the efforts  
3 associated with developing the basis of evaluation, and to isolate that process from any  
4 knowledge of incoming bids. This ensured the evaluation criteria and reference  
5 projections developed in the first phase were independent and neutral to any and all  
6 proposals that would be received and evaluated in the second phase.

7  
8 To ensure no overlaps, the first phase was conducted such that the key deliverables –  
9 the acceptance of the Base Case results and the finalization of the Quantitative  
10 Protocol – would occur before any bids were opened.

11

12 **III. Phases of the Price Analysis**

13 **A. Phase 1A – Development of the Base Case**

14 **Q. What is the Base Case?**

15 A. The Base Case is a counterfactual projection of capacity mix, generation, emissions, and  
16 prices associated with Rhode Island electricity consumption under a scenario in which the  
17 Company does not enter into long term contracts for energy and environmental attributes  
18 under this solicitation. It is not a plan for the Rhode Island electric sector and should not  
19 be viewed as such.

20

1 The purpose of the Base Case is to serve as a common reference point to measure the  
2 incremental benefits and costs of bids received in response to the OSW RFP. The Base  
3 Case model is developed according to the analytic framework described in the  
4 Quantitative Protocol and is modeled using the financial assumptions described therein.

5  
6 **Q. Describe the process for development of the Base Case.**

7 A. Development of the Base Case consists of three steps, beginning with the development of  
8 the Base Case input assumptions followed by running the Base Case model and finally  
9 calibration of the Base Case model through an iterative process to ensure the Base Case  
10 projections are explainable and reasonable.

11  
12 During the Quantitative Evaluation Team kickoff meeting, TCR identified ten broad  
13 categories of modeling inputs that would be required to produce projections from a  
14 forward-looking market model. TCR categorically reviewed each of modeling inputs,  
15 identifying those that would require information from, or detailed discussion with, the  
16 Quantitative Evaluation Team. For the remaining inputs, the TCR team relied on its  
17 modeling expertise, industry best practices and standardized data sources to develop and  
18 present input assumptions that would form the basis of the Base Case model.

19  
20 Over the first two months, TCR presented each of these input assumptions in detail to the  
21 Quantitative Evaluation Team. When multiple approaches were possible TCR presented

1 the alternatives explaining the implications of each to the Quantitative Evaluation Team  
2 and worked to reach consensus on the exact inputs that would go into the model.

3

4 **Q. Please describe the ten categories of input assumptions that the Quantitative**  
5 **Evaluation Team used.**

6 A. The ten broad categories of input assumptions developed for the Base Case are as  
7 follows:

8 **1. Generating Unit Capacity Additions & Retirements** – The existing generation fleet  
9 in ISO-NE is sourced from the generators list available in the ISO-NE 2022 Capacity  
10 Energy Load & Transmission (“CELT”) report. Near-term additions for capacity are  
11 sourced from capacity that has cleared the ISO-NE Forward Capacity Auctions  
12 (“FCA”) as well as from a list of clean energy procurements that have signed  
13 contracts with utilities in ISO-NE. This list of clean energy procurements was put  
14 together by TCR based on market research and reviewed by the Quantitative  
15 Evaluation Team. TCR also included projected clean energy additions that would be  
16 procured in response to state mandates in addition to the procurements described  
17 above. The Capacity Expansion module of the ENELYTIX model, based on future  
18 economic and system conditions, also adds new capacity and retires existing capacity  
19 from a set of generic resources that are based on cost and operational data obtained  
20 from ISO-NE Cost of New Entry (“CONE”) studies, Energy Information

1 Administration (“EIA”) and National Renewable Energy Laboratory (“NREL”) with  
2 upper limits on buildouts sourced from NREL studies.

3  
4 **2. Specific Generating Unit Retirements** – In addition to the generic retirements  
5 described above, specific retirements in the model are sourced from the ISO-NE  
6 retirement tracker with inputs from de-list bids per the results of the FCA.

7 Retirements of nuclear generating resources are typically assumed based on the  
8 termination of their Nuclear Regulatory Commission licenses which were discussed  
9 with the Quantitative Evaluation Team. Certain existing units are also assumed to  
10 retire based on their ability to survive economically.

11  
12 **3. Transmission Topology** – ENELYTIX utilizes a full nodal representation of the ISO-  
13 NE transmission topology and electric characteristics of transmission facilities within  
14 ISO-NE based on a 2025 summer peak power flow case obtained from ISO-NE. The  
15 transmission topology includes individual line specifications and ratings as well as  
16 constraints associated with interface limits established by the ISO as well as  
17 contingency constraints associated with the security constrained dispatch of resources  
18 consistent with the manner in which the ISO operates the grid.

19  
20 **4. Load Forecast** – TCR developed the load forecast for each of the eight load zones  
21 within ISO-NE utilizing a combination of ISO-NE CELT forecasts through 2031 and

1 extrapolations beyond that year. The extrapolations for load are based on long term  
2 forecasts obtained from EIA Annual Energy Outlook (“AEO”) 2022 as well as a curve  
3 fit extrapolation of electrification load utilizing load shapes from a separate load  
4 study. Annual forecasts for energy and peak loads are translated into hourly forecasts  
5 using a combination of historical hourly data and generation shapes from the load  
6 study. The TCR load forecast also accounts for load reductions due to energy  
7 efficiency (“EE”) measures as well as behind the meter photovoltaic (“BTMPV”)  
8 resources. The final load is called the Net Energy for Load (“NEL”) which is the load  
9 against which generators in the modeled footprint will be dispatched against. TCR  
10 models BTMPV resources as being in front of the meter to facilitate RPS accounting  
11 as well as to better capture the impacts of shifting peaks due to BTMPV penetration  
12 over the study period.

13  
14 **5. Installed Capacity Requirements** – Installed capacity requirements in ENYLYTIX  
15 reflect resource adequacy within various import and export constrained zones within  
16 ISO-NE. TCR reviewed historical resource adequacy parameters reported by ISO-NE  
17 as well as the results for forward looking resource adequacy for the FCA and  
18 developed projections for future capacity requirements based on the peaks projected  
19 in the load forecasts. TCR also modelled resource contribution to installed capacity  
20 based on FCA qualified capacity as well as additional assumptions for capacity  
21 contribution of future generation based on the analysis of the latest FCA results.

1       **6. RPS Requirements** – TCR includes Class 1 renewable portfolio standard (RPS)  
2       requirements of each New England. The calculation of RPS requirements for each  
3       state equals the forecast load of load serving entities (“LSEs”) obligated to comply  
4       with that state’s RPS multiplied by that state’s annual Class 1 RPS percentage target.  
5       The forecast load of LSEs is the NEL for each state reduced by the load exempt from  
6       the RPS in that state. Additional RPS inputs are state-specific resource eligibility,  
7       limitations on certificate banking and borrowing, and alternative compliance payment  
8       prices. These assumptions are sourced from state specific RPS regulations.

9  
10       **7. Massachusetts CES and annual cap on Carbon Emissions** – TCR included the  
11       Massachusetts regulation that caps carbon emissions from electric generating units  
12       located in Massachusetts and included the Massachusetts Clean Energy Standard  
13       (CES) requirements that are incremental to the multi-state RPS requirements.

14  
15       **8. Emission Allowance Prices** – TCR used the CO2 allowance price assumptions based  
16       on Regional Greenhouse Gas Initiative (“RGGI”) projections from WoodMackenzie’s  
17       (“WoodMac”) 2022 North American gas forecasts. These prices are imposed on all  
18       carbon emitting generators in ISO-NE.

19



1       **9. Generating Unit Operational Characteristics** – TCR developed assumptions for  
2       the key physical and operating cost parameters of all the types of generating units and  
3       resources that are included in the model. These include thermal units, nuclear units,  
4       hydro, pumped storage hydro, wind, and solar PV. Operating characteristics of  
5       existing units are sourced from historical operations which were obtained from S&P  
6       Global while renewables were sourced from NREL.

7  
8       **10. Fuel Prices** – TCR developed forecasts of monthly spot gas prices for each gas-fired  
9       unit in New England based upon the spot prices at the market hub which serves the  
10      unit. The four relevant hubs are Algonquin, Tennessee Zone 6, Tennessee Dracut and  
11      Iroquois Zone 2. The forecasts are based upon WoodMac’s 2022 North American gas  
12      projections of Henry Hub prices plus projections of the basis differential to each hub  
13      from the Henry Hub. The basis differentials are obtained from the forward prices and  
14      assumed to be held constant based on the last year of available data. The projections  
15      of distillate and residual to electric generators in New England are also drawn from  
16      WoodMac forecasts.

17  
18      The full details of the ISO-NE input assumptions used to develop the Base Case model  
19      are provided as Appendix D.1 to the TCR Evaluation Report provided as Attachment  
20      NNK-1 to my testimony.

21

1 **Q. Does the TCR Base Case also include NYISO?**

2 A. Yes, the TCR Base Case model represents the joint footprint of ISO-NE and NYISO  
3 system.

4

5 The dynamics and operation of the ISO-NE system is influenced by the operation of the  
6 NYISO system through the flows and resulting price impacts across the three  
7 interconnections that exist between the two relatively similar sized systems. To capture  
8 future impacts to prices and flows across these interconnections, TCR models the full  
9 NYISO system in conjunction with ISO-NE with the interconnections modeled as  
10 dynamic bi-directional interchanges.

11

12 TCR developed comparable input assumptions for the NYISO footprint using similar  
13 approaches and equivalent sources which were also presented and discussed with the  
14 Quantitative Evaluation Team. Those are detailed in Appendix D.2. to the TCR  
15 Evaluation Report provided as Attachment NNK-1 to my testimony.

16

17 **Q. How is ENELYTIX used in the development of the Base Case model?**

18 A. ENELYTIX is a state-of-the-art cloud-based energy market simulation environment  
19 which is built on Power System Optimizer (“PSO”), which is an advanced simulator of  
20 power markets. ENELYTIX has the capability to model the decision processes used in a  
21 wide range of power planning and market structures including long-term system

1 expansion using its Capacity Expansion module, as well as the hourly dispatch of markets  
2 using its Energy and Ancillary Services (“E&AS”) module, both of which are used in the  
3 development of the Base Case model.

