STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

IN RE: THE NARRAGANSETT ELECTRIC

COMPANY d/b/a NATIONAL GRID REVIEW : DOCKET NO. 4929

OF POWER PURCHASE AGREEMENT : PURSUANT TO R.I. GEN. LAWS § 39-31-1 TO 9 :

REPORT AND ORDER

I. Background/Travel

On February 7, 2019, under the authority of the Affordable Clean Energy and Security Act (ACES),¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company) filed with the Public Utilities Commission (PUC or Commission) a Power Purchase Agreement (PPA) between National Grid and DWW Rev 1, LLC (DWW). In the filing, National Grid and DWW sought approval of a twenty-year PPA under which National Grid will purchase 100% of the energy and environmental attributes associated with DWW's 400 MW offshore wind facility.² The price for energy, renewable energy certificates, and transmission related to the offshore wind facility is \$0.098425 per kWh. National Grid also sought approval of a cost recovery mechanism and financial remuneration equal to 2.75% of the annual payments under the PPA.

To approve the PPA, the PUC must find three things: the PPA is commercially reasonable, as defined in ACES; the requirements for the solicitation have been met (including whether the solicitation was open and competitive); the PPA is consistent with the region's greenhouse gas reduction targets; and the contract is consistent with the purposes of ACES.³ Finally, National Grid sought approval of its proposal to recover costs through the existing long-term contracting

¹ R.I. Gen. Laws § 39-31-1 to 9. ACES was enacted to authorize coordinated regional procurement activities for different types of energy supply by electric distribution companies or the New England States.

² The facility will be located on the Outer Continental Shelf in Bureau of Ocean Energy Management (BOEM) Lease OCS-A 0486 area. Brennan and DeDomenico Joint Test. at 5;

http://www.ripuc.org/eventsactions/docket/4929-NGrid-Brennan-DeDomenica(2-7-19).pdf.

³ R.I. Gen. Laws § 39-31-6(a)(1)(vii).

for renewable energy recovery factor. While ACES authorizes the PUC to provide for the recovery of reasonable costs from all electric distribution customers, including costs incurred under approved contracts and approve any other proposed regulatory or ratemaking changes that reasonably advance the goals set forth in ACES,⁴ the standard of review of these two proposals is governed by the PUC's general ratemaking authority.

Following National Grid's filing, the PUC notified the Office of Energy Resources (OER), Department of Environmental Managemen (DEM)t, and Rhode Island Commerce Corporation of the filing and the statutory requirement that they each submit an advisory opinion to the PUC on various topics relevant to the PUC's required findings. The PUC also issued a notice of public comment and set a schedule in this matter.⁵ A hearing to accept public comments was held in the evening on March 19, 2019. Six members of the public provided comment in support of the project whereas there was no comment provided in opposition.⁶ The supporters said the project would provide environmental and economic development benefits.

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The commission shall accept public comment on any contracts filed by the distribution utility, as authorized under this section, for a period no less than thirty (30) days.

⁴ R.I. Gen. Laws § 39-31-7(a)(5), (7).

⁵ R.I. Gen. Laws § 39-31-6(a)(1) (vi) provides as follows:

⁽A) During this public comment period, the contracts shall be reviewed by the following state agencies, which shall provide advisory opinions to the public utilities commission on the topics specified, and the public utilities commission shall give due consideration to the advisory opinions filed:

⁽I) The department of environmental management (DEM) shall provide an advisory opinion on the expected greenhouse gas emissions and statewide environmental impacts resulting from the proposed contract(s).

 $⁽II)\ The\ commerce\ corporation\ shall\ provide\ an\ advisory\ opinion\ on\ the\ expected\ statewide\ economic\ impacts\ resulting\ from\ the\ proposed\ contract(s).$

⁽III) The office of energy resources shall provide an advisory opinion on the expected energy security, reliability, environmental, and economic impacts resulting from the contract(s).

⁽B) The commission shall notify the aforementioned agencies upon the filing of any contract filed by the distribution utility pursuant to this chapter, and notify them of any related hearings and/or proceedings.

⁽C) Advisory opinions issued by agencies designated under (vi)(A) of this paragraph shall not be considered as final decisions of the agencies making the opinions, and shall not be subject to judicial review under § 42-35-15, or any other provision of the general laws.

⁶ Tr. (Mar. 19, 2019).

On May 28, 2019, following six days of hearings, the PUC reviewed the evidence, including advisory opinions, discovery, and prefiled testimony, and approved the PPA, finding it consistent with ACES. The PUC denied National Grid's request for remuneration, finding it unsupported and neither legally required nor necessary. The PUC found that the Company shall be entitled to cost recovery of the PPA products but determined it appropriate to wait until a future time, closer to the project achieving commercial operation, to approve a specific mechanism.

II. Commission Findings and Analysis

A. Standard of Review

As noted above, ACES set out the standard of review and criteria the PUC must use in making its decision. Under ACES, to approve the PPA, the PUC must make each of the findings set out in the first five following section headings. The final two section headings address the Company's proposed remuneration and cost recovery.

