

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. _____
REVIEW OF POWER PURCHASE AGREEMENTS
PURSUANT TO R.I. GEN. LAWS § 39-31
WITNESSES: TIMOTHY J. BRENNAN AND CORINNE M. DIDOMENICO
February 7, 2019**

DIRECT TESTIMONY

OF

TIMOTHY J. BRENNAN

AND

CORINNE M. DIDOMENICO

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Table of Contents

I.	Introduction	1
II.	Overview of the RFP and ACES	8
III.	Solicitation for Offshore Wind.....	10
IV.	Description of the Contract	18
V.	Consistency with ACES	20
VI.	Analysis of Docket No. 4600 Benefit-Cost Framework.....	33
VII.	Cost Recovery	40

1 **I. Introduction**

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

3 A. My name is Timothy J. Brennan. My business address is 40 Sylvan Road, Waltham,
4 Massachusetts.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am a Director in the Regulatory Strategy and Integrated Analytics group for National Grid
8 USA Service Company, Inc., which provides services to The Narragansett Electric
9 Company d/b/a National Grid (National Grid or Company). My primary responsibilities
10 in this position include the understanding and monitoring of the ISO New England
11 (ISO-NE) wholesale electricity markets and system planning process, and representing the
12 National Grid companies and our customers' interests in the associated stakeholder
13 processes and regulatory proceedings, as well as advocating on their behalf, as necessary,
14 for enhanced reliability and more economically efficient market results.

15
16 **Q. Please describe your education and professional background.**

17 A. I have worked for National Grid for more than 30 years since graduating from Tufts
18 University in 1988 with a Bachelor of Science in Mechanical Engineering, and a minor in
19 Engineering Management. My professional experience has included responsibilities in the
20 areas of power plant engineering, wholesale market trading, energy supply procurement,
21 and transmission strategy. For more than 19 years, I have represented National Grid and

1 its customers in the ISO-NE and New England Power Pool (NEPOOL) stakeholder
2 processes, promoting the development and enhancement of competitive wholesale
3 electricity markets and cost-effective and reliable grid for New England. I have also served
4 three years as a NEPOOL Officer, as Vice-Chair, on behalf of the Transmission Sector.

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

8 A. Yes. I have provided testimony before the PUC in Docket No. 4570 regarding The
9 Narragansett Electric Company's (Narragansett) Request for Proposals pursuant to the
10 Rhode Island Affordable Clean Energy Security Act, R.I.G.L. §§ 39-31-5 and 39-31-6
11 (ACES). I have also testified before the Massachusetts Department of Public Utilities (MA
12 DPU) in several matters, including D.P.U. 16-05 regarding National Grid's request for
13 approval of gas-capacity contracts in connection with Algonquin's Access Northeast
14 Project. I recently submitted testimony in: (1) D.P.U. 18-65, regarding National Grid's
15 request for approval of a long-term contract to acquire its pro rata share of an aggregate of
16 9,554,940 megawatt-hours (MWh) of hydroelectricity from Canada and associated
17 environmental attributes, in accordance with the Massachusetts statute Section 83D of An
18 Act Relative to Green Communities, St. 2008, c. 169 (Green Communities Act), as
19 amended by St. 2016, c. 188, § 12; and (2) D.P.U. 18-77, regarding National Grid's request
20 for approval of a long-term contract for the purchase of its pro rata share of 800 megawatts
21 (MW) of offshore wind energy generation from Vineyard Wind LLC, pursuant to Section

1 83C of the Green Communities Act (Section 83C).

2

3 **Q. Ms. DiDomenico, please state your name and business address.**

4 A. My name is Corinne M. DiDomenico. My business address is National Grid, 100 East Old
5 Country Road, Hicksville, New York 11801

6

7 **Q. By whom are you employed and in what capacity?**

8 A. I am Manager of Environmental Transactions, Energy Procurement of National Grid. I
9 manage the competitive solicitations for renewable energy projects, including negotiations
10 for long-term contracts for renewable energy projects. This includes competitive
11 solicitations to comply with the Long-Term Contracting Standard for Renewable Energy,
12 R.I. Gen. Laws. § 39-26.1.1 et seq. (LTC Standard), procurements pursuant to the ACES,
13 and enrollments under the Distributed Generation Standard Contracts Act, R.I. Gen. Laws
14 § 39-26.2.1 et seq. I am also involved with the development of National Grid's renewable
15 energy policies.

16

17 **Q. Please describe your education and professional background.**

18 A. I graduated from Drexel University in 2005 with a Bachelor of Science Degree in Civil
19 Engineering. I received a Masters in Business Administration in Finance and Investments
20 from Baruch College in May 2013. In July 2005, I joined KeySpan Corporation as an
21 Engineer in Generation Operations. I was accepted into the Engineering Rotation Program

1 and held various positions in Power Engineering, Generating Plant (Steam and Gas
2 Turbine) Operations, and Maintenance Services. In November 2009, as part of a
3 management development initiative, I joined Energy Portfolio Management as the
4 technical advisor to the Senior Vice President. I was promoted to my current position in
5 June 2011.

6
7 **Q. Have you previously testified in proceedings before the Rhode Island Public Utilities**
8 **Commission (PUC) or in other jurisdictions?**

9 A. Yes. I have provided testimony before the PUC on long-term contracts for renewable
10 energy and associated attributes in Docket No. 4764 (PPAs resulting from the three-state
11 process), on renewable energy resource matters in Docket No. 4437 (Champlain Wind,
12 LLC PPA), in Docket No. 4319 (Black Bear Development Holdings, LLC PPA), and in
13 Docket No. 4573 (Copenhagen Wind Farm, LLC PPA). I also participated in technical
14 sessions at the PUC in Docket Nos. 4277 and 4288 concerning the Distributed Generation
15 Standard Contracts and in Docket No. 4536-A in connection with the Renewable Energy
16 Growth Program. I have also submitted testimony and schedules on behalf of National Grid
17 before the MA DPU in D.P.U. 13-146/13-147/13-148/13-149, as well as D.P.U. 17-
18 117/17-118/17-119/17-120, both dockets in which National Grid sought approval of long-
19 term contracts for renewable resources.

20

1 **Q. What is the Company proposing in this proceeding?**

2 A. The Company is seeking PUC approval under ACES for a 20-year power purchase
3 agreement (PPA), which the Company has entered into for the purchase of energy and
4 renewable energy certificates (RECs) from DWW Rev I, LLC's (DWW) 400 MW
5 Revolution Wind Farm offshore wind facility (Revolution Wind), which is to be located
6 on the Outer Continental Shelf in Bureau of Ocean Energy Management (BOEM) Lease
7 OCS-A 0486 area (the Facility) (Schedule NG-1).