4  
5 TCR translates the finalized modeling input assumptions described above into data  
6 structures that are compatible with the ENELYTIX and combined with other default input  
7 data such as renewable shapes and thermal operating characteristics that are sourced from  
8 the ENELYTIX vendor, NEG. These inputs are sequentially processed through the  
9 Capacity Expansion module and the E&AS module within ENELYTIX to obtain two  
10 Base Case models – a Base Case Capacity Expansion model which projects long term  
11 changes to the capacity mix over the study period, and a more granular Base Case E&AS  
12 model which utilizes the outputs from the Capacity Expansion model and produces  
13 results of the hourly operation of the system over the same period. These two models  
14 jointly represent the Base Case model, and the resulting market projections are the Base  
15 Case projections.

16  
17 It should be noted that the input assumptions developed for the Base Case model would  
18 also be used for all Proposal Case models developed.

19

1 **Q. Please describe the Base Case Capacity Expansion module.**

2 A. The ENELYTIX Capacity Expansion module determines an optimal electric system  
3 expansion in New England and New York over a long-term planning horizon. Its  
4 objective function is to minimize the net present value of the total cost, i.e., capital, fuel  
5 and operating and maintenance costs, of the generation fleet serving the wholesale market  
6 within the ISO-NE and NYISO electrical footprint subject to resource adequacy,  
7 operational and environmental constraints.

8

9 In terms of inputs, the Base Case Capacity Expansion module utilizes all of the categories  
10 of input assumptions that were developed but with simplifications on chronological  
11 operations and transmission which allow the model to optimize over the 25+ year look-  
12 ahead period.

13

14 The output of the Base Case Capacity Expansion module is primarily the projection of  
15 long-term changes to the systems' generation mix over the study period. These include  
16 year-on-year changes to the capacity mix reflecting generic resource additions and model  
17 selected retirements as well as providing projections for environmental compliance costs  
18 against environmental constraints enforced in the model such as prices for RECs.

19

20 The results from the Capacity Expansion module are processed as incremental inputs to  
21 the ENELYTIX E&AS module.

1 **Q. Please describe the E&AS module.**

2 A. The ENELYTIX E&AS module simulates the hourly Day-Ahead market operations  
3 within the footprint of the ISO-NE and NYISO power systems and markets. This model  
4 implements hourly chronological simulations of the Security Constrained Unit  
5 Commitment (SCUC) and Economic Dispatch (SCED) processes, as well as the structure  
6 of the ancillary services in ISO-NE and NYISO markets.

7  
8 In terms of inputs, the Base Case E&AS module utilizes all the categories of input  
9 assumptions that were developed except for those categories of inputs that were solved  
10 for in the Capacity Expansion module, such as resource adequacy and RPS. In addition  
11 to the Base Case input assumptions, the E&AS module receives incremental inputs from  
12 the projections of the Base Case Capacity Expansion module, including projected  
13 changes to the generation mix and other compliance prices.

14  
15 The Base Case E&AS module is an aggregation of the individual 25+ annual E&AS  
16 module runs that run more granular hourly simulations year-by-year over the study  
17 period. The output of the Base Case E&AS module is the projection for hourly  
18 chronological dispatch and nodal prices against the full representation of the transmission  
19 topology, as well as additional market attributes such as unit generation, emissions etc.  
20 that are required for the analysis.

21

1 **Q. How was the complete Base Case model developed and finalized?**

2 A. TCR utilized the weekly meetings to provide routine updates to the Quantitative  
3 Evaluation Team on the development of the Base Case model, providing preliminary  
4 results where available and flagging any modeling issues in advance that would need to  
5 be addressed once a full set of results were available. TCR presented the first set of  
6 comprehensive modeling results to the Quantitative Evaluation Team on February 15,  
7 2023, focusing on the results of the Base Case Capacity Expansion model.  
8 Having internally reviewed the model for data errors and consistency, TCR provided  
9 explanations and justifications for the model results identifying the key drivers for those  
10 results where possible. TCR worked with the Quantitative Evaluation Team to address  
11 any concerns with the reasonableness of results and incorporated that feedback into  
12 subsequent model runs. This was an iterative process that involved the development of  
13 several versions of the Capacity Expansion model including sub-variants of versions that  
14 tested impacts of modifying specific input assumptions.

15  
16 Once the Base Case capacity expansion results were agreed upon, TCR proceeded with  
17 running several test years for the Base Case E&AS model, which were similarly  
18 presented and discussed with the Quantitative Evaluation Team. Once these results were  
19 deemed reasonable TCR ran the E&AS model over the full analysis period and presented  
20 those results to the Quantitative Evaluation Team for final approval.

21

1 **Q. What were the outcomes of the final Base Case model?**

2 A. The results of the final Base Case model are included as Appendix C to the TCR  
3 Evaluation Report provided as Attachment NNK-1 to my testimony. These results  
4 provide what was considered to be a reasonable projection of changes to the system  
5 capacity mix over the study period and the expected energy and environmental attribute  
6 prices against the input assumptions and constraints imposed on the system. Below, I  
7 will discuss some of the key Base Case model results. The data that is summarized in the  
8 charts below form basis for the calculations used in the Price Analysis.

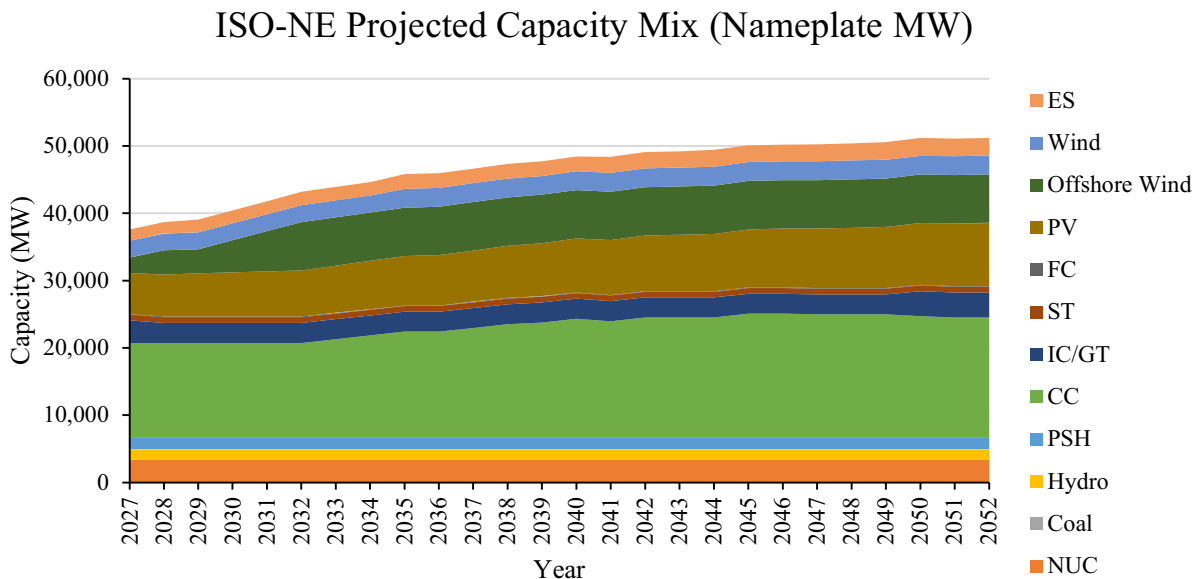
9

10 **▪ Overview of selected results from the Base Case Capacity Expansion model**

11 The projected capacity mix in ISO-NE, resulting from the assumed and model selected  
12 additions and retirements, is summarized in the figure below.<sup>1</sup> The projections indicate  
13 overall growth in installed capacity in line with increasing load and capacity requirements  
14 but do not see any significant variation in terms of capacity mix.

---

<sup>1</sup> Figure Abbreviations: ES = Energy Storage, PV – Photovoltaic, FC = Fuel Cell, ST = Steam Turbine, IC = Internal Combustion, GT = Gas Turbine, CC = Combined Cycle, PSH = Pumped Storage Hydro, NUC = Nuclear



1  
2 Renewables see significant growth in the near term in the form of offshore wind additions  
3 assumed in the Base Case. These offshore wind additions are just over 7GW of  
4 nameplate capacity that are projected to come online by 2032 in response to various state  
5 mandated procurements. Additional renewable additions include the projected growth in  
6 distributed PV resources as well as some additional wind built by the Capacity Expansion  
7 model. The rest of the additions are thermal with some energy storage built to provide  
8 capacity in regions with restricted thermal buildout.

9  
10 The environmental attribute markets respond to the influx of clean energy resulting in the  
11 regional environmental attribute market having surplus supply driving renewable energy  
12 credit (“REC”) prices to the assumed floor price of \$2/MWh in the near term. The prices



1 recover with growing RPS requirements and load growth, after which the prices settle at  
2 their respective alternative compliance payments (“ACP”).

3  
4 The Capacity Expansion model projects a significant amount of capacity turnover with  
5 the model choosing to retire as much as 9.4 GW of aging and underutilized thermal  
6 capacity and replacing it with a comparable quantity of high efficiency combined cycle,  
7 peaker and energy storage units.

8  
9 TCR also enforces an emission limit that suppresses in-state emissions in the ENELYTIX  
10 model by applying a regional constraint which results in the reduction of emissions in the  
11 Capacity Expansion module.