1. The PPA was the result of a reasonable, open, and competitive method of soliciting proposals from renewable energy developers

The PPA, signed by the contracting parties and filed with the PUC for approval, resulted from a competitive solicitation that allowed for a reasonable amount of negotiation. The PUC has previously found that the use of requests for proposals (RFP) together with a robust review process has been an effective method of procuring renewable energy. Here, at the outset of what led to this PPA, an RFP for offshore wind projects was issued by all of the Massachusetts investor-owned electric distribution companies after it was approved by the Massachusetts Department of Public

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⁷ Brennan and DiDomenico Jt. Test. at 31; http://www.ripuc.org/eventsactions/docket/4929-NGrid-Brennan-DeDomenica(2-7-19).pdf. See Order No. 23102 (Apr. 9, 2018); Order No. 20215 (Dec. 1, 2010); 810-RICR-40-05-1 (Long-Term Contracting Standards for Renewable Energy);

Utilities.⁸ The RFP allowed the Massachusetts electric distribution companies to invite other states to participate in the projects under certain conditions.⁹

The RFP was distributed to approximately 600 individuals and entities with an interest in developing renewable energy projects. It was also posted publicly on a dedicated website. The evaluation process included three stages. In the first, proposals were reviewed to ensure they met eligibility and threshold requirements. In the second, proposals were evaluated based on specific quantitative and qualitative criteria. Finally, the evaluation team conducted further analysis of the proposals to ensure that only viable projects that would provide cost-effective, reliable offshore wind energy with limited risk, would be available for selection. Three qualified bidders submitted eighteen bids with twenty-seven pricing variations. Following Massachusetts' selection of 800MW of offshore wind from another developer, Rhode Island reviewed the analysis prepared by the Massachusetts evaluation team and, based on its review, selected the 400MW DWW Rev I project for contract negotiations.¹⁰ The parties did, in fact, negotiate changes to the model PPA that was included in the procurement process.¹¹

2. The requirements of the solicitation were met

The undisputed evidence in the record was that the requirements of the solicitation were met. The Massachusetts evaluation process, which Rhode Island accepted, included a review by an independent evaluator hired to provide oversight to ensure the process was open, fair, and transparent and to ensure the process was not unduly influenced by an affiliated company.¹² National Grid's witnesses, Timothy Brennan, Director or Regulatory Strategy and Integrated

⁸ Brennan and DiDomenico Jt. Test. at 11.

⁹ *Id*. at 5-6.

¹⁰ Id. at 11-17; Dalton Test. at 8-9; http://www.ripuc.org/eventsactions/docket/4929-OER-Dalton%20(4-5-19).pdf.

¹¹ OER Advisory Op. at 16-17; http://www.ripuc.org/eventsactions/docket/4929-OER-AdvisoryOpinion 3-22-19.pdf.

¹² Brennan and DiDomenico Jt. Test. at 17; Dalton at 7.

Analytics Group for National Grid USA Service Company, Inc., and Corinne DiDomenico, Manager of Environmental Transactions, Energy Procurement of National Grid, testified that the independent evaluator concluded that these requirements had been met.¹³

3. The PPA is commercially reasonable

a. The terms and pricing are reasonably consistent with what an experienced power market analyst would expect to see in transactions involving regional-energy resources and regional-energy infrastructure

The uncontested testimony was that the PPA was commercially reasonable in that it represented terms and conditions that an experienced power market analyst would expect to see in transactions involving regional-energy resources. The negotiation of contract terms commenced with a model PPA that had been provided to the bidders during the procurement process. John Dalton, President of Power Advisory LLC, a consultant retained by the Division of Public Utilities and Carriers (Division) and OER, testified that the model PPA was consistent with other PPAs used in regional procurements, such as those approved by the PUC in Docket No. 4822. He referenced OER's Advisory Opinion which outlined the modifications that had been made during negotiations and concluded that those modifications represented a balancing of commercial interests that would benefit Rhode Island consumers.¹⁴

Mr. Brennan and Ms. DiDomenico; DWW witness, Jurgen Weiss, Ph.D, a Principal with The Brattle Group; and Mr. Dalton each testified that the pricing was consistent with what they would expect to see in transactions involving regional energy resources. Of particular consideration was the fact that the pricing is consistent with contract pricing offered by other

¹³ Brennan and DiDomenico Jt. Test. at 17.

¹⁴ Dalton Test. at 11-12; Weiss Test. at 4, 9-10; http://www.ripuc.org/eventsactions/docket/4929-DWW-Weiss 4-5-19.pdf; Hr'g. Tr. at 93-94 (May 2, 2019).

offshore renewable energy resources in the same time frame.¹⁵ For example, in December, the Connecticut Public Utilities Regulatory Authority approved a 200MW portion of the Revolution wind project for \$99.50/MWh, slightly above the price in the instant PPA before the PUC.¹⁶ Additionally, Dr. Weiss testified that the 800 MW Vineyard Wind project approved by the Massachusetts Department of Public Utilities is, over time, approximately ten percent less expensive than the PPA before the PUC.¹⁷

Dr. Weiss also testified that the PUC should not consider price alone when assessing whether the pricing under the PPA is commercially reasonable. Where the statute does not require a least cost procurement, he testified, one should consider the overall benefit to cost ratio when determining whether a PPA price is commercially reasonable.¹⁸

Based on the testimony of these witnesses, the PUC found that the pricing in the PPA was commercially reasonable.

b. The project has a credible commercial operation date

There was no dispute that the project has a credible commercial operation date. In the Company's prefiled testimony, the witnesses stated that they determined the project had a reasonable commercial operation date based on DWW's experience in offshore wind farm development. At the hearing, Ms. DiDomenico testified that during the bid evaluation period, the Company considered DWW's permitting timeline, interconnection timeline, and National Grid's own awareness of renewable energy project development milestones.¹⁹ Mr. Dalton testified that the DWW project offered the latest commercial operation date of all the projects offered by the

¹⁵ Weiss Test. at 9-11.

¹⁶ *Id*. at 9.

¹⁷ *Id*. at 11.

¹⁸ Weiss Test. at 5; Hr'g. Test. at 87-88, 90.