8
9 DWW¹ submitted a proposal for the Facility in response to the Request for Proposals for
10 Long-term Contracts for Offshore Wind Energy Projects issued by the Massachusetts
11 Electric Distribution Companies² and the Massachusetts Department of Energy Resources
12 (DOER), on June 29, 2017 (RFP). The RFP indicated that the Commonwealth of
13 Massachusetts (i.e., DOER) in consultation with the Massachusetts Electric Distribution
14 Companies would consider the participation of other states as a means to achieve
15 Massachusetts' Offshore Wind Energy Generation goals if such participation has a positive

¹ On November 29, 2018, National Grid was notified that, on November 7, 2018, the D.E. Shaw Group, and all other owners of interest in Deepwater Wind Holdings, LLC, consummated a transaction with Orsted whereby the entirety of Deepwater Wind Holdings, LLC was transferred to Orsted. The surviving entity was renamed Orsted US East Coast Offshore Wind, LLC, and is wholly-owned subsidiary of Orsted US East Coast Offshore Wind Holdco, LLC, which in turn is a wholly-owned subsidiary of Orsted North America Inc. The PPA was not otherwise affected by the transaction.

² The Massachusetts Electric Distribution Companies include Fitchburg Gas and Electric Light Company d/b/a/ Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, and NSTAR Electric Company d/b/a Eversource Energy.

1 or neutral impact on Massachusetts ratepayers.³ Specifically, the RFP stated, “Rhode
2 Island’s Distribution Company, Narragansett Electric Company, has expressed interest in
3 evaluating and considering projects proposed in response to this RFP pursuant to the
4 General Laws of Rhode Island, including Chapter 31 of Title 39, the Affordable Clean
5 Energy Security Act (Chapter 39-31). After the Massachusetts evaluation was complete,
6 the Massachusetts Electric Distribution Companies and the DOER provided the Company,
7 the OER and the Rhode Island Division of Public Utilities and Carriers (Division) with
8 analyses from the Massachusetts RFP. Based on the Massachusetts analyses, the
9 Company, in consultation with the OER, decided to pursue contract negotiations based on
10 the determination that Revolution Wind is a commercially reasonable strategic investment
11 in offshore wind energy generation that is projected to result in significant net benefits to
12 Rhode Island customers.

13
14 **Q. What is the purpose of your testimony?**

15 A. This testimony will: (1) demonstrate that the Company’s PPA with DWW satisfies the
16 goals and requirements of ACES relating to the voluntary solicitation of long-term
17 contracts from renewable energy developers; (2) explain the pricing and other key
18 provisions of the PPA; (3) address the applicable goals and principles from the PUC’s
19 Docket No. 4600A Order and Guidance Document; and (4) address the proposed

³ See footnote 8 of Schedule NG-2.

1 mechanism for cost recovery.

2
3 **Q. What schedules are you sponsoring in your testimony?**

4 A. I am sponsoring nine schedules, including:

- 5 • Schedule NG-1 is the PPA executed by the Company;
- 6 • Schedule NG-2 is the final RFP as issued on June 29, 2017;
- 7 • Schedule NG-3 is the final order of the MA DPU approving the Section 83C
8 solicitation;
- 9 • Schedule NG-4 includes the Massachusetts and Rhode Island Standards of
10 Conduct;
- 11 • Schedule NG-5 is the Revolution Wind Quantitative Evaluation Report prepared
12 by Tabors Caramanis Rudkevich (“TCR”);
- 13 • Schedule NG-6 is the Economic Benefits Report prepared by Navigant Consulting,
14 Inc. (REDACTED);
- 15 • Schedule NG-7 presents the Company’s Dkt. 4600 analysis;
- 16 • Schedule NG-8 is a comparison of Revolution Wind’s net benefits to other
17 programs; and
- 18 • Schedule NG-9 presents illustrative bill impacts for the Company.

19
20 **Q. Please describe how you have organized your testimony.**

21 A. Section I of this testimony is an introduction. Section II of this testimony describes the
22 RFP and explains why the Company is seeking approval of the PPA pursuant to ACES.
23 This section also provides an overview of ACES and the requirements regarding the review

1 and approval of executed PPA under ACES. Section III of this testimony describes and
2 discusses the solicitation process, including bid scoring and project selection. Section IV
3 of this testimony describes the specifics of the PPA. Section V discusses how the PPA
4 satisfies the requirements of ACES. Section VI of this testimony addresses the applicable
5 goals and principles of the PUC's Docket No. 4600A Order and Guidelines. Section VII
6 of this testimony addresses how the Company intends to recover the net costs of the PPA.
7

8 **II. Overview of the RFP and ACES**

9 **Q. Please describe the process of formulating the RFP.**

10 A. The RFP, provided as Schedule NG-2, was developed jointly by the Massachusetts
11 Distribution Companies and the DOER in accordance with Section 83C). Section 83C
12 requires the Massachusetts Electric Distribution Companies to jointly and competitively
13 solicit proposals for offshore wind energy generation not later than June 30, 2017.
14 Provided that reasonable proposals are received, the Massachusetts Electric Distribution
15 Companies must enter into cost-effective contracts for offshore wind energy generation for
16 an amount equal to approximately 1,600 MW of aggregate nameplate capacity by June 30,
17 2027.

18
19 The RFP issued on June 29, 2017 approved by the MA DPU on June 21, 2017 in Fitchburg
20 Gas and Electric Light Company, et al., D.P.U. 17-103 (Schedule NG-3). As mentioned
21 earlier, the RFP indicated that the Commonwealth of Massachusetts in consultation with

1 the Massachusetts Electric Distribution Companies would consider the participation of
2 other states as a means to achieve Massachusetts' Offshore Wind Energy Generation goals
3 if such participation has a positive or neutral impact on Massachusetts ratepayers, and that
4 Rhode Island was interested in considering projects submitted in response to the RFP.
5

6 **Q. What is the basis for the Company's request for approval of a long-term renewable**
7 **contract with DWW?**

8 A. The Company is requesting approval of the PPA pursuant to ACES, which authorizes
9 National Grid, in consultation with OER and Division, to participate in regional or multi-
10 state competitive solicitations to procure domestic or international large-or small-scale
11 hydroelectric power and eligible renewable energy resources, including wind, as defined
12 by § 39-26-5(a), and to enter into long-term contracts subject to review and approval of the
13 Commission pursuant to R. I. Gen. Laws §§ 39-31-6 (a) (1) & 39-31-7 (c) (5) (i)-(v).
14

15 **Q. Does ACES require the Company to enter into long-term contracts?**

16 A. No, the Company is not required to enter into long-term contracts under ACES.
17

18 **Q. Why is the Company voluntarily seeking approval for this long-term contract for off-**
19 **shore wind?**

20 A. As mentioned above and as described more fully herein, the contract meets the
21 requirements of ACES, in that it is: (1) commercially reasonable, as defined in ACES; (2)

1 consistent with the requirements of the solicitation; (3) consistent with the region’s
2 greenhouse gas reduction targets; and (4) consistent with the purposes of ACES.
3 Moreover, the contract is a significant step toward achieving the state’s clean energy goals
4 of reducing greenhouse gas emissions, increasing clean energy jobs and continuing growth
5 in Rhode Island’s clean energy economy. The Revolution Wind project will add
6 another 400 MW toward Governor Raimondo’s “1,000 MW by 2020” goal, more than
7 doubling the state’s progress since last year.⁴

8 Furthermore, Rhode Island’s continued leadership and contribution to the emerging off-
9 shore wind industry brings opportunities to drive down costs, attract future development,
10 increase diversity of clean energy supply, and encourage a clean energy economy bringing
11 investment and jobs to the region.