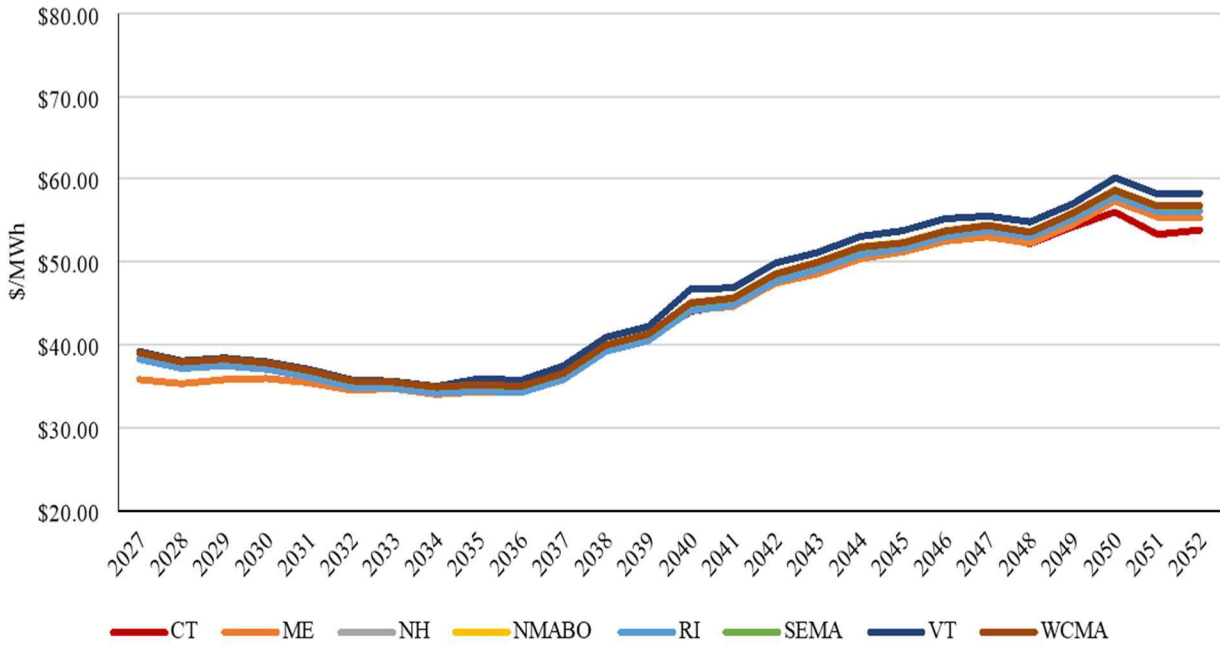
12  
13 The resulting year-on year changes to the capacity mix, the compliance price for  
14 environmental attributes, and the premiums on carbon associated with the emission  
15 constraint are carried forward into the Base Case E&AS model.

16  
17 **▪ Overview of results from the Base Case E&AS Model**

18 The annual average locational marginal prices (“LMPs”) projected in the E&AS models  
19 show near-term depression of energy prices, resulting from the increased penetration of  
20 offshore wind discussed above. These prices recover and grow in the 2040s as increasing  
21 load is met by natural gas fired generation whose marginal cost increases in time with

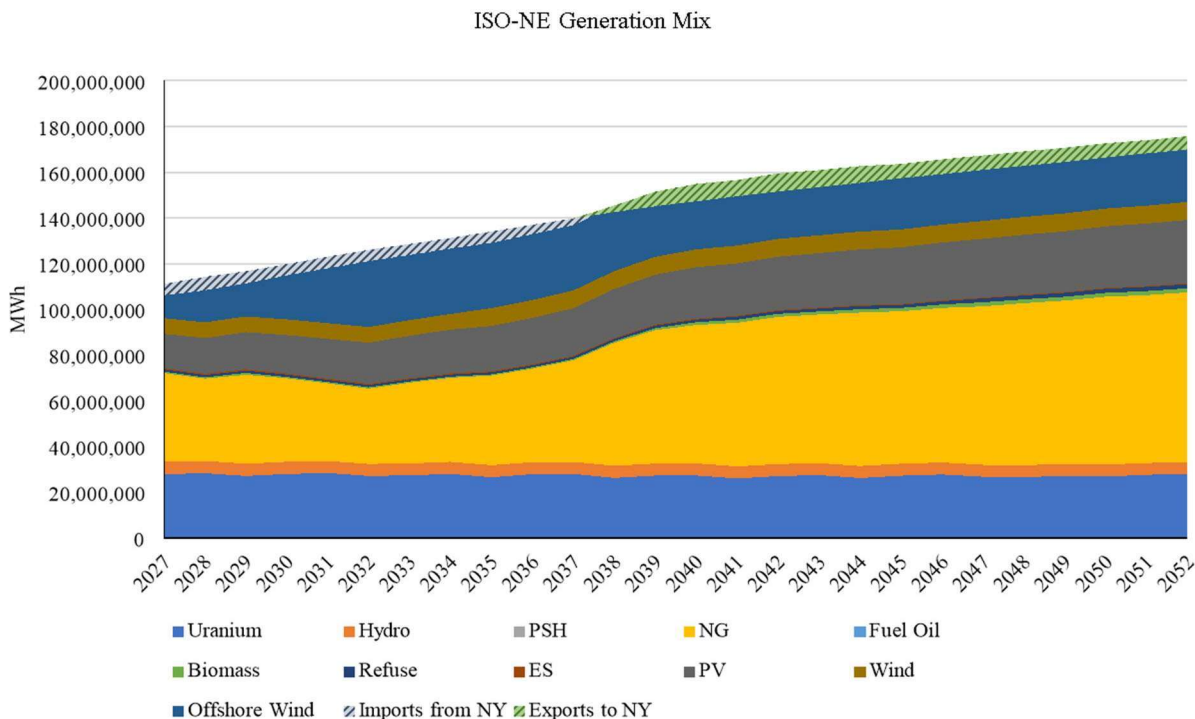
1 growing RGGI prices and constraints on pipeline capacity which drive up prices in the  
2 winter periods.

ISO-NE Annual Average LMPs by Energy Area



3

1 The figure below depicts the annual ISO-NE generation mix by fuel source as well as  
2 imports from and exports to NYISO against the ISO-NE total load.<sup>2</sup>



3

4

5

**B. Phase 1B – Development of the Quantitative Protocol**

6 **Q. What is the Quantitative Protocol?**

7 A. The Quantitative Protocol is a document that establishes and consolidates the various  
8 procedures and processes that would guide TCR and the Quantitative Evaluation Team to  
9 carry out the quantitative evaluation of bids during the second phase. The Quantitative  
10 Protocol was developed and finalized prior to any knowledge of the bids and remained

<sup>2</sup> Figure Abbreviations: PSH = Pumped Storage Hydro, NG = Natural Gas, ES = Energy Storage, PV = Photovoltaic, NY = New York.

1 unmodified over the course of the evaluation process. It can be found as Appendix B.1 to  
2 the TCR Evaluation Report provided as Attachment NNK-1 to my testimony.

3  
4 From a general perspective, the Quantitative Protocol provides context to the overall  
5 OSW RFP and bid evaluation process as well as guidance on how the outcomes of the  
6 quantitative metrics calculated as part of the Price Analysis will be combined with the  
7 qualitative metrics calculated in the Non-Price Analysis to develop the final scores and  
8 rank the bids.

9  
10 From a quantitative evaluation standpoint, the Quantitative Protocol identifies and  
11 defines several critical analysis inputs such as the study period, financial assumptions,  
12 and the analytic structure underlying the development and use of market simulation  
13 models. It also establishes the specific categories of quantitative metrics that would be  
14 used to evaluate each of the bids received, as well as provide a detailed step-by-step  
15 description of the methodology and inputs used to calculate the costs and benefits  
16 associated with each of the quantitative metrics.

17  
18 **Q. What was the study period and why was it selected?**

19 A. The study period selected for the evaluation was 26 years from the beginning of 2027  
20 through the end of 2052. This period was selected in anticipation of projects, which are  
21 the subject of the bids, will have a commercial operation date between January 1, 2027

1 through December 31, 2032 and would be able to model the full range of bids over their  
2 maximum possible 20-year PPA periods.

3  
4 **Q. What were the financial assumptions outlined in the Quantitative Protocol?**

5 A. All costs and prices used in the quantitative analysis would be made in real 2023 constant  
6 dollars (“2023\$”). All input modeling and bid data was first converted from either the  
7 source year dollar value or from a nominal dollar value to the 2023\$ equivalent before  
8 being used in the modeling and analysis.

9  
10 Historical dollar values were converted to 2023\$ based on historical reported rates of  
11 inflation. Future dollars are converted to 2023\$ based on an assumed projection of  
12 inflation that was directly sources from WoodMac’s assumptions for inflation and were  
13 corroborated with other sources of projections including the long-term projections from  
14 the Congressional Budget Office (“CBO”) as well as the EIA AEO 2022 macroeconomic  
15 assumptions. The rate of inflation was projected to be higher in the near term but settles  
16 at a 2% rate by 2027 and is held at that rate thereafter.

17  
18 Finally, the model and analysis assume a Nominal discount rate of 6.97% which the  
19 Company provided to TCR. This discount rate is used in the analysis to aggregate  
20 streams of future costs and revenues to a net present value.

21

1 **Q. What are the quantitative metric categories that are described in the Quantitative**  
2 **Protocol?**

3 A. There are three categories of metrics described in the Quantitative Protocol -  
4 Direct Contract Costs and Benefits and the Indirect Costs and Benefits  
5 and additional costs and benefits.

6

7 **Q. What are the Direct Contract Costs and Benefit metrics?**

8 A. Direct Contract Costs and Benefits provide a mark to market comparison of the cost of  
9 energy and RECs obtained from the proposal. The direct cost of energy and RECs equal  
10 the quantity of hourly energy/RECs produced by the generating unit in the bid being  
11 analyzed multiplied by the as-bid bundled Power Purchase Agreement (“PPA”) price of  
12 energy and RECs for that hour. These direct costs are offset by the direct benefits of  
13 energy and RECs. The direct benefits of energy equal the hourly energy generated by the  
14 generating unit multiplied by the hourly nodal LMP at the point of delivery. The direct  
15 benefits of RECs equal the avoided costs of purchasing RECs valued at Base Case REC  
16 prices to meet Rhode Island Renewable Energy Standard (“RES”) requirements plus the  
17 revenues from sale RECs in excess of the RES requirement valued at Proposal Case REC  
18 prices. The direct costs and benefits are calculated annually over the PPA period of the  
19 bid unit(s) being evaluated.