¹⁹ Brennan and DiDomenico Jt. Test. at 25-26; Hr'g. Tr. at 154-55 (May 2, 2019).

three bidders. That combined with DWW's experience developing the Block Island Wind Farm led him to conclude that the project had a credible commercial operation date.²⁰ The PUC also noted that the commercial operation date can be extended from the first quarter of 2024 to January 15, 2028.²¹ Based on the testimony of National Grid's witnesses and the OER and Division witness, the PUC found that the project has a credible commercial operation date.

c. The benefits to Rhode Island, including the total energy security, reliability, environmental and economic benefits to the State of Rhode Island and its ratepayers, likely exceed the cost of the project

Notwithstanding the uncontroverted testimony that the benefits exceed the cost of the PPA, the record also showed that Rhode Island and its ratepayers face the risk that the cost may ultimately exceed the benefit of the project. Recognition of the risk, even if not quantified, is important in any analysis the PUC is asked to consider but is even more so the first time the PUC is asked for approval under a statutory standard of review. The record, however, while raising concerns that the testimony may paint too rosy a picture, did not clearly demonstrate a quantifiable risk. There is no basis, therefore, for the PUC to make a definitive finding that either the costs will exceed the benefits, or the benefits will not exceed the costs. Thus, based on the record before it, the PUC reasonably concluded that the benefits to Rhode Island were likely to exceed the costs of the project.

i. The direct costs of the PPA may exceed the direct economic benefits

On a net present value (in 2018 dollars), the direct costs of the PPA total \$1,333,945,342 and the direct benefits total \$1,338,612,074. The PPA is expected to achieve \$4.67 million in direct net benefits to ratepayers.²² The direct benefits are simply the difference between the PPA

²⁰ Dalton Test. at 14-15.

²¹ PPA Section 3.2; National Grid's Response to PUC 2-19; http://www.ripuc.org/eventsactions/docket/4929-NGrid-DR-PUC2 3-18-19.pdf.

²² National Grid's Response to PUC 5-1; National Grid's Response to PUC 3-7, Attachment 3-7-A.

costs and the anticipated market value of the energy and RECs delivered under the PPA. If the combined market value of these products exceeds the cost paid under the PPA, direct net benefits are realized. The record shows that the energy purchased under this PPA will never cost less than the market value of energy.²³ The energy product will realize a net loss of \$66.4 million over the term of the PPA.²⁴ The REC product is projected to realize a net benefit of \$71.1 million.²⁵ Therefore, because the energy cost is projected to always exceed the market price, realization of direct benefits depends entirely on the veracity of the REC forecasts.

The entire direct net benefit of the PPA is expected to be realized in the second half of the last year of the PPA.²⁶ This result is dependent on a doubling of REC market prices between 2027 and 2028.²⁷ If such an event is delayed by even six months, all else being equal, the PPA will remain a net direct economic loss to ratepayers. This doubling will occur if there is a shortage of RECs. The predicted shortage is based on projected load data.²⁸ If the load data is overstated, there is a risk the shortage will not occur as forecast and therefore, market prices will not spike.

To forecast REC requirements, the Tabors Caramanis Redkevich (TCR) model relied upon by the parties, utilizes a number of data sources, including forecasts of net summer peak load from ISO-New England's 2018 CELT (capacity, energy, loads, transmission) Report. While witnesses testified that the ISO-NE CELT Report is the best information available, a review of past reports shows that ISO-NE consistently overestimates weather normalized annual summer peak for load,

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²³ National Grid's Response to RR-2, Figure 1.

²⁴ National Grid's Response to PUC 3-7, Attachment 3-7-A.

 $^{^{25}}$ *Id*.

²⁶ National Grid's Response to PUC 5-1, indicating that the PPA enters the final year with a net loss of \$7.78 million and is expected to break even in the second half of that year.

²⁷ National Grid's Response to PUC RR-2, Figure 3.

²⁸ National Grid's Response to PUC RR-2, Figures 1 and 2; Hr'g. Tr. at

net of photovoltaics and passive demand response.²⁹ An overestimate of the load will result in an overestimate of the RECs needed. The risk here is that an overestimate of the RECs needed compared to the RECs expected in the region at the same time, may lead to a faulty conclusion that there will be a shortage of RECs and a corresponding increase in prices. The risk is exacerbated because the spike in the market value of RECs is driven by marginal scarcity. If there is adequate supply, even by one, of RECs in the region, the price will remain very low.³⁰ In short, the market value of RECs turns on a dime, and all else being equal, so do the direct economic benefits of this PPA.

The risk, however, cuts both ways. If low REC prices persist, the region may increase their states' renewable energy requirements, and all else being equal, boost REC market values in the future. As with any forecast, there is a risk. And that risk could move in either direction. The evidence in the record, however, while not quantified, suggests that there is a small margin for error in the forecasts. Notwithstanding these concerns, the testimony in the record was that the direct benefits should exceed the costs and any risk addressed in this section was not quantified in a manner to overrule the conclusions in the testimony.

ii. The indirect energy market savings may not be fully realized

The indirect benefits of this PPA include \$86.967 million in energy market price savings to Rhode Island energy customers and \$1.157 billion in energy market price savings to other New England customers through an overall price suppression effect from the offshore wind farm.³¹ Mr. Brennan explained that energy supply cost savings are realized when the marginal generating

²⁹ Hr'g. Tr. at 117 (May 2, 2019); Hr'g. Tr. at 76-77 (May 9, 2019); National Grid's Response to PUC 6-1. Even more recently, the actual 2018 summer peak load was 573 MW lower than forecast in the 2018 CELT Report and the 2019 summer peak load forecast is 189 MW lower than forecast in the 2018 CELT Report. *Id*.