12
13 **III. Solicitation for Offshore Wind**

14 **Q. Please describe the solicitation process.**

15 A. As required by Section 83C, the RFP was developed by the Massachusetts Electric
16 Distribution Companies (including the Company’s Massachusetts affiliates), in
17 consultation with the DOER, the Massachusetts Attorney General’s Office, and an
18 Independent Evaluator retained by the DOER. In accordance with Section 83C, the RFP
19 solicited proposals for Offshore Wind Energy Generation using a competitive bidding

⁴ <http://www.energy.ri.gov/renewable-energy/governor-clean-energy-goal.php>

1 process.⁵ The RFP was reviewed and approved by the Massachusetts Department of Public
2 Utilities on June 21, 2017 in D.P.U. 17-103 and was issued by the Massachusetts Electric
3 Distribution Companies and the DOER on June 29, 2017. Bids were due no later than
4 December 20, 2017.

5 The RFP was distributed to approximately 600 individuals and entities with an interest in
6 developing renewable energy projects from a list compiled by the Massachusetts
7 Distribution Companies and the DOER. The RFP was also released publicly on the same
8 date on a dedicated website: macleanenergy.com.

9 The RFP sought proposals for the procurement of 400 MW of Offshore Wind Energy
10 Generation and allowed bidders to offer proposals for up to approximately 800 MW. The
11 Massachusetts Electric Distribution Companies indicated that they would consider
12 procuring up to approximately 800 MW if the Evaluation Team determined that a larger-
13 scaled proposal is both superior to other proposals submitted in response to this RFP and
14 is likely to produce significantly more economic net benefits to ratepayers based on the
15 evaluation criteria set forth in the RFP.

16 To support the development of the offshore wind energy market, the RFP also sought
17 proposals that include expandable, nondiscriminatory, open-access offshore transmission
18 facilities for the efficient delivery of their power to the onshore transmission system.

⁵ Section 83C defines Offshore Wind Energy Generation as: (1) Class I renewable energy generating sources, as designed in Section 11F of Chapter 25A of the General Laws; (2) has a commercial operation date on or after January 1, 2018 that has been verified by the DOER; and (3) operates in a designated wind energy area for which an initial federal lease was issued on a competitive basis after January 1, 2012.

1 As set forth in § 2.1 of the RFP, the evaluation was conducted in three parts. In Stage 1,
2 proposals were reviewed to ensure that they met eligibility and threshold requirements. In
3 Stage 2, proposals were evaluated based on specific quantitative and qualitative criteria.
4 In Stage 3, the Evaluation Team conducted further evaluation of the proposals to ensure
5 selection of viable projects that would provide cost-effective, reliable Offshore Wind
6 Energy Generation with limited risk.

7 After evaluations of all bids received from this competitive solicitation were completed,
8 and Massachusetts selected the 800 MW Vineyard Wind project, Rhode Island selected the
9 400 MW Revolution Wind project for contract negotiation. Separately, Connecticut
10 announced its selection of an additional 200 MW of off-shore wind from the Revolution
11 Wind project. As evidence of the competitiveness of this solicitation, the prices of these
12 projects, despite their size differences, were quite close, with levelized nominal prices for
13 the MA 800 MW Vineyard Wind project, the RI 400 Revolution Wind project, and the CT
14 200 MW Revolution Wind project of \$84.23/MWh, \$98.425, and \$99.50, respectively.

15
16 **Q. How many bids were submitted in response to the RFP?**

17 A. All three BOEM leaseholders participated in the RFP. Bids were submitted by Bay State
18 Wind, Deepwater Wind (i.e. Revolution Wind), and Vineyard Wind. Each bidder
19 submitted alternative generator lead line and expandable transmission network bids, in
20 accordance with the requirements of the RFP. A total of 18 bids, with 27 pricing variations,
21 were submitted by these developers.

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Q. Please describe generally the process followed to evaluate the bids received.

A. An initial evaluation was completed by the Massachusetts Evaluation Team,⁶ as discussed above. After the Massachusetts Evaluation Team completed its evaluation, a summary of the analysis was shared with the Company, OER, and Division, subject to a non-disclosure agreement. The Company, OER, and Division reviewed the analyses to identify bids that appeared to meet the requirements of ACES.

Q. What analysis did the Massachusetts Evaluation Team share with OER and the Company?

A. At the OER's request, in coordination with the Company, the Massachusetts Evaluation Team provided OER, Division, and the Company with project-specific summaries of its confidential analysis. The analyses included a levelized net benefit per MWh of each project expressed in 2017 dollars based on a comparison of costs and benefits derived by the Massachusetts Evaluation Team consultant using its ENELYTIX computer simulation model and a base case developed for Massachusetts.

⁶ The Massachusetts Evaluation Team consists of the Massachusetts Electric Distribution Companies and the DOER.

1 **Q. What conclusion did the Company and OER reach with respect to the bids submitted**
2 **in response to the RFP?**

3 A. After reviewing the material, OER, Division, and the Company determined that the
4 Revolution Wind proposal could result in significant net energy, economic, and
5 environmental benefits over the life of the contract to Rhode Island, its electric customers
6 and the economy while advancing the energy policy goals of ACES. In addition to
7 favorable pricing for the Company's customers, the project provides the potential for
8 significant additional economic benefits to the state due to its proposed location in the
9 offshore lease area close to RI, and its onshore interconnection within, or in close proximity
10 to, RI. As a result, the Company chose to move forward with contract negotiations
11 regarding DWW's 400 MW proposal, which OER and Division supported, as announced
12 on May 23, 2018.

13
14 **Q. Is DWW a corporate affiliate of the Company?**

15 A. The Company has no direct corporate affiliate relationship with DWW. The Company
16 does have a corporate affiliate, GridAmericas Holding, Inc. (National Grid Ventures) that
17 has entered an option agreement (Option Agreement) with an affiliate of DWW Rev I, LLC
18 pursuant to which National Grid Ventures has the right to acquire the Delivery Facility (as
19 defined below) at the time of the project's commercial operation date, subject to certain
20 terms and conditions, and will provide transmission service to the Wind Farm and recover
21 its purchase price under a Transmission Services Agreement (TSA). DWW will be

1 responsible for the development and construction of (a) an offshore substation connected
2 to the Wind Farm's Collection Facilities, (b) one or more submarine High Voltage
3 Alternating Current (HVAC) cables from the offshore substations to a new landfall
4 location, (c) one or more sets of buried terrestrial HVAC connecting the cable landfall to
5 the new onshore substation and (d) a new onshore substation, including all the equipment
6 required to interconnect with the electric grid, including obtaining all rights and approvals
7 necessary for its operations ((a) through (d) are collectively defined as the Delivery
8 Facility), in consultation with National Grid Ventures. National Grid Ventures has the right
9 to acquire the Delivery Facility subject to certain terms and conditions. If National Grid
10 Ventures acquires the Delivery Facility, National Grid Ventures will provide transmission
11 service to the Revolution Wind Project under the terms of a TSA at Federal Energy
12 Regulatory Commission approved rates.