20

1 **Q. What are the Indirect Costs and Benefit metrics?**

2 A. Indirect Costs and Benefits measure the impacts of the bid on regional prices for energy  
3 and RECs. The indirect energy price benefits are the savings from changes to wholesale  
4 energy market costs paid for load in Rhode Island, i.e., from changes to LMPs in Rhode  
5 Island in the Proposal Case relative to energy market costs in Rhode Island in the Base  
6 Case. The indirect REC Price Benefits are the savings from changes to the costs paid by  
7 Rhode Island utilities<sup>3</sup> for Class 1 RECs based on expected market prices in the Proposal  
8 Case relative to the Base Case. This metric calculates the savings associated with RECs  
9 obtained by the Rhode Island utilities to meet the state's RPS requirements incremental to  
10 the RECs delivered by the Proposal and through existing long-term contracts. The  
11 Indirect Costs and Benefits are also calculated annually, beginning with the commercial  
12 operation date under the PPA but extending through to the end of the analysis period.

13

14 **Q. What are the additional costs and benefit metrics?**

15 A. Additional cost and benefit metrics were considered and detailed in the Protocol  
16 document but were not included in the calculation of total net benefits. These metrics  
17 included the benefits associated with the reduction of greenhouse gas emissions  
18 ("GHGs") as well as the potential value of the project's contribution to reducing winter  
19 electricity price spikes. Both of these metrics were considered as supporting metrics that

---

<sup>3</sup> The calculated benefits reflect the entire electric load for the State of Rhode Island, including customers of The Block Island Utility District d/b/a Block Island Power Company and Pascoag Utility District.

1 could be calculated from the available market projections and provided for information  
2 only.

3  
4 **Q. How are the various categories of metrics used in evaluating the Bidder's Proposal?**

5 A. Only the Direct Contract Costs and Benefits and the Indirect Costs and Benefits were  
6 used in the Proposal evaluation process with some of the additional supporting metrics  
7 being provided for information only.

8  
9 TCR developed an Excel-based workbook (the "Quantitative Evaluation Workbook")  
10 which was programmed to categorically calculate the metrics required to evaluate each  
11 bid and to produce each Proposal Case Result Workbook during the second phase of the  
12 evaluation process. The Quantitative Evaluation Workbook collected the annualized  
13 projections from the modeling of the Base Case and Proposal Case models and calculated  
14 the annual values of each of the direct and indirect cost and benefit metrics over the study  
15 period per to the steps outlined in the Quantitative Protocol. These annual streams of  
16 costs and benefits representing the metrics were then aggregated on a net present value  
17 basis by means of a nominal discount rate after which they are unitized ("\$/MWh") by  
18 dividing them by the net present value of the Proposal's generation.

19  
20 Finally, the unitized values of all direct and indirect benefits and costs were aggregated to  
21 obtain the total unit net benefit which is the core quantitative measure of comparison of  
22 the various bids. This \$/MWh value is the single representative value that measures the



1 cost-effectiveness of each Proposal against the Base Case and also serves as the key  
2 quantitative comparator between the various bids.

3  
4 **Q. Please describe the development of the Quantitative Protocol Document.**

5 A. The development of the Quantitative Protocol began with the review of the Quantitative  
6 Protocol that was developed and implemented for the most recent Rhode Island 2018  
7 clean energy RFP. The evaluation framework outlined in that RFP process served as a  
8 starting point for the development of the framework that would be applied for the 2022  
9 RI offshore wind RFP. TCR reviewed the earlier document in detail and produced an  
10 updated version to be used going forward that reflected the requirements of the current  
11 offshore wind procurement. This included incorporating changes that were part of the  
12 updated RFP, such as an update to the distribution of points between price and non-price  
13 factors, as well as changes reflecting the circumstances of the evaluation – such as  
14 updates to the study period and financial assumptions. The protocol also included  
15 updates to methodologies based on lessons learned such as revisiting the point scaling  
16 methodology and making finer refinements to the steps involved in certain metrics.  
17 TCR identified all areas that required updates or had gaps and reviewed them in detail  
18 with the Quantitative Evaluation Team prior to implementing them into the Quantitative  
19 Protocol document.

20

1 **Q. How was the Quantitative Protocol finalized?**

2 A. Over the course of the weekly meetings, TCR maintained the master version of the  
3 Quantitative Protocol document, which was updated each time the Quantitative  
4 Evaluation Team made a decision on any of the key areas identified by TCR or by the  
5 Quantitative Evaluation Team. The Quantitative Protocol document was iteratively  
6 updated until all outstanding issues were resolved after which a final version was  
7 circulated and approved by the Quantitative Evaluation Team. The final Quantitative  
8 Protocol is included as Appendix B.1. to the TCR Evaluation Report, which is  
9 Attachment NNK-1 to my testimony.

10

11 **C. Phase 2 – Bid Evaluation**

12 **Q. Please describe the second phase of the TCR Price Analysis.**

13 A. Starting with the opening of bids, the efforts in the second phase of the analysis involved  
14 three key activities - the review of bids received in response to the OSW RFP, evaluation  
15 of bids as part of the Stage Two Analysis, and any additional analysis required as part of  
16 the Stage Three evaluation process.

17

18 **Q. Please describe TCR’s process of reviewing the bids received in response to the**  
19 **OSW RFP.**

20 A. One bidder submitted a proposal in response to the OSW RFP for one single physical  
21 buildout for an offshore wind in terms of capacity and timing and included six price

1 offerings (each price offering represents a “Proposal Case”). TCR reviewed the single  
2 bid for completeness primarily from an evaluation standpoint, assessing whether all the  
3 data required to undertake the modeling and Price Analysis was provided and whether the  
4 data was clear and consistent with expected values and comparable data points within the  
5 bid itself. TCR relied on the data provided by the Bidder in the Certification, Project and  
6 Pricing Data (“CPPD”) form, which was an attachment to the OSW RFP designed to  
7 obtain specific data that would assist in the quantitative evaluation of bids. In addition to  
8 reviewing the data in the CPPD form, TCR also reviewed relevant sections of the main  
9 bid document. TCR reported back on its findings to the Quantitative Evaluation Team  
10 and assisted the Company in drafting clarifying questions that were sent to the Bidder as  
11 well as reviewing their responses.

12

13 **Q. How did TCR utilize the data submitted by the Bidder?**

14 A. TCR utilized the data from the Bidder to develop and run the Proposal Case models  
15 which were then used to calculate the quantitative metrics associated with the Proposal  
16 Case. The input assumptions and modeling setup used in the Proposal Case are identical  
17 to that of the Base Case except for the following two categories.

18 ➤ **Generation:** Each Proposal Case model included the offshore wind project as  
19 proposed by the Bidder. In the case of the single bid received, this included the

20

[REDACTED]

21

[REDACTED]

1

[REDACTED]

2

[REDACTED] Additional operating and cost data such as the hourly generation profiles, contribution to capacity and backing PPA prices were also included in the model.

4

All of these inputs were sourced from the bidder’s CPPD file and processed by TCR into a format compatible with ENELYTIX.

6

➤ **Transmission:** Each Proposal Case included proposed changes to the transmission topology including [REDACTED]

8

[REDACTED] These changes were reviewed by the Company’s transmission team and provided to TCR as inputs to the model. The Company transmission team also reviewed these transmission changes for impacts to Base Case constraints such as impacts to the contingency constraints and provided those as inputs to TCR.

13

14 **Q. Describe the steps involved in the evaluation of each bid as part of the Stage Two**  
15 **Price Analysis.**

16 A. Once TCR obtained all the necessary modeling inputs, TCR translated those into inputs  
17 compatible with the ENELYTIX modeling environment using processes similar to those  
18 used for the development of the Base Case. TCR developed the Proposal Case model by  
19 first re-running the Capacity Expansion module, tracking for changes against the Base  
20 Case capacity expansion projections resulting from the addition of the proposal unit  
21 generation and transmission. Once these projections were reviewed internally for

1 consistency and completeness, then the hourly annual E&AS models were run over the  
2 study period. Results of the Capacity Expansion and E&AS models for each Proposal  
3 Case were compared against the Base Case from both a qualitative and quantitative  
4 standpoint to ensure reasonableness of results. Projections from the Proposal Case model  
5 were processed and fed into the Quantitative Evaluation Workbook template that was  
6 developed in the first phase to produce a Proposal Case Result Workbook. The Proposal  
7 Case Result Workbook combines selected market projections from the Proposal Case  
8 model with selected market projections from the Base Case model, calculates each of the  
9 metrics defined in the Quantitative Protocol and finally arrives at the \$/MWh total unit  
10 net benefit metric that is attributable to the Proposal Case. The Proposal Case Result  
11 Workbook also contains several modeling result worksheets that provide additional  
12 insight into the projections from the specific Proposal Case that are not directly utilized in  
13 the calculation of quantitative metrics but are helpful for reference. TCR determined the  
14 need to run six separate Proposal Case models – one for each price offering proposed.  
15 After discussing the bids with the Quantitative Evaluation Team and ensuring all the  
16 input data was accurate and final, TCR developed a total of six Proposal Case  
17 ENELYTIX models whose projections were used to produce six Stage Two Proposal  
18 Case Result Workbooks.

19

1 **Q. What were the outcomes of the Stage Two Analysis?**

2 A. The Stage Two Analysis produced values for a \$/MWh total net unit benefits attributable  
3 to the Bidder's Proposal. This serves as the end point of the Price Analysis portion of the  
4 Stage Two analysis. Based on the framework set out in the Quantitative Protocol, TCR  
5 assigned the maximum of 75 points to the bid having the highest unit net benefit, i.e., the  
6 top bid. All the other bids were awarded three points less for each \$/MWh that its total  
7 unit benefit was lower than that of the top bid. The resulting quantitative scores for each  
8 of the six bids were combined with the points allocated through the Non-Price Analysis,  
9 which was a maximum of 25 points.

10

11 The final Stage Two results summary sheet is provided as Appendix A.1. of the TCR  
12 Evaluation Report, which is Attachment NNK-1 to my testimony. On an absolute dollar  
13 basis, it is estimated that the top ranked proposal would cost approximately \$3 billion in  
14 net present value real 2023 dollars relative to the counterfactual Base Case, indicating  
15 that selecting any of the Proposals received in response to the OSW RFP would result in a  
16 net cost to the Company's customers. In other words, the estimated benefits resulting  
17 from the procurement of the top ranked bid are not enough to offset the procurement  
18 costs.