³⁰ National Grid's Response to RR-2, Figure 3.

³¹ National Grid's Response to PUC 3-7.

resource has a lower clearing price than the market otherwise would have. Since all generating units receive the clearing price, the total revenue paid to the energy market by load will be lower.³²

There are multiple wholesale markets, including the Forward Capacity Market (FCM) which is designed to pay generation for its availability to deliver energy when needed.³³ Mr. Brennan explained that generating units bid into the FCM seeking to earn the difference between the revenue the generator can earn in the energy market and its needed revenue, a difference Mr. Brennan referred to as the "missing money,"³⁴ The cost of the capacity market, as well as the cost of ancillary services, are paid for by load.³⁵ Because the modelling did not quantify the impact on capacity values or ancillary services values, it is unclear what the net impact across markets will be if generation seeks to make up for the lost energy revenues resulting from the energy market price suppression.³⁶ ISO-New England might grant cost-based recovery for reliability or fuel security reasons, and thus reduce the projected energy market savings. States may also provide uplift to generators for other reasons.³⁷ As a result, there is a risk that Rhode Island ratepayers may not realize the full projected indirect benefits from the energy market price savings.³⁸ Again, however, because of the lack of quantification of the risk, there is no basis for the PUC to definitively find that total benefits will not exceed the costs.

iii. The increase in PPA market value from extreme winter fuel prices may not be fully realized

The increase in project PPA market value during a period of extreme winter fuel prices has been lauded as an indirect economic benefit to Rhode Island ratepayers. This value is projected to

³² Hr'g. Tr. at 59-63 (May 1, 2019).

³³ *Id.* at 59 (May 1, 2019).

³⁴ *Id*.

³⁵ *Id*. at 74.

³⁶ *Id.* at 56-57. Based on a qualitative analysis, National Grid projected an increase in ancillary services costs. National Grid Response to PUC 3-6.

³⁷ Hr'g. Tr. at 100-01, 152-54, 159-61 (May 1, 2019).

³⁸ National Grid's Response to PUC 3-6.

be \$25.4 million.³⁹ The PUC is concerned that the benefits may be overstated as there may have been a flaw in the statistical analysis. It appears the effect of the 2013/2014 winter on forecasted prices may have been included twice without statistical justification. The extreme winter prices experienced in 2013/2014 were included in the baseline projection for the 2024/2025 energy price, and then TCR applied an additional markup to that price by applying the impact of the 2013/2014 winter price again.⁴⁰ Therefore, the PUC was concerned the benefits may have been overstated. This is another risk for ratepayers. However, because the explanation of the analysis was not crystal clear, the PUC cannot conclude definitively that the total benefits will not exceed the costs.

iv. The economic benefits to Rhode Island may not be fully realized

The economic benefit to Rhode Island from this PPA is estimated to be in excess of \$400 million.⁴¹ The total economic benefit is described as including direct, indirect, and induced impacts on employment, earnings, output, and value added during the construction and operations phases of the project.⁴² Despite testimony that a full economic impact model should consider the impact of any changes to electric rates, neither of the economic impact models considered the potential impact of any increases or decreases in electric bills or the cost of electric power that might result from this PPA.⁴³

The PPA is projected to have direct net costs of \$123 million (net present value 2018\$) during the first four years of operation.⁴⁴ Based on an annual unitized amount per kWh, an average residential ratepayer (6,000 kWh per year) will pay approximately \$164 for this PPA over the first

³⁹ National Grid's Response to PUC 3-7.

⁴⁰ The record also does not provide an explanation for TCR's assumption that a period of extreme winter prices will occur once in fifteen years.

⁴¹ Brennan and DiDomenico Jt. Test at 25; National Grid's Response to PUC 3-7; National Grid's Initial Filing, Schedule NG-6 at 1; Commerce RI Advisory Op. at 8.

⁴² National Grid's Initial Filing, Schedule NG-6 at 1; Commerce RI Advisory Op. at 8.

⁴³ Hr'g. Tr. at 65-67 (May 9, 2019). Mr. O'Neill testified that there is an economic model capable of analyzing the effect of bill impacts.

⁴⁴ National Grid's Response to PUC 5-1.

four years. This rate impact scales linearly with consumption, with a 19,710,000 kWh per year customer paying \$540,448 for this PPA over the first four years. Based on the projections in discovery, ratepayers will recoup their costs over the next 11 years. 45 Despite expert testimony that it is important to understand the impacts of the net direct costs on employment and other economic indicators in the early years of this PPA, that analysis was not conducted.⁴⁶ Also unexplored by the analyses is the timing of economic impacts: the net direct costs of this PPA will be charged to ratepayers at the start of the operations phase when construction-related employment and earnings benefits end.⁴⁷

Because of the incomplete economic analysis, there is a risk that the economic benefits over the term of the PPA may be overstated. However, unlike the testimony from customers and intervenors in prior offshore wind farm dockets, there was no evidence presented to quantify the impact such that the PUC could find the costs to the Rhode Island economy will definitively exceed the benefits. The PUC cautions that future economic impact analyses should include a full analysis of the impact of any above market costs during the term of a PPA which follows the end of the construction period.

4. The PPA is consistent with the region's greenhouse gas reduction targets

The estimated reductions in greenhouse gas emissions was not a consistent figure.⁴⁸ The evidence in the record, however, demonstrated that each model and methodology used produced directionally consistent conclusions that the project will result in a reduction to regional greenhouse gas emissions.⁴⁹ Based on DEM's Advisory Opinion, the testimony of DWW witness

⁴⁸ See DEM Advisory Opinion at 4; http://www.ripuc.org/eventsactions/docket/4929-

DEM Advisory Opinion 2019-3-22.pdf; OER Advisory Opinion at 28-29; Luciani Test. at 4, Exhibit 3; http://www.ripuc.org/eventsactions/docket/4929-DWW-Luciani(4-5-19).pdf.