13
14 **Q. If National Grid Ventures exercises its option to acquire the Delivery Facility and**
15 **provides transmission services to the Revolution Wind Project, will there be an**
16 **increased cost to Rhode Island customers?**

17 A. No, there will not be an increased cost to Rhode Island customers.

18
19 **Q. Did the option agreement have any bearing on the Company's decision to enter**
20 **contract negotiations with DWW?**

21 A. It did not. As noted above, the decision to choose DWW for contract negotiations was

1 collectively determined by OER, the Division, and the Company based on a joint
2 determination that after Massachusetts selected the 800 MW Vineyard Wind project, the
3 best available project was DWW's 400 MW Revolution Wind project, and the analysis
4 indicated the project could result in significant net benefits over the life of the contract to
5 Rhode Island, its electric customers and the economy while advancing the energy policy
6 goals of ACES.

7
8 **Q. What protections were established prior to the Section 83C solicitation to ensure the**
9 **solicitation was conducted in a fair, transparent and competitive manner?**

10 A. The Company's Massachusetts affiliates, Massachusetts Electric Company and Nantucket
11 Electric Company, executed a Utility Standard of Conduct agreement (Schedule NG-4).
12 That agreement ensured that the solicitation process was conducted in a fair, transparent,
13 and competitive manner, that all laws, regulations, rules and standards and codes of
14 conduct were observed, that all potential bidders were treated equally, that no potential
15 bidder received preferential treatment or confidential, non-public information not available
16 to other potential bidders and that the efforts of the Massachusetts Distribution Companies
17 did not create any actual or apparent conflict of interest.

18
19 **Q. What are the key provisions of the Standards of Conduct?**

20 A. Effective January 30, 2017 and through and until the conclusion of the approval
21 proceedings resulting from the Section 83C solicitation (among other temporal

1 milestones), the Company was required to designate individuals participating in a direct
2 and meaningful way in the solicitation process and designate such individuals to either an
3 Evaluation Team or a Bid Team. No member could be a member of both teams, and no
4 individual could change teams during the solicitation process. In addition, individuals who
5 were neither members of the Bid Team nor Evaluation Team but who provide guidance,
6 advice, information or support to the Bid Team and/or Evaluation Team in the normal
7 course of their responsibilities were identified as “Subject Matter Experts. The Bid Teams
8 and Evaluations Teams were represented by separate counsel. Moreover, members of each
9 of the Bid or Evaluation Teams were prohibited from communicating, consulting or
10 advising with each other, directly or indirectly. Additional Standards of Conduct
11 provisions are included in Schedule NG-4.

12
13 **Q. Were there any conclusions drawn in Massachusetts regarding the effectiveness of**
14 **the Standards of Conduct during the Section 83C process?**

15 A. Yes. An Independent Evaluator was required to evaluate the Section 83C solicitation and
16 evaluation processes to provide additional oversight of each process to ensure the processes
17 fair, transparent and competitive. The Independent Evaluator concluded that all bids were
18 evaluated in a fair and objective manner through the conduct of an open, fair and
19 transparent solicitation and bid selection process that was not unduly influenced by an
20 affiliated company.

21

1 **Q. Did Narragansett execute the same Standards of Conduct regarding its evaluation of**
2 **bids?**

3 A. Yes, it did. A copy is included in Schedule NG-4.
4

5 **IV. Description of the Contract**

6 **Q. Please provide an overview of the DWW PPA.**

7 A. Under the terms of the PPA, the Company will purchase 100 per cent of the output of the
8 400 to 408 MW Facility. The facility's generating capacity will ultimately be determined
9 based on the size of the wind turbines installed by the project, and the turbine models under
10 consideration could be as large as 12 MW each, resulting in a facility size that is slightly
11 larger than 400 MW. The obligation to purchase energy and RECs is unit contingent,
12 meaning that the Company is only required to purchase energy and RECs that are actually
13 produced by the Facility. The term of the PPA shall continue for 20 years following the
14 Commercial Operation Date.
15

16 **Q. Please describe the pricing under the PPA.**

17 A. The price for energy and RECs is a fixed price of \$98.425/MWh over the entire 20-year
18 term of the PPA. The price does not escalate over the term of the contract.
19

20 **Q. Does the PPA price include the cost for transmission?**

21 A. Yes, the PPA price includes the cost for transmission.

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Q. Do the RECs generated by the Facility and included in the PPA qualify under the Renewable Energy Standard (RES) program?

A. Yes, the Facility qualifies as an “eligible renewable energy resource”, as defined pursuant to the RES statute, R.I. Gen. Laws § 39-26-5 and the regulations promulgated thereunder.⁷ The PPA requires that the seller sell and the buyer buy RECs from the facilities only to the degree that they satisfy the RES as an Environmental Attribute associated with a specified MWh of generation from the Facility.

Q. If the Facility fails to qualify as an eligible renewable energy resource are the Company’s customers still obligated to pay for the RECs?

A. No. The Company has no obligation under the PPA to purchase RECs should the Facility no longer qualify as an eligible renewable energy resource under the RES statute. However, the seller is required to use commercially reasonable efforts to maintain the facility’s qualification as an eligible renewable energy resource.

Q. What is the Commercial Operation Date associated with the Facility?

A. The targeted Commercial Operation Date is January 15, 2024. The Company considers this date reasonable and credible, as required by R.I. Gen. Laws. § 39-31-3, based on

⁷ See Section 5.0 Rules and Regulations Governing the Implementation of a Renewable Energy Standard.

1 DWW's experience in US off-shore wind development, certain critical milestones for the
2 development and construction of the project and achievement of commercial operation as
3 more particularly set forth in the PPA.

4
5 **V. Consistency with ACES**

6 **Q. What is the purpose of ACES?**

7 A. The purpose of ACES is to:

8 (1) Secure the future of the Rhode Island and New England economies, and their shared
9 environment, by making coordinated, cost-effective, strategic investments in energy
10 resources and infrastructure such that the New England states improve energy system
11 reliability and security; enhance economic competitiveness by reducing energy costs to
12 attract new investment and job growth opportunities; and protect the quality of life and
13 environment for all residents and businesses;

14 (2) Utilize coordinated competitive processes, in collaboration with other New England
15 states and their instrumentalities, to advance strategic investment in energy infrastructure
16 and energy resources, provided that the total energy security, reliability, environmental,
17 and economic benefits to the state of Rhode Island and its ratepayers exceed the costs of
18 such projects, and ensure that the benefits and costs of such energy infrastructure
19 investments are shared appropriately among the New England States; and

1 (3) Encourage a multi-state or regional approach to energy policy that advances the
2 objectives of achieving a reliable, clean-energy future that is consistent with meeting
3 regional greenhouse gas reduction goals at reasonable cost to ratepayers.
4

5 **Q. What must the Company demonstrate to obtain an approval of this contract pursuant**
6 **to ACES?**

7 A. ACES established a process for OER, in consultation with Division, and the Company to
8 identify cost-effective, strategic investments in energy resources and infrastructure that
9 have the potential to improve energy system reliability and security, reduce energy costs,
10 and protect Rhode Island's quality of life and environment in coordination with other New
11 England states. Contracts entered into pursuant to ACES must be reviewed and approved
12 by the Commission. The Commission may approve the contracts if it finds that the
13 contracts are: (1) commercially reasonable, as defined in ACES; (2) that the requirements
14 for the solicitation have been met; (3) that the contract is consistent with the region's
15 greenhouse gas reduction targets; and (4) the contract is consistent with the purposes of
16 ACES.
17

18 **Q. Does the proposed PPA meet the provisions of ACES?**

19 A. Yes, the PPA meets each of the requirements of ACES. The PPA is commercially
20 reasonable, as defined in ACES § 39-31-3, and will provide benefits to Rhode Island and
21 its ratepayers that exceed the costs of the project. In addition, the PPA is consistent with

1 the requirements of the solicitation that resulted in the Revolution Wind bid. Lastly, the
2 contract is consistent with the region’s greenhouse gas reduction targets and is consistent
3 with the purposes of ACES. Ultimately, the Revolution Wind project, as part of a portfolio
4 of MA, RI, and CT offshore wind projects, is expected to bring significant energy market
5 price reduction benefits to RI electricity customers, as well as other economic and
6 environmental benefits to Rhode Island.