19

1 **Q. Were there any additional steps analysis carried out in Stage 2?**

2 A. Yes. Upon the Company’s request, TCR produced alternative versions of each of the six  
3 Proposal Case Result Workbooks that utilized modified calculations for energy revenue  
4 during hours of negative LMPs at the Delivery Point. The modified calculations are  
5 described below and differ from the steps described in the Quantitative Protocol  
6 document. TCR produced alternate versions of each the six Proposal Case Result  
7 Workbooks produced during Stage Two which utilized the modified calculations and  
8 reported out different net unit benefits. The six original Proposal Case Result Workbooks  
9 were re-labeled and identified as “Gross” Result Workbooks while the new workbooks  
10 with modified metrics were labeled and identified as ”Net” Result Workbooks. Alternate  
11 versions of the final Stage Two result rankings were also developed. The original set  
12 result rankings (which ranked the original ‘Gross’ workbooks) remained unchanged and  
13 labeled as the “Gross” rankings. The results from the new “Net” versions of the  
14 workbooks were combined into comparable Stage Two “Net” rankings and provided as  
15 Appendix A.2 to the TCR Evaluation Report, provided as Attachment NNK-1 to my  
16 testimony.

17  
18 **Q. Explain the difference between the “Gross” Stage 2 Result Workbooks and the**  
19 **“Net” Stage 2 Result Workbooks.**

20 A. The hourly modeling of the Proposal Cases reported multiple hours where the proposed  
21 offshore wind was curtailed resulting in LMPs at the point of delivery being highly

1 negative. In the hours where LMPs were negative, the revenues from sale of energy  
2 would result in “negative revenues” or in other words, a net cost to the Company, which  
3 would be a cost incremental to the PPA price paid to the bidder to procure the energy.  
4 Section 2.2.4.2.2 of the OSW RFP outlines a mechanism that would require the bidder to  
5 credit the Company for the costs incurred by selling energy during hours of negative  
6 LMPs. In other words, the mechanism passes on market side costs to the bidder thus  
7 ensuring the net cost to the Company is never greater than the PPA price. The Company  
8 requested TCR to review this mechanism and implement it into the metric calculations  
9 that produced the net unit benefits. TCR analyzed the hourly revenues and added  
10 intermediate calculations steps that would nullify the costs incurred by the Company in  
11 hours of negative LMPs and adjusted the metric that reported out the revenues from the  
12 sale of energy. The updated metric value resulted in an increase in the net revenues and  
13 an increase to the overall net unit benefit of each of the Proposal Cases relative to their  
14 original “Gross” counterparts.

15  
16 **Q. What does the quantitative net unit benefit difference between the “Gross” Stage 2**  
17 **results and the “Net” Stage 2 results represent?**

18 A. The “Net” rankings used results from the “Net” Result Workbooks whose difference was  
19 the method by which the metric measuring the revenues from the sale of energy are  
20 calculated. Thus, the updated “Net” Result ranking for the six Proposal Cases resulted in  
21 no change to the relative ordering of the six Proposals compared to their original “Gross”



1 ranking counterpart. On an absolute dollar basis, the top ranked Proposal Case using a  
2 “Net” calculation would cost approximately \$1.9 billion in net present value real 2023  
3 dollars relative to the counterfactual Base Case. While this is a significant improvement  
4 over the “Gross” assessment, it still represents a scenario where the procurement costs  
5 outweigh the estimated benefits.

6  
7 **Q. Having completed Stage Two, what occurred in Stage Three analysis?**

8 A. Stage Three of the evaluation anticipated the need for two types of additional analysis.  
9 The first type of analysis was to assess the impacts and metrics associated with  
10 combining multiple Proposal Cases into a portfolio of Proposal Cases. This was not  
11 possible given the single Project configuration that was received. The second type of  
12 analysis was to test sensitivities that would re-evaluate Proposal Cases against a slightly  
13 different set of input assumptions on an as-required basis. Based on review of the six  
14 Proposal Cases run during Stage Two, the Quantitative Evaluation Team requested TCR  
15 to run an additional Sensitivity Case on one of the Proposal Cases evaluated in Stage  
16 Two.

17  
18 **Q. Please describe the Sensitivity Case done as part of Stage Three.**

19 A. The results of the Proposal Case modeling indicated significant curtailment of energy  
20 production from the proposed offshore wind unit that resulted in negative LMPs at and  
21 around the point of delivery. Further analysis by TCR indicated that the curtailments

1 were driven by transmission congestion, specifically contingency constraints that are  
2 enforced in the model which reflect the security constrained operation of the system. The  
3 combined impact of the curtailment and negative LMPs resulted in the calculated energy  
4 metrics to be significantly lower than expected. The bidder had identified a few  
5 overloads with its project in-service, but did not address those overloads with  
6 transmission upgrades. The Evaluation Team decided to model a few additional  
7 transmission upgrades to mitigate the identified overloads, since these transmission  
8 system upgrades would probably be made if the proposed project proceeded through the  
9 ISO-NE interconnection process and further into development. TCR implemented these  
10 incremental upgrades to one of the existing Proposal Case models and re-ran it as a  
11 Sensitivity Case using the same approach that used to run the Proposal cases. The results  
12 from the Sensitivity Case indicated that the hypothetical upgrades reduced transmission  
13 congestion as evidenced by higher LMPs and lower curtailments of offshore wind.

14  
15 **Q. What was the outcome of the Stage Three Analysis?**

16 A. The single Sensitivity Case was the only additional analysis that was conducted as part of  
17 the Stage Three analysis. The Sensitivity Case model was processed in a manner similar  
18 to that of a Proposal Case, i.e., the projections from the Sensitivity Case were used to  
19 develop a Stage Three Sensitivity Result Workbook which reported out various metrics as  
20 well as the \$/MWh total unit net benefit. TCR combined the results of the Stage Three  
21 Sensitivity Case with the result of the six Stage Two Proposal Cases to recalculate the

1 quantitative points and ranking and developed a revised Stage Three result ranking  
2 summary. The qualitative points for the Sensitivity Case remain unchanged from the  
3 Proposal Case. The final Stage Three result ranking is provided as Appendix A.3. to the  
4 TCR Evaluation Report, provided as Attachment NNK-1 to my testimony. TCR also  
5 produced a separate “Gross” and “Net” version of the Stage Three Result Workbook  
6 consistent with the Stage Two Proposal Cases and included the “Net” ranking as  
7 Appendix A.3 and A.4 to the TCR Evaluation Report, provided as Attachment NNK-1 to  
8 my testimony.

9  
10 The Sensitivity Case, i.e., the Case with the incremental upgrades, was the top ranked  
11 Proposal in Stage 3. On an absolute dollar basis, it is estimated that the Sensitivity case  
12 would cost approximately \$2.5 billion and \$1.7 billion in net present value real dollars  
13 using the “Gross” and “Net” frameworks, respectively. While the Sensitivity Case results  
14 in increased benefits, the overall outcome remains unaffected as the Proposal would still  
15 represent a net cost to customers.

16  
17 **IV. Conclusion**

18 **Q. Does this conclude your testimony?**

19 **A.** Yes it does.

**Testimony of  
Bradford Labine**

REDACTED

THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a RHODE ISLAND ENERGY  
RIPUC DOCKET NO. 23-32-EL  
IN RE: 2022 RHODE ISLAND OFFSHORE WIND RFP  
WITNESS: LABINE

---

**PRE-FILED DIRECT TESTIMONY**

**OF**

**BRADFORD LABINE**

**September 27, 2023**

**Table of Contents**

I. Introduction ..... 1

II. Review of the Bidder’s Proposal ..... 3

III. ACES Requirements and Threshold Requirements of the OSW RFP ..... 5

IV. Siting and Permitting Analysis ..... 10

V. Environmental and Fisheries Mitigation Plan Analysis ..... 12

VI. Conclusion ..... 14

1 **I. Introduction**

2 **Q. Mr. Labine, please state your name and business address.**

3 A. My name is Bradford Labine. My business address is 280 Melrose Street, Providence,  
4 Rhode Island 02907.

5

6 **Q. By whom are you employed and what is your position?**

7 A. I am employed by The Narragansett Electric Company d/b/a Rhode Island Energy (the  
8 “Company”) as the Manager of Environmental and Safety. In this role, I am responsible  
9 for managing a team of environmental and safety professionals to ensure the Company  
10 complies with its environmental regulatory obligations for its operations and construction  
11 activities, and that work is performed safely. My duties include contract management,  
12 regulatory compliance, horizon scanning, creating, and adhering to the Company’s  
13 environmental and safety plans and policies, finance and budget, auditing, as well as  
14 additional responsibilities relating to environmental and safety requirements.

15

16 **Q. Please describe your educational background and professional experience.**

17 A. I graduated from Franklin Pierce University in 1990 with a Bachelor of Science Degree  
18 in Biology and Biological Anthropology. I began my professional career in 1990 with  
19 Springborn Laboratories as a Principal Investigator for Environmental Fate and Product  
20 Chemistry studies. Since that time, I have worked in roles of increasing scope and  
21 responsibility within the environmental field, in both the private and public sector,

1 including ten years within the United States Department of Defense as an Environmental  
2 Manager and Project Manager. In June, 2022, I joined the Company in my current role.  
3 I also served for more than twenty years in the Reserves and National Guard of the  
4 United States Army as an Environmental Science and Engineering Officer.

5  
6 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**  
7 **(the “PUC”) or in any other jurisdiction?**

8 A. No.

9  
10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to describe the Company’s evaluation of certain siting  
12 and environmental issues associated with Bay State Wind, LLC’s (the “Bidder”) bid  
13 (the “Proposal”) for the Revolution Wind 2 Project (the “Project”) in response to the  
14 Company’s October 2022 Request for Proposals for Long-Term Contracts for Offshore  
15 Wind Energy (the “OSW RFP”). I also explain the support I provided during the  
16 Qualitative Factor development and evaluation, which included the Siting & Permitting  
17 Factor and the Environmental Factor, as discussed in the pre-filed direct testimony of  
18 Company witness James M. Rouland.