⁴⁵ *Id.*; National Grid's Response to PUC 5-4.

⁴⁶ Hr'g. Tr. at 43-47, 65-67 (May 9, 2019).

⁴⁹ DEM Advisory Opinion at 5-6.

Ralph Luciani, Director in Energy Practice for Navigant Consulting, and the Advisory Opinion of OER,⁵⁰ the PUC concluded that the PPA is consistent with the region's greenhouse gas reduction targets.

5. The PPA is consistent with the purposes of ACES

The findings in part II.A, sections one through five, above encompass each of the purposes of ACES. No further findings are necessary.

6. The Company is not entitled to financial remuneration

National Grid requested remuneration of 2.75% calculated on the total contract cost, estimated to be greater than \$88 million, in nominal dollars, over the life of the contract.⁵¹ The PUC denied the request. Accordingly, ratepayers will not be required to pay \$88 million over twenty years to National Grid's shareholders in addition to the contract costs.

The PUC's denial was soundly grounded. First, unlike other legislation passed by the General Assembly, the ACES legislation neither requires nor specifically authorizes the PUC to give National Grid's shareholders remuneration. Second, National Grid failed to provide any credible evidence that National Grid's credit rating would be harmed by entering into a power contract for which it was guaranteed full cost recovery, nor that it would be harmed in any way.⁵² The PUC neither will, nor should award National Grid's shareholders millions of dollars based on supposition. Third, the PUC sets rates based on law, economics, and evidence. It does not hand out a "gratuity" or tip a utility because of its cooperation in signing a contract that poses no risk to the utility to advance state policy. Indeed, a utility can be mandated to procure energy for its

⁵⁰ OER Advisory Opinion at 26-31.

⁵¹ National Grid Response to PUC 2-9.

⁵² As Mr. Kahal testified, if National Grid's credit rating was adversely affected, specifically due to the lack of an additional, guaranteed profit, and its cost of capital were to increase, the Company could seek rate relief under R.I. Gen. Laws § 39-3-11. Kahal Test. at 9.

customers, whether that energy comes from fossil-fueled generation or renewable sources, without receiving a gratuity.⁵³

i. ACES does not require an award of remuneration

The plain language of ACES, enacted in 2014, does not require an award of remuneration.⁵⁴ This is in stark contrast to other renewable energy statutes such as the Long-Term Contracting for Renewable Energy Act,⁵⁵ enacted in 2009; the Distributed Generation Standard Contracts Act,⁵⁶ enacted in 2011; and the Renewable Energy Growth Program Act,⁵⁷ enacted in 2014. The first two laws require remuneration specifically valued at 2.75% of the total payments made under the contracts. The Renewable Energy Growth Program does not require but allows remuneration and sets a rate of 1.75% of the payments made to enrolled projects.⁵⁸ Thus, a reading of the renewable energy procurement laws shows that the General Assembly has been clear, through its use of plain language in statutes, when it intends to authorize or direct the PUC to award remuneration. It therefore follows that the absence of such a mandate in a related statute evidences a clear intent not to require remuneration.

It should also be noted that the Renewable Energy Growth Program Act was enacted on June 30, 2014, and ACES was enacted just four days later. The former requires remuneration; the latter omits any reference to it at all. Had the General Assembly intended to require remuneration

⁵³ See R.I. Gen. Laws § 39-1-27.3, requiring electric distribution companies to procure Standard Offer and Last Resort supply for ratepayers at no profit; See R.I. Gen. Laws § 39-26-1-4, requiring all retail electric energy suppliers to procure a percentage of deliveries from renewable energy resources.

⁵⁴ Hevert Test. at 6.

⁵⁵ R.I. Gen. Laws § 39-26.1-4.

⁵⁶ R.I. Gen. Laws § 39-26.2-9.

⁵⁷ R.I. Gen. Laws § 39-26.6-13(j)(3).

⁵⁸ *Id.* The Renewable Energy Growth Program also authorizes the PUC to establish more specific performance standards. R.I. Gen. Laws § 39-26.6-13(j)(2)-(3). All three of the named statutes require National Grid to procure renewable energy to meet mandatory, legislatively-enacted procurement goals. In contrast, the legislation at issue in this matter - ACES - allows for the voluntary procurement of renewable energy. While this may account for the difference in treatment by the General Assembly, it is not necessarily dispositive. For example, the Renewable Energy Standard, a mandatory renewable energy procurement statute, also does not allow for remuneration.

for procurements under both statutory schemes, it would have said so. Having failed to include remuneration language in ACES, the legislature made its intent clear. Therefore, the PUC found that the General Assembly did not intend to require the PUC to grant National Grid a 2.75% shareholder payment calculated on the full cost of the PPA.

ii. The evidence does not support remuneration

National Grid witness Robert Hevert, a financial consultant for utilities, testified that the requested remuneration was needed to compensate National Grid's shareholders for the use of capital and to offset some perceived risk to the Company's balance sheet. Mr. Hevert maintained that the financial obligation imposed by the subject PPA would lead to liquidity concerns and constrained cash flow.⁵⁹ He contended that an award of 2.75% remuneration would offset those concerns and compensate the Company for strategically using its strong balance sheet and credit rating to reduce financing costs to Ørsted and for advancing state policy.⁶⁰ Mr. Hevert argued that the total PPA costs of \$3.21 billion (nominal dollars) over a twenty-year period would present a financial risk to National Grid. He claimed that rating agencies would impute a large amount of debt that, in turn, could greatly increase the Company's capital costs resulting from a potential downgrade in the Company's credit rating.⁶¹ He stated that all these concerns warranted remuneration.⁶² Yet, Mr. Hevert also testified that nowhere in the May 14, 2018 Moody's report on The Narragansett Electric Company was there mention of power purchase agreements of any sort as affecting credit ratings factors, and he further stated that is not unusual.⁶³

⁵⁹ Hevert Test. at 11, 16.