7
8 *Commercial Reasonableness*

9 **Q. How is “commercially reasonable” defined under ACES?**

10 A. “Commercially reasonable” is defined under ACES as “terms and pricing that are
11 reasonably consistent with what an experienced power market analyst would expect to see
12 in transactions involving regional-energy resources and regional-energy infrastructure.”
13 R.I. Gen. Laws. § 39-31-3. Additionally, in order to determine if a contract is commercially
14 reasonable, the Commission must determine that: (1) the project has a credible operation
15 date; (2) the benefits to Rhode Island exceed the cost of the project; and (3) that based on
16 the preponderance of the evidence, the total energy security, reliability environmental and
17 economic benefits to the state of Rhode Island and its ratepayers exceed the costs of the
18 projects. R.I. Gen. Laws. § 39-31-3.

1 **Q. Please describe how the Company determined that the PPA terms and pricing are**
2 **reasonably consistent with what an experienced power market analyst would expect**
3 **to see in transactions involving regional-energy resources and regional-energy**
4 **infrastructure?**

5 A. The PPA resulted from an open, robust competitive bid process. The RFP was widely
6 distributed to a list of approximately 600 entities active in the renewable generation market
7 in the Northeast and nationally. It was also posted on a website set up by the soliciting
8 parties. The RFP process was fairly administered, issued by three electric distribution
9 companies, in coordination with the Massachusetts DOER. Particularly in light of the
10 nascent state of the offshore wind industry in the United States, the prices received in
11 response to the RFP are highly informative of what an experienced market analyst should
12 expect to see in transactions involving regional offshore wind energy infrastructure.

13
14 **Q. Did the Company conduct additional analysis?**

15 A. Yes, the Company retained TCR to conduct an analysis to quantify the net costs and
16 benefits specific to Rhode Island. See Schedule NG-5 for a detailed description of their
17 analysis.

18
19 **Q. Why did the Company conduct additional analysis beyond what was provided by the**
20 **Massachusetts?**

21 A. While the analyses provided by Massachusetts provided indicators of costs and benefits,

1 the Massachusetts analysis did not quantify costs and benefits specific to Rhode Island.
2 Additionally, they did not include factors required by Docket 4600, beyond the scope of
3 the Massachusetts RFP.

4
5 **Q. Please describe the analysis performed by TCR.**

6 A. Direct benefits were determined using a mark-to-market comparison of the Revolution
7 Wind contract price with forecasted market prices with the project in service. In other
8 words, the direct contract price benefit analysis compares the PPA costs for energy and
9 RECs to the forecasted market value of the energy and RECs delivered during the contract
10 term.

11
12 Indirect energy price benefits were determined based on the projected change that the
13 portfolio of offshore wind projects procured by RI, CT, and MA would produce in energy
14 market prices. Put simply, the indirect benefits measure the impact the portfolio has on
15 electric supply costs to Rhode Island customers.

16 The method for conducting the analysis, other benefits, and key assumption are described
17 in detail in TCR's report, Schedule NG-4.

18
19 **Q. What are the projected energy and REC market benefits?**

20 A. The total direct and indirect energy and REC market net benefits are projected to result in

1 \$91.6 million⁸ over the term of the contract. Of that, the direct contract price benefits are
2 projected to be \$4.6 million, and the indirect energy price savings are projected to be \$87
3 million.

4
5 **Q. Does the PPA provide additional economic benefits to Rhode Island?**

6 A. Yes, in addition to projected net benefits for customers associated with the energy and
7 REC markets, the development and construction of the 400 MW Revolution Wind project
8 in the offshore lease area close to RI, as well as its planned onshore interconnection within
9 or in close proximity to the state is expected to produce over \$400 million in additional
10 economic benefits for the state, including jobs and in-state expenditures during the
11 construction and operation phases of the project. Please refer to the Advisory Opinion on
12 the Economic Development Benefits of the Revolution Wind Project prepared by Navigant
13 Consulting, Inc., provided as Schedule NG-6.

14
15 **Q. How did the Company determine that the Revolution Wind project has a credible
16 commercial operation date?**

17 A. The targeted Commercial Operation Date is January 15, 2024. The Company considers
18 this date reasonable and credible, as required by R.I. Gen. Laws. § 39-31-3, based on
19 DWW's experience in US off-shore wind development, certain critical milestones for the

⁸ Net Present Value in 2018 dollars.

1 development and construction of the project, and achievement of commercial operation as
2 more particularly set forth in the PPA.

3
4 **Q. Does the project improve energy system reliability and security for Rhode Island?**

5 A. Yes. The addition of 400 MW of nameplate capacity will supplement the region's base of
6 installed capacity will increase reliability of the system. While the generation from an
7 offshore wind project is intermittent, it can, however, on average, be relied upon to increase
8 system supply and therefore enhance reliability for the ISO-NE system.

9
10 Additionally, off-shore wind, on average, has higher production during winter peak hours,
11 when ISO-NE experiences winter fuel security issues, thus increasing the security of the
12 system by reducing reliance on coal, oil, and natural gas during these critical winter peak
13 periods.

14
15 *Consistency with Solicitation*

16 **Q. Is the Commission required to approve the method of soliciting proposals from
17 renewable energy developers under ACES?**

18 A. Although we are not attorneys, it is our understanding that the answer is yes. Pursuant to
19 ACES, the Company may select a reasonable, open and competitive method of soliciting
20 proposals from renewable energy developers that may include public solicitations and
21 individual negotiations. R.I. Gen. Laws. § 39-31-6(a)(1)(i).

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Q. Does ACES require the Commission to approve the method of soliciting proposals prior to the issuance of an RFP?

A. Our understanding of the plain language of the statute leads to a conclusion that it does not. There is no mention in the statute regarding the sequence of Commission approval of the method of solicitation in relation to the timing of the issuance of a request for proposals. The only specific requirement in ACES regarding the solicitation, other than the need for Commission approval at some point, is that the solicitation process must permit a reasonable amount of negotiating discretion for the parties to engage in arms-length negotiations over final contract terms. R.I. Gen. Laws. § 39-31-6(a)(1)(ii).

Q. As noted earlier, however, the RFP was reviewed and approved by a regulatory commission prior to issuance, correct?

A. That is correct. The method and timetable for the solicitation that resulted in the bid from DWW was approved by the MA DPU in D.P.U. 17-103.