19



1 **Q. Please describe your role in the development of the Qualitative Factors that would**  
2 **be used to evaluate any bid proposals received.**

3 A. I participated in regular meetings with the Company’s qualitative evaluation team, as  
4 well as representatives from the Rhode Island Office of Energy Resources (“OER”) and  
5 the Rhode Island Division of Public Utilities and Carriers (“DPUC”), to develop the  
6 Siting & Permitting Factor and the Environmental Factor as part of the Qualitative  
7 Evaluation. I helped develop the criteria within the Siting & Permitting Factor and the  
8 Environmental Factor to ensure that bids received met the requirements of the Affordable  
9 Clean Energy Security Act, R.I. Gen. Laws ch. 39-31 (as so amended, “ACES”), as well  
10 as to effectively evaluate the viability of the Project.

11

12 **II. Review of the Bidder’s Proposal**

13 **Q. Please describe your role in the review of the Bidder’s Proposal.**

14 A. In reviewing the Bidder’s Proposal, I was the lead subject matter expert for two  
15 qualitative factors: (1) the Siting & Permitting Factor, which included the Site Status  
16 criterion and the Permits & Approvals criterion, and (2) the Environmental Factor, which  
17 included the Environmental Assessment & Mitigation criterion and the Environmental  
18 and Fisheries Mitigation Plan (the “EFMP”) criterion. These criterion are discussed in  
19 more detail in Mr. Rouland’s pre-filed direct testimony. I was also responsible for  
20 reviewing the Bidder’s Proposal to support the evaluation of the Siting & Permitting  
21 Factor and the Environmental Factor. I attended regular meetings with the Company’s

1 qualitative evaluation team, as well as OER and DPUC, to discuss evaluation results,  
2 propose clarifying questions for the Bidder and discuss the scoring of the Bidder's  
3 Proposal for the Siting & Permitting Factor and the Environmental Factor.

4  
5 When evaluating the Proposal, our team followed the evaluation process outlined in the  
6 OSW RFP and summarized in Mr. Rouland's pre-filed direct testimony. First, I reviewed  
7 the Proposal to confirm that Stage 1 Eligibility, Minimum Threshold, and other  
8 requirements were met for the Siting & Permitting Factor and the Environmental Factor.  
9 Next, I reviewed the Proposal and led the qualitative evaluation of the Siting &  
10 Permitting Factor and the Environmental Factor, working collaboratively with the  
11 evaluation team to understand how the Siting & Permitting Factor and the Environmental  
12 Factor related to the Bidder's Proposal. Third, I participated in discussions with the  
13 evaluation team on Stage 3 considerations, including project viability and the extent to  
14 which the Project would satisfy the goals outlined in ACES.

15  
16 **Q. Please describe your principal concerns with the siting, permitting and**  
17 **environmental aspects of the Bidder's Proposal.**

18 A. The Bidder's Proposal includes [REDACTED]  
19 [REDACTED] for the Project, but only provided detail on [REDACTED]  
20 [REDACTED]  
21 [REDACTED] The Bidder failed to identify and evaluate the alternative onshore

1 routes to transmit the power from the offshore substation to the point of interconnection.

2 As a result, the Bidder’s siting and permitting plan and associated stakeholder  
3 engagement plan for the Project’s onshore facilities were also uncertain.

4  
5 In addition, the Bidder’s EFMP failed to demonstrate an understanding of the local or  
6 regional fishing industry, failed to specifically identify the fisheries that will be impacted  
7 by the Project and the impact on those fisheries, failed to convey adequate stakeholder  
8 engagement or support within the fishing industry, and failed to commit to record  
9 sediment vibration and detect particle motion, all as required in the OSW RFP.

10 For these reasons, I concluded that the Bidder’s Proposal did not satisfy the Site Status  
11 and EFMP minimum threshold requirements in the OSW RFP

12

13 **III. ACES Requirements and Threshold Requirements of the OSW RFP**

14 **Q. Please summarize the requirements of ACES as they relate to your testimony.**

15 A. Section 39-31-6(a)(vii)(A) requires that to approve a contract under ACES, the PUC must  
16 find that the contract is commercially reasonable. Section 39-31-3 defines “commercially  
17 reasonable” to include, among other things, “a credible project operation date.” Section  
18 39-31-10(a) of ACES requires that proposals submitted in response to the OSW RFP  
19 include “at a minimum, information on potential environmental impacts through the  
20 submittal of environmental and fisheries mitigation plan, which shall include site and  
21 environmental data transparency requirements [and] a site layout plan and maps that

1 illustrate the location of all onshore and offshore equipment and facilities and clearly  
2 delineates the perimeter of the area where the offshore wind turbines will be placed.” In  
3 addition, to approve a contract under ACES, Section 39-31-6(a)(vii)(B) requires that the  
4 PUC find that the requirements of the solicitation have been met.

5  
6 **Q. Please summarize the OSW RFP Minimum Threshold requirements as they relate**  
7 **to the Siting & Permitting Factor and the Environmental Factor.**

8 A. The OSW RFP Minimum Threshold requirements relevant to the Siting & Permitting  
9 Factor and the Environmental Factor include all requirements set forth in Section 10(a) of  
10 ACES, among other requirements typical for procurements such as the OSW RFP.  
11 Specifically, the OSW RFP requires:

- 12 • that the bidder demonstrates that it has a federal lease for an offshore wind energy  
13 generation site, and a valid lease, or option to lease, for marine terminal facilities  
14 necessary for staging and deployment of major project components to the project site.
- 15  
16 • that the bidder must detail the proposed interconnection site and both the offshore and  
17 onshore route and describe what rights the bidder has acquired for both. The bidder  
18 must provide a detailed plan and timeline for the acquisition of any additional  
19 necessary rights. For each route, the bidder must (i) specifically describe the portions  
20 of the route where sufficient rights to locate the offshore delivery facilities have been  
21 acquired; and (ii) provide a detailed reasonable and achievable plan, with a timeline,

- 1 to acquire sufficient rights to the remainder of the offshore delivery facilities  
2 locations.
- 3
- 4 • that the bidder must provide a site layout plan and maps that illustrate the location of  
5 all onshore and offshore equipment and facilities and clearly delineate the perimeter  
6 of the area where the offshore wind turbines will be placed. The bidder must provide  
7 a map showing the location of the marine terminal facility and the proposed water  
8 routes to the project site.
  - 9
  - 10 • that the bidder must provide a map of the proposed interconnection that includes the  
11 path from the facility site to the interconnection location, all onshore transmission and  
12 interconnection locations and supporting details. The bidder must also provide maps  
13 for any alternate routes.
  - 14
  - 15 • that the bidder must provide a description of the area surrounding any land-based  
16 project areas, including transmission and interconnection facility locations.
  - 17
  - 18 • that the bidder must provide a description of all government-issued permits, approvals  
19 and authorizations that have been obtained or need to be obtained for the use and  
20 operation of the facility, the proposed onshore interconnection and transmission  
21 locations, and associated offshore delivery facilities and the location(s) of such

1 facilities. The bidder must provide copies of any permits, approvals and  
2 authorizations obtained, and a detailed plan and timeline to secure the remaining  
3 permits, approvals and authorizations for all offshore and onshore routes.

- 4
- 5 • that the bidder must provide copies of relevant leases, easements and related  
6 documents for the facility site, marine terminal, offshore delivery facilities and, if  
7 available, the transmission and interconnection location, or all applicable letters of  
8 intent if formal agreements have not been reached. The bidder must also provide a  
9 description of its stakeholder engagement plan.

10

11 The Minimum Threshold requirements for the bidder’s EFMP require:

- 12 • that the plan detail: (i) specific adverse environmental and fisheries impacts, impacts  
13 on historically marginalized communities, and impacts on environmental justice  
14 communities that are likely to result from the facility and measures the bidder will  
15 take to avoid, minimize, and/or mitigate those impacts; (ii) where specific measures  
16 are not known for a specific category of impact at the time of the bid, the bidder must  
17 describe how it will work collaboratively with the state and federal agencies and other  
18 stakeholders to define avoidance, minimization, and mitigation measures; and (iii) the  
19 bidder should provide a roadmap for the environmental and fisheries work to come  
20 and provide a degree of certainty that it is committed to working collaboratively with  
21 stakeholders to develop a cost effective and environmentally responsible project.

- 1 • that the EFMP include: (i) an agreement to make publicly available any information
- 2 or raw data and supporting metadata that is developed in furtherance of a facility and
- 3 relates to environmental characteristics, or use by wildlife, of any offshore, nearshore
- 4 or onshore areas, as well as any raw data sponsored or developed by the bidder
- 5 relating to the potential impacts of the construction, operation, or decommissioning of
- 6 its facility on the environment and wildlife of such areas; (ii) an agreement to follow
- 7 the guidance developed by the U.S. Bureau of Ocean Energy Management
- 8 (“BOEM”) for the mitigation of impacts from offshore wind energy projects on
- 9 commercial and recreational fishing communities; (iii) an agreement that the project
- 10 shall not commence activities that generate significant noise, including geophysical
- 11 survey work and impact pile driving during poor visibility conditions, unless an
- 12 alternate mitigation monitoring plan that does not rely on visual operation has been
- 13 determined to be effective to the extent compatible with practicality, worker safety
- 14 and applicable regulations; (iv) if the bidder will be using pile driving or other
- 15 methods of installation that result in high underwater noise levels, an agreement to
- 16 monitor underwater acoustics during foundation installation in order to (w) measure
- 17 changes in sound pressure levels, (x) record sound levels in the water column and
- 18 vibrations in the sediment, (y) detect particle motion, and (z) assess the effectiveness
- 19 of a noise mitigation system to reduce underwater noise generated during pile
- 20 installation. The bidder must provide the Company, six months prior to submission
- 21 of a Construction and Operation Plan to BOEM, with an “Underwater Acoustic

1 Monitoring Plan,” which must include commitments to allow raw and metadata to be  
2 publicly available no more than six months after installation completion detailing  
3 how data will be collected and made available as soon after collection as practicable  
4 for use by third-parties; (v) an agreement to report the number and value of claims for  
5 lost commercial fishing gear submitted, the number and value of those claims that are  
6 paid, and a general description of each incident and resolution in its quarterly  
7 progress reports using the best available data to assess impacts; and (vi) an  
8 agreement, if requested by the Rhode Island Department of Energy Management or  
9 the Rhode Island Coastal Management Resources Council, to participate in any multi-  
10 state or regional coordination and/or collaboration efforts.