⁶⁰ Hevert Test. at 11-13.

⁶¹ Hevert Test. at 25-26; Hevert Reb. at 38.

⁶² Hevert Test. at 27-28.

⁶³ *Id.* at 21.

Division witness Matthew Kahal, a consultant, refuted Mr. Hevert's claims. At the hearing, he testified that any debt imputation risk is small, if existent. He explained that the credit rating agencies would use the present value of the cost of the PPA, not the total nominal cost over time, and that would yield a smaller amount.⁶⁴ The ratings agencies would then multiply that reduced amount by a risk factor. Mr. Kahal stated that risk factor would be very, very small.⁶⁵

Relying on explanation given by two rating agencies, he opined that it is highly unlikely that debt imputation would take place.

For example, he provided the following quote from Moody's:

Some utilities have the ability to pass through the cost of purchased power under PPAs to their customers. As a result, the utility takes no risk that the cost of power is greater than the retail price it will receive. Accordingly, we regard these PPA obligations as operating costs with no long-term debt-like attributes.⁶⁶

Furthermore, Mr. Kahal stated that while Standard and Poor's (S&P) does sometimes treat PPAs as debt equivalents for credit metric purposes, its decision to do so and the quantification of debt imputed depend to a large degree on the cost recovery mechanism granted the utility.

In support, Mr. Kahal provided the following quote from S&P:

A 0% risk factor [meaning zero debt imputation by S&P] indicates that the burden of the contractual payments rests solely with ratepayers, as when the utility merely acts as a conduit for the delivery of third party's electricity.⁶⁷

Thus, he stated, "[b]oth Moody's and S&P in those quotes describe cost recovery mechanisms similar to [National Grid's] mechanism." Mr. Kahal contended, based on these statements, that when the ratings agencies are evaluating risk, they strongly consider whether there is a certain cost

⁶⁴ Hr'g. Tr. at 69-70. National Grid calculated the net present value of the PPA at approximately \$1.33 billion. National Grid Response to PUC 5-7.

⁶⁵ Hr'g. Tr. at 70.

⁶⁶ Kahal Test. at 18.

⁶⁷ *Id*.

⁶⁸ *Id*.

recovery mechanism allowing dollar-for-dollar cost recovery.⁶⁹ It should also be noted, as Mr. Kahal stated, the credit rating agencies' reports do not mention remuneration as part of their analysis either.⁷⁰

Mr. Hevert also argued that the PUC should consider the total nominal cost of the PPA over a twenty-year period as evidence of risk to the Company. The annual payments on the PPA amount to approximately \$161 million.⁷¹ However, for comparison purposes, the 2018 Standard Offer Service expense was \$416.23 million and the 2017 Standard Offer Service expenses was \$337.43 million.⁷² And, by law, the Company earns no remuneration or profit on this expense.

One should consider that the Company previously had Standard Offer Service contracts in place that were not fixed price contracts. They were comprised of a fixed base price and a fuel index adder. Those contracts totaled \$4.57 billion over an approximate nine-year period, from the end of 2000 through 2009, with expenses ranging from \$393.13 million to \$716.83 million annually. No additional remuneration or profit was allowed.

Mr. Kahal noted that the aforementioned Standard Offer Service contracts resulted in costs of a greater magnitude both overall and only on an annual basis. He also testified that it is very common in long term PPAs to have payments that vary with the market conditions.⁷³ This can result in volatility for both the utility and its ratepayers. The subject PPA, however, is a fixed price contract with ratepayers taking all of the market risk.⁷⁴

Neither Mr. Hevert nor any other National Grid witness had conducted any analysis to quantify the expected or potential risk of the PPA to National Grid's credit quality, credit metrics,

⁶⁹ Hr'g. Tr. at 95 (May 10, 2019).

⁷⁰ *Id*. at 70.

⁷¹ Kahal Test. at 5. The Company will forecast costs, collect those costs on a going-forward basis from ratepayers, and reconcile any under- or over-recovery on at least an annual basis. *See infra* Section II.A.7.

⁷² FERC Form 1 page 321 (2017); FERC Form 1 page 321 (2018).

⁷³ Hr'g. Tr. at 90-92.

⁷⁴ Hr'g. Tr. at 90-92; National Grid's Response to PUC 4-6.

cost of capital, or liquidity requirements.⁷⁵ Accordingly, he stressed that the PUC should not ignore the qualitative assessments baked into the credit ratings.⁷⁶ For example, he offered that ratings agencies pay close attention to the regulatory supportiveness of the jurisdiction in which the utility operates.⁷⁷

In support of his position, Mr. Hevert provided a credit report regarding the Hawaiian Electric Company. In that report, Moody's had downgraded the utility, citing, in part, the degradation of the relationship with the regulators. Upon closer review of the report through cross-examination, and as discussed in Mr. Kahal's testimony, the PUC found that reliance on this document by Mr. Hevert was misplaced. In the Hawaiian Electric Company situation, not only was the Hawaii Public Utilities Commission chairman openly criticizing the utility for failing to meet state renewable energy mandates, but an investigation had been opened into the utility's behavior. Also, the Moody's report specifically referenced a large underfunded pension obligation as a basis for the downgrade.