Q. What findings did the MA DPU make regarding the method and timetable for the solicitation?

A. The Department found that the proposed timetable and the method for solicitation and execution of long-term contracts for renewable energy included in the RFP are consistent with the requirements of Section 83C and 220 C.M.R. § 23.00 et seq., subject to the

1 inclusion of one modification. Specifically, the MA DPU found that the method for the
2 solicitation and execution of long-term contracts for Offshore Wind Energy Generation
3 contained in the RFP is consistent with the requirements of Section 83C and 220 C.M.R. §
4 23.00 et seq. The RFP solicited proposals to enter into cost-effective long-term contracts
5 with a term of between 15 and 20 years for Offshore Wind Energy Generation for between
6 400 MW and 800 MW of aggregate nameplate capacity by June 30, 2027, consistent with
7 Section 83C and 220 C.M.R. § 23.04(5) (RFP §§ 1.1, 2.2.1.6). The Department found that,
8 in developing the provisions of long-term contracts, the electric distribution companies
9 appropriately considered long-term contracts for RECs, for energy, or for a combination of
10 RECs and energy as required by Section 83C and 220 C.M.R. § 23.04(1). The Department
11 also found that the RFP defines eligible products as (1) Offshore Wind Energy Generation
12 with a project specific generator lead line proposal; and (2) Offshore Wind Energy
13 Generation with an expandable transmission proposal under a FERC tariff (RFP § 2.2.1.3).
14 Section 83C and 220 C.M.R. § 23.05(1) require the Department to determine that an
15 Offshore Wind Energy Generation resource: (1) provides enhanced electricity reliability
16 within the Commonwealth; (2) contributes to reducing winter electricity price spikes; (3)
17 will be cost-effective to Massachusetts ratepayers over the term of the contract taking into
18 consideration potential economic and environmental benefits to the ratepayers; (4) avoids
19 line loss and mitigates transmission costs to the extent possible and ensures that
20 transmission cost overruns, if any, are not borne by ratepayers; (5) adequately demonstrates
21 project viability in a commercially reasonable timeframe; (6) allows Offshore Wind Energy

1 Generation resources to be paired with energy storage systems; (7) mitigates environmental
2 impacts where possible; and (8) creates and fosters employment and economic
3 development in Massachusetts, where feasible. The MA DPU found that the RFP includes
4 these criteria in the first and second bid evaluation stages (RFP §§ 2.2, 2.3).

5
6 Section 83C and 220 C.M.R. § 23.05(5) also require that proposals for long-term contracts
7 include associated transmission costs and that, if proposals include transmission costs and
8 if the Department finds that recovery to be in the public interest, the Department may
9 authorize or require the contracting parties to seek recovery of such transmission costs of
10 the project through federal transmission rates, consistent with FERC policies and tariffs.
11 The MA DPU found that the Electric Distribution Companies included this provision in
12 the RFP's allowable forms of pricing (RFP § 2.2.1.4).

13
14 Further, consistent with Section 83A and 220 C.M.R. § 23.05(4), the MA DPU found that
15 the RFP provides that the electric distribution companies will allocate the products
16 purchased under the contracts on a pro-rata basis based on total energy demand (RFP §
17 2.5). Finally, consistent with Section 83C and 220 C.M.R. § 23.06, the MA DPU found
18 that the DOER and the Attorney General jointly selected, and DOER contracted with, an
19 Independent Evaluator to monitor and report on the solicitation (RFP § 1.5).

20

1 The only change to the proposed RFP required by the MA DPU was for the Electric
2 Distribution Companies to revise the proposed timetable for the solicitation and execution
3 of long-term contracts. The Department found that the revisions to the RFP's proposed
4 timetable will allow project developers to structure reasonable proposals and will provide
5 the Electric Distribution Companies sufficient time to appropriately evaluate such
6 proposals, complete contract negotiations, and submit any resulting cost-effective contracts
7 to the Department while enhancing the potential for selected projects to qualify for higher
8 2018 federal tax credits to the benefit of electric distribution company ratepayers.

9
10 **Q. How might the findings of the MA DPU regarding the solicitation assist the**
11 **Commission in its own determination regarding the solicitation?**

12 A. As noted above, ACES requires the Commission to: (1) review and approve the Company's
13 solicitation as including a reasonable, open and competitive method of soliciting proposals
14 from renewable energy developers that may include public solicitations and individual
15 negotiation; and (2) ensure that the solicitation process permits a reasonable amount of
16 negotiating discretion for the parties to engage in arms-length negotiations. With regard
17 to the first requirement, the Commission should consider the MA DPU's review and
18 approval of the RFP, and the Electric Distribution Companies' actual solicitation decisions,
19 as meeting the requirement in full.

1 The use of an RFP for solicitations has been a proven, reliable method of engaging the
2 competitive market in bidding to contract for renewable power. Here, not only was an RFP
3 used to solicit bids, it was reviewed and approved by a fellow regulatory commission as
4 being consistent with Massachusetts law, which includes similar goals as RI to procure
5 cost-effective, reliable and environmentally-friendly energy. Accordingly, the
6 Commission should find that soliciting for renewable energy through the RFP was a
7 reasonable method of solicitation.

8
9 Regarding the requirement for the Commission to find that the solicitation was open and
10 competitive, as noted previously, the RFP was publicly advertised on the web, and sent
11 directly to approximately 600 individuals and entities with an interest in developing
12 renewable energy projects. Ultimately, 18 bids were received with 27 pricing variations.
13 As demonstrated elsewhere in our testimony, the price of the DWW contract is
14 commercially reasonable. Accordingly, the Commission should find that the solicitation
15 was both open and competitive.

16
17 Finally, the RFP included a several week period for contract negotiations. Once the
18 Revolution Wind project was selected for RI, the Company actually negotiated final terms
19 for the contract over several months, beyond the timeframe contemplated in Massachusetts
20 for the Section 83C contracts. Accordingly, the Commission should find that the

1 solicitation process permitted a reasonable amount of time for the parties to engage in arms-
2 length negotiation of final contract terms.

3
4 Consistency with RI Greenhouse Gas Reduction Targets

5 **Q. Is the PPA consistent with Rhode Island's greenhouse gas reduction targets?**

6 A. Yes. The annual reduction in greenhouse gas reduction emissions is projected to be
7 approximately 102,000 tons CO₂/yr, or a 10% reduction for the Rhode Island Electric
8 Power Consumption sector.⁹

9
10 Consistency with the Purpose of ACES

11 **Q. How is the contract consistent with the purpose of ACES?**

12 A. In summary, the purpose of ACES is to encourage RI to coordinate with other New England
13 states to make cost-effective, strategic investments in energy resources and infrastructure
14 to improve energy system reliability and security; enhance economic competitiveness by
15 reducing energy costs to attract new investment and job growth opportunities; and protect
16 the quality of life and environment for all residents and businesses. Moreover, ACES
17 requires a demonstration that such investments are cost-effective for RI customers, with
18 appropriate cost sharing among New England states, if applicable. Finally, ACES
19 encourages a multi-state or regional approach to energy policy that advances the objectives

⁹ Calculated based on the "consumption-based" emission accounting methodology per the RI-EC4 Rhode Island Greenhouse Gas Emissions Reduction Plan (December 2016).