11

12 **IV. Siting and Permitting Analysis**

13 **Q. Has the Bidder met the Minimum Threshold requirements for the Siting &**  
14 **Permitting Factor?**

15 A. No. The Bidder’s Proposal does not include sufficient detail or certainty regarding the  
16 Project’s landfall location, onshore substation location, and the alternate routes

17 connecting the landfall site to the point of interconnection. [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] Furthermore, the Bidder did

21 not provide information on the portions of the alternative routes for which the Bidder has



1 acquired sufficient rights to locate its offshore delivery facilities or a timeline to acquire  
2 sufficient rights to the remainder of the alternative routes.

3 The Company submitted two separate clarifying questions to the Bidder requesting that  
4 the Bidder clarify the absence of detail in its site layout plan; however, the Bidder failed  
5 to cure these issues with its responses to the Company's questions.

6  
7 **Q. Do you have any concerns regarding the siting and permitting of the Project?**

8 A. Yes. The plan and timeline to secure onshore rights were not sufficiently detailed. Given  
9 the ambiguity of the proposed locations and the lack of detailed investigations the Bidder  
10 did not demonstrate a reasonable likelihood of success in acquiring the property rights for  
11 the Project.

12  
13 **Q. As a result of the siting and permitting evaluation, did the Project demonstrate a**  
14 **“credible project operation date” as required under ACES?**

15 A. No. Section 39-31-6(a)(1)(vii)(A) of ACES requires that contracts approved under  
16 ACES must be commercially reasonable. The definition of “commercially reasonable”  
17 includes, among other things, having a credible project operation date, as determined by  
18 the PUC.

19  
20 The Bidder has not submitted a detailed and credible plan for the successful siting and  
21 permitting of the Project. The ambiguity in landfall location and onshore substation

1 location, and the related impacts on route selection, environmental assessments, and  
2 permitting all contribute to the finding that the Bidder's Proposal may not support a  
3 credible project operation date since there are numerous unknown variables that increase  
4 the risk of whether the Project can be built, thus impacting Project viability.

5  
6 For siting requirements, the Bidder has not demonstrated a reasonable likelihood of  
7 access to onshore site control rights on a timely basis, due to the ambiguity in site  
8 selection [REDACTED] For permitting  
9 requirements, the Bidder has not shown that it has engaged the local communities and  
10 environmental groups, and that they have been engaged or show support for the Project.  
11 In addition, the Bidder has not provided sufficient detail on the potential landfall and  
12 onshore substation sites and the impact on the permitting process.

13  
14 As a result of these uncertainties, the Company was unable to determine that the Bidder  
15 has demonstrated a credible project operation date.

16  
17 **V. Environmental and Fisheries Mitigation Plan Analysis**

18 **Q. Does the Bidder's EFMP meet the Minimum Threshold requirements in the OSW**  
19 **RFP?**

20 **A.** No. The Bidder provided an EFMP but does not clearly include a detailed  
21 characterization of the existing fisheries resources specific to the Project's location or the

1 region. The Bidder did not sufficiently detail the adverse impacts to commercial and  
2 recreational fishing specific to the proposed location of the Project. The submitted EFMP  
3 did not provide a roadmap for the environmental and fisheries work to come. Also, the  
4 Bidder did not agree to record vibrations in the sediment or to detect particle motion, as  
5 required by the OSW RFP, and failed to cure this deficiency in response to the  
6 Company’s clarifying questions to address the discrepancy.

7

8 **Q. Do you have any concerns with the stakeholder and fisheries engagement plans in**  
9 **the submitted EFMP?**

10 A. Yes. Although the Bidder has a robust stakeholder engagement plan and fisheries  
11 stakeholder engagement plan, Bidder has not provided sufficient evidence that its  
12 outreach adequately penetrated the local communities and environmental groups to gauge  
13 their level of support. Additionally, the Bidder did not provide a strategy to address  
14 dissent from stakeholders.

15

16 **Q. Does the Bidder’s EFMP introduce risk into the Project?**

17 A. Yes. Given the lack of certain elements in the Bidder’s EFMP, as described above, the  
18 lack of a detailed EFMP and firm stakeholder engagement and support introduces the  
19 potential for opposition from those fisheries and environmental groups in the future,  
20 which could endanger the Project or delay its schedule.

21

1 VI. Conclusion

2 Q. Does this conclude your testimony?

3 A. Yes.

**Testimony of  
Mark A. Stevens, P.E.**

REDACTED

THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a RHODE ISLAND ENERGY  
RIPUC DOCKET NO. 23-32-EL  
IN RE: 2022 RHODE ISLAND OFFSHORE WIND RFP  
WITNESS: STEVENS

---

**PRE-FILED DIRECT TESTIMONY**

**OF**

**MARK A. STEVENS, P.E.**

**September 27, 2023**

**Table of Contents**

I. Introduction ..... 1

II. Review of Bidder’s Interconnection and Transmission Upgrade Plans ..... 4

III. Impact of Interconnection and Transmission Issues on the Quantitative Evaluation of the Proposal ..... 10

IV. Conclusion ..... 13

1 **I. Introduction**

2 **Q. Mr. Stevens, please state your name and business address.**

3 A. My name is Mark A. Stevens. My business address is 280 Melrose Street, Providence,  
4 Rhode Island 02907.

5

6 **Q. Mr. Stevens, by whom are you employed and what is your position?**

7 A. I am employed by PPL Services Corporation (“PPL Services”) as a Principal Engineer in  
8 Transmission Planning. My primary responsibilities include performing and reviewing  
9 transmission, load-serving, generator interconnection and regulatory planning studies,  
10 working with engineering design groups, and supporting project siting and permitting on  
11 behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the  
12 “Company”). In addition, I participate in industry task forces and working groups at both  
13 the New England and wider regional levels.

14

15 **Q. Mr. Stevens, please describe your educational background and professional  
16 experience.**

17 A. I am a graduate of the University of Vermont, holding a Bachelor of Science Degree in  
18 Electrical Engineering. I am also a graduate of Northeastern University, holding a  
19 Master of Science Degree in Electrical Engineering. I have twenty years’ experience in  
20 power system planning and analysis. From September 1995 to October 2003, I was  
21 employed as an electrical engineer in the Energy Management System group in the



1 Dispatching Department at National Grid USA Service Company, Inc. (“National Grid”).  
2 Starting in 2003, I was a Senior Engineer in the Transmission Planning Department at  
3 National Grid. In 2007, I was promoted to Lead Engineer in the Transmission Planning  
4 Department. Most recently, I was a Principal Engineer in the Transmission Planning  
5 Department at National Grid. On May 25, 2022, PPL Rhode Island Holdings, LLC, a  
6 wholly owned indirect subsidiary of PPL Corporation, acquired 100 percent of the  
7 outstanding shares of common stock of the Company from National Grid, at which time I  
8 assumed my current position. Also, I am a Registered Professional Engineer in the  
9 Commonwealth of Massachusetts.

10  
11 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**  
12 **(the “PUC”)?**

13 A. Yes. I previously testified before the PUC in Docket No. 4360 in connection with the  
14 PUC’s Advisory Opinion to the Rhode Island Energy Facility Siting Board (“EFSB”) on  
15 the Company’s Interstate Reliability Project and in Docket No. 4737 in connection with  
16 the PUC’s Advisory Opinion to the EFSB on the Company’s application to construct the  
17 Burrillville Interconnection Project. I also provided written pre-filed testimony in Docket  
18 No. 4029 in connection with the Company’s Rhode Island Reliability Project that was  
19 pending before the EFSB in Docket No. SB-2008-2. I have also provided testimony  
20 before the Massachusetts Energy Facility Siting Board for transmission projects.

21

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to describe the Company's evaluation of certain  
3 transmission and interconnection issues identified in Bay State Wind's (the "Bidder")  
4 interconnection and transmission plans for the Revolution Wind 2 Project (the "Project")  
5 that it included with its bid package ("Proposal") in response to the Company's October  
6 2022 Request for Proposals for Long-Term Contracts for Offshore Wind Energy (the  
7 "OSW RFP").

8  
9 **Q. Please provide an overview of your involvement with the evaluation of the Project.**

10 A. I was responsible for evaluating the interconnection and transmission upgrade plans and  
11 studies provided by the Bidder, including the Bidder's Third-Party Feasibility, Delivery  
12 and Constraints, and Overlapping Impact studies. In my role, I participated on the  
13 qualitative and quantitative scoring teams responsible for evaluating the Proposal and  
14 created the power flow models that the Company's economic analysis consultant, Tabors  
15 Caramanis Rudkevich Inc. ("TCR") used in their economic analysis of the Proposal (the  
16 "Price Analysis"), which was part of the overall quantitative evaluation discussed in the  
17 pre-filed direct testimony of Company witness James M. Rouland.

18

1 **II. Review of Bidder’s Interconnection and Transmission Upgrade Plans**

2 **Q. Please summarize your principal concerns with the interconnection and**  
3 **transmission upgrade plans of the Bidder’s Proposal.**

4 A. I have two principal concerns with the interconnection and transmission aspects of the  
5 Bidder’s proposal. My first concern is that the Bidder’s third-party interconnection  
6 analysis did not properly follow the methodology required in the OSW RFP. The  
7 Minimum Threshold requirements relevant to interconnection and transmission require  
8 that all technical reports or studies closely follow the current ISO-NE interconnection  
9 process and detail any assumptions with respect to projects that are ahead of the proposed  
10 project in the ISO-NE Interconnection Queue. As described in the following paragraph,  
11 the Bidder did not closely follow the current ISO-NE interconnection process. Also, the  
12 Bidder’s Informative Deliverability Study<sup>1</sup> did not adhere to the assumptions included in  
13 Appendix F to the OSW RFP, in that it did not dispatch one of the required generators;<sup>2</sup>  
14 the Bidder did not provide information on how the Proposal would be affected if the  
15 Facility is connected to regionalized offshore transmission facilities; and the Bidder did  
16 not clarify if and how it had utilized the ISO-New England (“ISO-NE”) Forward

---

<sup>1</sup> The purpose of the Informative Delivery Study is to identify system constraints under specified generation dispatch conditions (as detailed in Appendix F of the OSW RFP).

<sup>2</sup> Appendix F assumptions require that the Bidder dispatch all the generators listed in Table 1 of Appendix F in its Informative Deliverability Study, among other requirements.