The situation in Rhode Island, however, is nothing like the situation in Hawaii. While disallowing the requested remuneration, the Rhode Island PUC herein has approved the subject PPA as being consistent with state policy and, as noted below, has approved dollar-for-dollar cost recovery for National Grid through rates.

Mr. Hevert also argued that failing to allow remuneration provided for by other statutes could signal weakened of regulatory supportive for National Grid's investment in renewable energy. He went so far as to contend that if the PUC failed to follow the recent ruling of the Massachusetts Department of Public Utilities allowing 2.75% remuneration, the investment

⁷⁵ Hr'g. Tr. at 29-32. (May 10, 2019); National Grid Response to DIV 1-4.

⁷⁶ *Id.* at 31-32.

⁷⁷ Hevert Reb. at 28.

community would consider it as a deterioration of the regulatory environment with a concomitant increase in regulatory risk.⁷⁸ At the hearing, he explained that if 2.75% remuneration were not provided, "the question for the investment community and to rating agencies will be what has changed, why would that no longer be applicable even though they're under different statutes."⁷⁹

Rejecting Mr. Hevert's speculative warning, Mr. Kahal noted that "the credit rating agencies are well aware that the current ACES legislation that governs this PPA does not provide for any remuneration and that this is a disputed issue before this Commission." Mr. Kahal further provided that no credit rating agency had expressed concern through new credit rating reports or communications with the Company. 81

Based on the foregoing, the PUC found that Mr. Hevert's testimony was supported by neither the evidence nor the law. There was, indeed, no evidence that ratings agencies would downgrade the utility as a result of a PPA supported by a dollar-for-dollar recovery factor. Moreover, there was credible evidence that the ratings agencies would likely view this PPA like other PPAs that are backed by full cost recovery mechanisms. There was no quantification of the risk or magnitude of such an action. No credible evidence even suggested that ratings agencies would view a denial of remuneration for this PPA as a degradation of the regulatory environment

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⁷⁸ *Id.* at 38

⁷⁹ Hr'g Tr. at 46 (May 10, 2019).

⁸⁰ *Id.* at 62-63.

⁸¹Id. at 63. The PUC also takes administrative notice of Moody's reports issued following the passage of the Renewable Energy Growth Act, reducing remuneration to 1.75% for compliance with the long-term mandatory feedin tariff payments to renewable energy project owners. No mention was made of this statutory change or any effect on The Narragansett Electric Company's financial outlook. Docket No. 4770, In re: The Narragansett Electric Company d/b/a National Grid – Electric and Gas Distribution Rate Filing, National Grid Response to PUC 1-10.

in Rhode Island.⁸² Rather, the evidence showed that the credit ratings agencies are well aware that ACES makes no mention of remuneration and that they would be concerned primarily, if not exclusively, with whether the utility was guaranteed cost recovery in a timely manner.

The facts support finding that DWW has financial risks related to development. The facts also support finding that ratepayers will bear all of the market risks. And the facts also support finding that with a recovery factor that is both forecasted and reconciled, National Grid bears no cost risk from this PPA. There is no justification for providing additional guaranteed profit to shareholders in the absence of a proven risk. That runs counter to the ratemaking process whereby a utility is allowed a reasonable opportunity to receive a profit based, in large part, on its risk profile.

iii. None of the proposed amounts for remuneration were supported by evidence

The only reason National Grid offered for its entitlement to the requested 2.75% of the total contract payments, for an estimated \$88 million payment to shareholders was the fact that it entered into the agreement. Mr. Hevert testified that he agreed that "there is no remuneration rate that is reasonably derived through an analytical approach." ⁸³ Thus, there was no support for awarding National Grid shareholders \$88 million of ratepayer money.

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⁸² The Connecticut Public Utilities Regulatory Authority order that provided cost recovery for the utilities who entered into contracts for the 200MW offshore wind PPA from the same Ørsted wind farm at issue here made no reference to remuneration. PURA Review of Clean Energy and Renewable Resource Agreements Selected in Response to DEEP's January 31, 2018 Request for Proposals from Private Developers for Clean Energy, Docket No. 18-06-37 (Dec. 19, 2018). Prior to the close of evidentiary hearings in this matter, National Grid and the Division were asked whether Connecticut had awarded remuneration. Neither had an answer. It is highly improbable that if Connecticut awarded remuneration, National Grid would have failed to supply this information as evidence to the PUC. The fact that there was no mention of Connecticut awarding remuneration suggests that it did not happen. That further supports a finding that remuneration is not always necessary to encourage advancement of state renewable energy policies. Nor is it always necessary to maintain a utility's credit rating.

⁸³ Hr'g. Tr. at 37, quoting National Grid's Response to DIV 1-5.

The Division, while refuting all of Mr. Hevert's testimony, proposed that National Grid's shareholders were entitled to some bonus or additional profit because, by entering into the PPA, the Company was helping to advance the State's renewable energy policy. That show of support, according to the Division, warranted some reward for the Company's shareholders. According to Division Deputy Administrator Jonathan Schrag, it would be appropriate to consider a sharing of benefits with the Company such as is done in energy efficiency. Accordingly, Mr. Schrag provided reasons why the full remuneration requested was inappropriate and suggested the PUC adopt certain "guardrails" that it could use in considering some level of remuneration. Mr. Schrag did not, however, any specific level of remuneration.

The PUC was left with three proposals regarding remuneration: (1) the Division's 5% of the net benefits with no quantification;⁸⁵ (2) the Division's \$1.48 million over twenty years, representing 20 basis points of current rate base;⁸⁶ (3) National Grid's \$88 million over twenty years representing 2.75% of the total expected contract costs. As noted above, the PUC rejected National Grid's proposal. For the following reasons, the PUC also rejects the Division's proposals.