1 of achieving a reliable, clean-energy future that is consistent with meeting regional
2 greenhouse gas reduction goals at reasonable cost to ratepayers.

3
4 The contract is fully consistent with this purpose. The contract is a result of regional
5 coordination between RI and Massachusetts whereby the Company, the OER and the
6 Division ultimately participated in the selection of a cost effective, renewable energy
7 project that is consistent with RI's, and the region's, clean energy goals, for the benefit of
8 RI customers. As noted above, the project will provide significant energy, environmental
9 and economic benefits to RI. As such, the contract will advance the state's objectives of
10 improving system reliability and security, and building a clean-energy future that is
11 consistent with meeting regional (and local) greenhouse gas reduction goals at reasonable
12 costs to ratepayers.

13
14 **VI. Analysis of Docket No. 4600 Benefit-Cost Framework**

15 **Q. Please summarize the purpose of the PUC's Docket No. 4600 Benefit-Cost**
16 **Framework.**

17 **A.** In Docket No. 4600, Investigation into the Changing Electric Distribution System, the PUC
18 determined that, due to the changing and modernizing electric distribution system, it was
19 necessary to develop an improved understanding and consistent accounting of the costs

1 and benefits caused by various activities on the system.¹⁰ The PUC sought to answer the
2 following questions:

3 (1) What are the costs and benefits that can be applied across any and/or all
4 programs, identifying each and whether each is aligned with state policy?

5 (2) At what level should these costs and benefits be quantified – where physically
6 on the system and where in cost-allocation and rates? and

7 (3) How can we best measure these costs and benefits at these levels – what level
8 of visibility is required on the system and how is that visibility accomplished?¹¹

9
10 After a thorough stakeholder process, the PUC accepted the Stakeholder Report and
11 adopted the goals, principles and new Rhode Island Benefit-Cost Framework (Framework).
12 The Framework includes thirty-four categories of costs and benefits and the PUC also
13 issued a Guidance Document further discussing the goals, principles and values to be
14 considered in connection with the Framework.¹² The Framework identified several
15 methodologies that could be used to quantify costs and benefits, but also recognized that
16 the Framework is meant to be refined or modified over time as the PUC and parties to
17 dockets gain more experience applying the Framework.

¹⁰ Docket No. 4600, Report and Order at 4-5 (May 4, 2017).

¹¹ Id. at 5.

¹² Id. at 8.

1 In adopting the Framework, the PUC held the following:

2 The PUC holds that the Framework should be relied upon, but also that it
3 should not be the exclusive measure of whether a specific proposal should
4 be approved. Rather, the Framework should serve as a starting point in
5 making a business case for a proposal. For example, there may be outside
6 factors that need to be considered by the PUC regardless of whether a
7 specific proposal is determined to be cost-effective or not. This may include
8 statutory mandates or qualitative considerations. Such application is
9 consistent with the PUC’s broad regulatory authority in setting just and
10 reasonable rates.¹³
11

12 **Q. Does the PUC’s Guidance on “Goals, Principles and Values for Matters Involving**
13 **The Narragansett Electric Company d/b/a National Grid” (Guidance Document)**
14 **provide further detail about how the Framework should be applied in this case?**

15 A. Yes. The Guidance Document provides that a proponent of any proposal affecting the
16 Company’s electric rates should provide evidence demonstrating how the proposal
17 advances, detracts from, or is neutral to each of the stated goals of the electric system.
18 Additionally, specific to the Framework, the Guidance Document provides that “any rate
19 design proposal should, at the very least, reference each category within the first two
20 columns of the Report: Mixed Cost-Benefit, Cost, or Benefit Category and System
21 Attribute Benefit/Cost Driver (Categories and Drivers, respectively).”¹⁴ The Guidance
22 Document states that each Categories and Drivers should be discussed and where costs and
23 benefits can be quantified, the proponent should provide the basis for the quantification

¹³ Id. at 23.

¹⁴ Guidance Document, at 6.

1 reached. Where quantification is not possible or practical, the proponent should explain.¹⁵

2 While the Company's request for approval of the PPA under ACES is not a rate design
3 proposal, the Company has followed the directives of the Guidance Document as closely
4 as possible.

5
6 **Q. How has the Company applied the Framework to the review of the PPA?**

7 A. To support this filing, the Company conducted its own analysis to demonstrate that the
8 PPA will result in net benefits and is consistent with state energy policies. Based on
9 additional guidance from the PUC,¹⁶ the Company applied the Framework and related
10 business case to the PPA.

11
12 To apply the Framework, the Company first reviewed each category of costs and benefits
13 identified in the Framework to determine which categories are applicable to the PUC's
14 review of the PPA. The analysis attached as Schedule NG-7 indicates the Framework
15 category in the column on the left, and the column on the right indicates whether the criteria
16 is applicable, and if so, how it has been addressed through the project analysis.

15 Guidance Document, at 6.

16 The PUC provided additional guidance on the appropriate application of the Framework in an Open Meeting held on August 29, 2018 in docket No. 4822 and at a technical session held in docket No. 4600 on November 1, 2018.

1 **Q. Did the Company determine that any of the costs and benefits within the Power**
2 **System Level category are not applicable to the review of this PPA?**

3 A. Yes. The PPA is a long-term wholesale power contract for the purchase of energy and
4 RECs, to be delivered at the transmission level. Therefore, there are no costs or benefits
5 to be quantified at the distribution level. Similarly, the PPA is not related to energy demand
6 reduction and therefore has no energy demand reduction induced price effect; although the
7 project's indirect benefit impact on market LMP price change and REC price change has
8 been quantified. In addition, the PPA does not include the purchase of capacity, and as a
9 result, there are no direct capacity costs or benefits associated with PPA. Modeling indirect
10 costs or benefits associated with capacity is beyond the accuracy of the modeling employed
11 by the Company and TCR. Finally, transmission costs are included in the purchase price
12 of energy and RECs, and therefore all electric transmission infrastructure costs have been
13 accounted for in the PPA cost of energy and RECs (see line 6 of Schedule NG-7).

14
15 **Q. Are any of the Customer Level costs and benefits applicable to the PPA?**

16 A. No, the Customer Level costs and benefits are not applicable to the PPA. The costs and
17 benefits in the Customer Level category are intended to measure direct participant costs
18 and benefits of retail customer program participation, such as energy efficiency or
19 distributed energy resource programs. The PPA is not a retail customer program. Rather,
20 all distribution customers will pay for the cost of the PPA through distribution rates such
21 that costs and benefits of the PPA are distributed equitably to all customers. While the

1 Company does not consider the Customer Level costs and benefits applicable to the review
2 of the PPA, the Company has separately provided illustrative bill impacts resulting from
3 the including of the PPA costs in the Company's Long-Term Contracting for Renewable
4 Energy Recovery (LTCRER) Provision.

5
6 **Q. Are any costs or benefits in the Societal Level category not applicable?**

7 A. The Societal Low-Income Impact category is intended to measure attributes such as
8 poverty alleviation, reduced energy burden, reduced involuntary disconnections from
9 service and other reductions in the costs of social services. The PPA at issue is not intended
10 to address these issues, and therefore the category is not applicable. To the extent this
11 category is intended to measure local economic benefits, those values have been captured
12 in the economic development category.