1 Capacity Auction (“FCA”) Wind Qualification Template spreadsheet in its Overlapping  
2 Impact Study, all of which were required under the OSW RFP.

3  
4 My second concern relates to the ISO-NE interconnection process. The Bidder’s Third-  
5 Party Feasibility Analysis did not properly approximate an ISO-NE Feasibility Study, in  
6 that it did not include pertinent interconnection queue positions that were ahead of the  
7 Project in the ISO-NE Interconnection Queue, nor did it account for upgrades needed to  
8 address potential transmission line overloads that were identified in the Third-Party  
9 Feasibility Analysis, as well as other potential overloads that were not identified. In  
10 addition, the Bidder did not include pertinent Capacity Network Resource queue  
11 positions in its Overlapping Impact Study, which did not properly approximate an ISO-  
12 NE Overlapping Impact Study.

13  
14 For these reasons, I concluded that the Bidder’s proposed project schedule for  
15 interconnection was uncertain, and its interconnection studies did not satisfy the  
16 requirements in the OSW RFP.

17  
18 **Q. How is the ISO-NE FCA Wind Qualification Template spreadsheet used in**  
19 **evaluating bids under the OSW RFP?**

20 A. The ISO-NE FCA Wind Qualification Template spreadsheet is used to approximate the  
21 qualified capacity of the Project for purposes of the ISO-NE Forward Capacity Market,

1 which would be used in the Bidder's Overlapping Impact Study. The Overlapping  
2 Impact Study identifies the required upgrades for the Project to deliver its qualified  
3 capacity without causing significant adverse impact to the transmission system.  
4

5 **Q. What are the Capacity Network Resource queue positions?**

6 A. The Capacity Network Resource queue positions represent generators that have an ISO-  
7 NE interconnection queue position and have requested to be a capacity network resource.  
8

9 **Q. How did the lack of these queue positions result in a deficiency in the Bidder's**  
10 **Overlapping Impact Study?**

11 A. The impact of the interconnection must be studied with the Capacity Network Resource  
12 queue positions modeled, so that the cumulative impact of the interconnection, in  
13 addition to the Capacity Network Resource queue positions, can be evaluated. The  
14 cumulative impact to the transmission system may be greater than the impact of the  
15 interconnection alone, and the upgrades required may be more extensive.  
16

17 **Q. What is the purpose of the Third-Party Feasibility Analysis in the evaluation of bids**  
18 **under the OSW RFP?**

19 A. The purpose of the Third-Party Feasibility Analysis is to evaluate the system impact of  
20 interconnecting the Project to the transmission system. It is significant to the evaluation

1 of bids in that it identifies the required upgrades for the Project to interconnect without  
2 causing significant adverse impacts to the transmission system.

3  
4 **Q. Please elaborate regarding the deficiencies with the Bidder's interconnection**  
5 **studies.**

6 A. The Bidder's Third-Party Feasibility Analysis and Overlapping Impact Analysis did not  
7 include pertinent queue interconnections, which should have been included for the  
8 analysis to properly approximate the ISO-NE interconnection process. Also, the Bidder  
9 did not address the cumulative cost and risk of interconnection network upgrades caused  
10 by or required by those earlier queued projects.

11  
12 Second, the Third-Party Feasibility Analysis identified transmission overloads but did not  
13 identify any upgrades required to address them. Moreover, there are additional  
14 transmission line segments, which should have been identified as overloaded, based on  
15 the results of previously performed ISO-NE feasibility studies. Yet, the Bidder did not  
16 identify transmission line overloads on those segments nor the required upgrades to  
17 address them. Because of these shortfalls, the Company did not consider the Bidder's  
18 Third-Party Feasibility Analysis credible.

19  
20 Third, as described earlier in my testimony, the OSW RFP requires that the Bidder  
21 provide an Informative Deliverability Study according to the criteria defined in

1 Appendix F of the RFP. The Bidder did not include all the required assumptions from  
2 Appendix F in its study. Specifically, the Bidder omitted one of the required queue  
3 interconnections in its Informative Deliverability Study.

4  
5 Finally, the Bidder's Third-Party Engineering and Cost Report detailing assumptions and  
6 costs for the onshore facilities required for the Project's interconnection did not  
7 sufficiently detail or provide cost estimates for [REDACTED]

8  
9 **Q. Based on the issues you described, has the Bidder submitted a detailed and credible**  
10 **plan for the successful design and operation of the interconnection and transmission**  
11 **facilities?**

12 A. No, the Bidder has not submitted a detailed and credible plan for the successful design  
13 and operation of the interconnection and transmission facilities. As discussed above, the  
14 Bidder's Third-Party Feasibility Analysis and Overlapping Impact Study did not include  
15 pertinent interconnection requests ahead of it in the interconnection queue; the Third-  
16 Party Feasibility Analysis did not identify upgrades required to address transmission line  
17 overloads; and the Bidder did not include all the required assumptions from Appendix F  
18 of the OSW RFP in its Informative Deliverability Study. When asked about these issues  
19 through clarifying requests, the Bidder did not cure the deficiencies. In addition, the  
20 Bidder did not address the cumulative cost and risk of interconnection network upgrades  
21 caused by or required by earlier queued projects with the same or related interconnection

1 point as the proposed Project. For those reasons, the Bidder's plan may not include all  
2 necessary upgrades and their associated costs and may not have properly identified  
3 additional cumulative cost risk; therefore, the Bidder's proposed project schedule for  
4 interconnection is uncertain, and therefore, may not support a credible project operation  
5 date.

6  
7 **Q. Did your evaluation identify any other timing concerns related to the Bidder's**  
8 **interconnection plan?**

9 A. Yes, there were timing concerns with the Bidder's System Impact Study, which suggest  
10 that the Bidder's interconnection timeline as outlined in its Proposal may not be accurate  
11 and/or does not provide the appropriate amount of flexibility for this type of project.

12  
13 **Q. How do these interconnection and transmission issues impact the Project's**  
14 **development and viability?**

15 A. Because of these issues outlined, I am *not* confident that the Project will meet its stated  
16 interconnection agreement timeline, and as a result, I am not confident that the Project is  
17 viable. For these reasons, the Interconnection and Transmission component of the  
18 Bidder's response to the OSW RFP received 0 points in the Qualitative Evaluation.

19



1 **Q. Do you have an update on the Bidder’s ISO-NE interconnection request status?**

2 A. Yes. According to the ISO-NE Public Interconnection Request Queue (the “Queue”), the  
3 Project was withdrawn as of September 8, 2023.

4  
5 **Q. How does the Project’s withdrawal from the Queue affect the Project’s development  
6 and viability?**

7 A. The Project’s withdrawal from the Queue casts further doubt that it will be able to meet  
8 its stated interconnection agreement timeline and further reduces my confidence that the  
9 Project is viable.

10  
11 **III. Impact of Interconnection and Transmission Issues on the Quantitative Evaluation**  
12 **of the Proposal**

13 **Q. Please describe your role in the Quantitative Evaluation.**

14 A. My role in the Quantitative Evaluation was first to provide an updated base power flow  
15 model (and associated contingency definitions) to TCR, which it used to perform its Price  
16 Analysis. Also, when the Proposal was received, I provided TCR with a power flow  
17 model of the interconnection facilities and transmission upgrades that would be required  
18 for the Project (along with associated updated contingency definitions).

19

1 **Q. Please elaborate regarding the power flow models you used to evaluate the**  
2 **interconnection and transmission facilities.**

3 A. The power flow model is an electrical model of the interconnected transmission system  
4 including all of New England. It was originally provided by ISO-NE and was further  
5 supplemented to include recent transmission and generation projects as well as the  
6 Project.

7

8 **Q. Were there any concerns with the interconnection information provided in the**  
9 **Bidder’s Proposal that led to or could have led to modeling issues?**

10 A. Yes, some of the transmission line impedances<sup>3</sup> of the Bidder’s proposed transmission  
11 line upgrades were incorrect, which led to incorrect power flows on the upgraded  
12 transmission lines, which could have negatively impacted TCR’s Price Analysis.

13 Through clarifying requests, the Bidder provided [REDACTED],  
14 which were used to properly model the upgrades for TCR’s Price Analysis.

15

16 **Q. How did the interconnection and transmission issues impact the Price Analysis?**

17 A. The interconnection and transmission issues impacted the Price Analysis by increasing  
18 congestion, lowering locational marginal prices, and raising offshore wind curtailment of  
19 the model.

<sup>3</sup> Simply put, impedance can be conceived as resistance to the flow of power.

1 **Q. Did the Company run an additional evaluation of the Project’s transmission and**  
2 **interconnection design remedying certain transmission line overloads that were**  
3 **noted in its initial evaluation of the Proposal?**

4 A. Yes, as part of Stage 3 of the evaluation process described in Company Witness  
5 Rouland’s pre-filed direct testimony, the Company ran an additional evaluation to  
6 analyze the impacts on its analysis of the Proposal if certain transmission line overloads  
7 that were identified by the Bidder, but not remedied, were addressed through additional  
8 transmission upgrades (referred to as the “Additional Stage 3 Evaluation”).  
9

10 **Q. Why did the Company choose to run the Additional Stage 3 Evaluation?**

11 A. The Company modeled additional transmission system upgrades for the Project to  
12 mitigate transmission overloads that were identified by the Bidder (since these  
13 transmission system upgrades would likely be made if the proposed Project proceeded  
14 through the ISO-NE interconnection process). The Company then ran an additional Stage  
15 3 Price Analysis with the additional transmission upgrades added to the Project.  
16

17 **Q. What was the impact on the Price Analysis when the Additional Stage 3 Evaluation**  
18 **data was entered into the model?**

19 A. The results of the Additional Stage 3 Evaluation on TCR’s Price Analysis showed that  
20 the additional upgrades eliminated some of the transmission line overloads, which served  
21 to reduce transmission congestion and resulted in higher locational marginal pricing and

1 lower curtailments of offshore wind in the model. The outcomes of the Price Analysis  
2 are further discussed in the pre-filed direct testimony of Company Witness Rouland and  
3 TCR Witness Ninad Kumthekar.

4

5 **IV. Conclusion**

6 **Q. Does this conclude your testimony?**

7 **A. Yes.**