13
14 **Q. Are there any costs or benefits that the Company determined are applicable, but that
15 cannot be quantified?**

16 A. Yes, the Company has noted those categories in Schedule NG-7.

17
18 **Q. For those categories that were quantified, what method did the Company use to
19 quantify the benefits and costs?**

20 A. The Company relied upon the analysis prepared by TCR to quantify the project net benefits,
21 as discussed further in Section III of the testimony, above, and in Schedule NG-5. The

1 Company also relied upon the economic benefit analysis prepared by Navigant Consulting
2 to determine the economic development value of the project, which is provided as Schedule
3 NG-6.

4
5 **Q. What is the net result of the benefit-cost analysis completed under the Framework?**

6 A. The project is estimated to provide over \$1 billion¹⁷ in total net benefits over the life of the
7 contract, demonstrating that the benefits exceed the costs of the project and furthers the
8 objectives of ACES.

9
10 **Q. How do the costs and benefits of this project compare to the costs and benefits of other
11 programs?**

12 A. The Company has prepared a comparison of the project's Benefit/Cost Test as compared
13 to the Energy Efficiency program for the program year 2019, as well as a comparison of
14 the project's levelized cost as compared to other renewable energy programs in Rhode
15 Island. The analysis is provided as Schedule NG-8.

16
17 **Q. Why should Rhode Island invest in this project, rather than implement more energy
18 efficiency?**

19 A. The PPA enables the financing of a 400 MW of commercially reasonable off-shore wind,

¹⁷ Net Present Value in 2018 dollars.

1 that will deliver approximately 1,628,398 MWh¹⁸ and RECs per year. The project is
2 expected to bring local economic benefits through jobs and economic investment to Rhode
3 Island. The project brings scale and diversity to Rhode Island's clean energy portfolio.
4 Additionally, this project will support Governor Raimondo's goal of increasing Rhode
5 Island's clean energy portfolio ten-fold by 2020.¹⁹

6
7 **VII. Cost Recovery**

8 **Q. How does the Company propose to recover the costs associated with this transaction?**

9 A. To the extent the Company chooses to sell the energy into the ISO-NE wholesale electricity
10 market and the renewable energy certificates (RECs) through a competitive bid process,
11 the Company will: (1) net against the cost of payments made under this long-term contract
12 the net proceeds received from the sale of energy and/or RECs; (2) credit or charge all
13 distribution customers the difference between the contract payments and proceeds through
14 a uniform, fully reconciling semi-annual factor in distribution rates, subject to review and
15 approval by the Commission; and (3) utilize a reconciliation process that allows the
16 Company to recover all costs incurred under such contracts, subject to review and approval
17 by the Commission, plus remuneration earned on payments made under the contract. As
18 noted above, the Company intends to sell the energy into the ISO-NE wholesale market

¹⁸ Average expected annual output.

¹⁹ In 2017, Governor Gina M. Raimondo announced a goal of increasing Rhode Island's clean energy portfolio ten-fold by 2020. For more details, please see:
<http://www.energy.ri.gov/renewable-energy/governor-clean-energy-goal.php>.

1 and retain RECs for the purpose of meeting the Company's annual Renewable Energy
2 Standard (RES) obligation. Any RECs not used for annual RES requirements will be sold
3 into the market and all distribution service customers shall be credited with the net proceeds
4 received.

5
6 **Q. Under what tariff is the Company proposing to recover costs associated with this**
7 **contract?**

8 A. The Company has a Commission-approved Long-Term Contracting for Renewable Energy
9 Recovery (LTCRER) Provision describing the availability, definition, pricing, and term of
10 service for the recovery from distribution customers on a uniform per-kWh basis of costs
11 relating to long-term renewable energy contracts. The LTCRER Factor provides for the
12 recovery of above-market costs from customers, or the crediting to customers of below-
13 market costs of long-term renewable energy contracts, pursuant to the LTCRER Provision.
14 The LTCRER Factor is included with the Renewable Energy Distribution Charge on
15 customers' bills.

16
17 **Q. Please describe the costs eligible to be recovered by this tariff.**

18 A. The Company proposes to recover the following costs associated with this long-term
19 renewable contract (1) the net costs of the energy sold into the ISO-NE market; (2) the net
20 costs of the RECs obtained under the long-term contracts; and (3) the remuneration allowed
21 in recognition of the Company's acceptance of the financial obligation of this long-term

1 contract. The net costs included in the determination of the LTCRER Factor are estimated
2 based upon the contract prices, projected market prices, and the estimated kWh generated
3 and purchased under the contracts.

4
5 **Q. Would the net costs for this PPA be presented for Commission approval be recovered**
6 **in the same manner as the net costs associated with previously approved long-term**
7 **renewable contracts?**

8 A. Yes. Under the PPAs, the Company will incur the same types of net costs as those which
9 the Company is currently recovering for the previously approved long-term contracts.

10
11 **Q. Does the Company reconcile estimated costs to actual contract costs under the**
12 **currently-approved tariffs?**

13 A. Yes. The currently-approved Long Term Contracting for Renewable Energy Recovery
14 Reconciliation provides an annual reconciliation in which the Company compares the
15 actual payments under the Company's Commission-approved renewable energy contracts,
16 less actual net proceeds received from the sale of energy into the wholesale electricity
17 market, less actual net proceeds from REC sales, plus actual remuneration at 2.75 percent
18 of Total Contract Cost, for contracts, with actual revenue billed to customers in the year
19 through the tariff. Any over- or under-recovery that results from this reconciliation is
20 included in the annual calculation of the LTCRER Reconciliation Factor applicable in the
21 following year.

1

2 **Q. Will this reconciliation apply to the PPA in this proceeding, if approved by the**
3 **Commission?**

4 A. Yes, it will.

5 **Q. Have you provided bill impacts related to the estimated recovery of the contract costs**
6 **associated with this contract?**

7 A. Yes, the bill impacts are presented in Schedule NG-9. The total bill impact for a residential
8 customer using 500 kWh per month is a net decrease of approximately 0.4%. The bill
9 impacts included herein are intended to provide only an illustration of how the proposed
10 contract would impact the customer bills based on the net impact of the contract costs
11 reduced by the projected reduction in supply costs, which, for simplicity, has been included
12 in the net costs upon which the illustrative LTCRER Factor is calculated.

13

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

15 A. Yes, it does.

Schedules

- Schedule NG-1 is the PPA executed by the Company;
- Schedule NG-2 is the final RFP as issued on June 29, 2017;
- Schedule NG-3 is the final order of the MA DPU approving the Section 83C solicitation;
- Schedule NG-4 includes the Massachusetts and Rhode Island Standards of Conduct;
- Schedule NG-5 is the Revolution Wind Quantitative Evaluation Report prepared by Tabors Caramanis Rudkevich (“TCR”);
- Schedule NG-6 is the Economic Benefits Report prepared by Navigant Consulting, Inc. (REDACTED);
- Schedule NG-7 presents the Company’s Dkt. 4600 analysis;
- Schedule NG-8 is a comparison of Revolution Wind’s net benefits to other programs;
and
- Schedule NG-9 presents illustrative bill impacts for the Company.