Mr. Schrag explained that the Division's proposals were derived from its consideration of PUC's least cost procurement standards which were used when setting incentive payments in the energy efficiency and system reliability procurement plans.⁸⁷ The PUC found that the Division's reliance on the least cost procurement standards was misplaced. First, as the witnesses testified, ACES is not a least cost procurement statute. Therefore, the least cost procurement standards to not apply here. Second, even if the PUC were to consider applying the least cost procurement

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⁸⁷ Schrag Mem. Supp. at 2-3.

⁸⁴ Kahal Test. at 26; Shrag Mem. Supp. at 1, 2.

⁸⁵ The 5% of net benefits proposal was not quantified. Hr'g. Tr. at 100-05.

⁸⁶ The 20 basis points proposal was the negotiating position that had been used to attempt to set performance incentive payments in the most recent National Grid base distribution rate case just for signing the contract. *Id*.

standards, those standards require some level of performance by the utility to create benefits. Here, Mr. Hevert testified that the Company cannot manage or maximize the forward-going economic or environmental benefits created by the project over its 20-year life. 88 Under any of the remuneration proposals, the Company is not accountable to the realization of the direct or indirect benefits of the PPA. Ms. DiDomenico testified that if no net benefits are realized, the Company will still recover the cost of deliveries, and that to earn the proposed remuneration all the Company has to do is take delivery and pay the bill. 89 Furthermore, Mr. Brennan explained that there is nothing ratepayers can do to achieve the benefits of this contract. Rather, the benefits of this project are dependent on wholesale market prices and ratepayers will pay regardless of the above or below market cost of the project. 90

Mr. Hevert also argued that the Division has no basis in Rhode Island law for correlating remuneration with benefits in the context of procuring long-term renewable contracts. This testimony directly conflicts with National Grid's own prior explanation of the Commission's discretion to approve remuneration in the form of incentives. In Docket No. 4822, National Grid posited that the "Commission [has] discretion to approve remuneration in the form of incentives for voluntary procurements." Under the Long-Term Contracting Standard, National Grid is obligated to procure 90 MW of renewable energy and is entitled to remuneration equal to 2.75% of the contract value up to this obligation. For any additional capacity above this obligation, voluntarily procured by the Company, the Company suggested that the Commission has the discretion to approve remuneration in the form of incentives as part of its general supervisory

⁸⁸ Hevert Reb. at 12, 43.

⁸⁹ Hr'g. Tr. at 171.

⁹⁰ *Id.* at 172-73.

⁹¹ Hevert Reb. at 43.

⁹² Docket No. 4822, In re: The Narragansett Electric Company d/b/a National Grid's Solicitation of Long-Term Contracts Pursuant to R.I. Gen. Laws § 39-26.1, National Grid's Response to PUC 1-1.

authority over regulated utilities. National Grid provided examples of discretionary incentives previously approved by the Commission in other dockets, including the Gas Procurement Incentive Plan and the Natural Gas Portfolio Management Plan incentive. ⁹³

Unlike the proposed remuneration, however, each of the above incentives encourages the Company to be strategic and optimize forward-going performance for the benefit of ratepayers and allows the Company to retain a share of those benefits. None of the proposals before the PUC are performance-based incentives. In the absence of a performance-based incentive, and to justify offering action-based remuneration for an action that has already been executed, such as the signing the PPA, Mr. Schrag proposed remuneration as a "gratuity" to promote "ongoing collaboration" with State policymakers.⁹⁴ The Company did not support the Division's proposal. Therefore, there is no evidence that giving the Company \$1.48 million for entering into the PPA represented the marginal value that would motivate the Company to "collaborate" in the future. All it is guaranteed to do is give an unwarranted bonus to shareholders.

Paying above market prices for energy and RECs can be viewed as internalizing the non-embedded costs of greenhouse gas pollution from power generation. However, paying "gratuities" to the utility to encourage future collaboration on achieving state policy goals is not the internalization of an externality. As noted above, the General Assembly chose not to include such remuneration in ACES and thus, chose not to include that expense in the cost of advancing state renewable energy goals. For all of the above reasons, the PUC found that the remuneration proposals were not supported by a factual or calculable basis.

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⁹³ *Id.* National Grid did not commit to proposing such types of incentives in future discretionary filings.

⁹⁴ Schrag Mem. Supp. at 2.

iv. National Grid has an incentive to continue to enter into PPAs

Despite National Grid's thinly veiled threat to decline participation in future renewable energy procurements if remuneration is denied in the instant case, the PUC believes that National Grid has an incentive to continue its participation. Unlike many of the other clean energy policies, PPAs do not adversely impact the utility's load. Moreover, they can present new business opportunities for other arms of the parent company to undertake capital investment outside of the state regulatory process. This is an important consideration because The Narragansett Electric Company's shareholders are those who invest in National Grid plc. One cannot purchase stock in The Narragansett Electric Company.⁹⁵

For example, National Grid Ventures, an unregulated group within National Grid plc, is positioned to own the transmission facilities necessary to deliver the energy from the project to the mainland interconnection point. DWW will construct the transmission facilities. National Grid Ventures has an option agreement to purchase the transmission facilities. Information on their website suggests a strong likelihood the group will exercise that option. Thus, National Grid plc will realize revenues from this investment. These revenues are unregulated and have the potential to translate into profit for the investors.

7. The Company is entitled to cost recovery of the purchase of the products from the PPA

The PPA that National Grid entered into is contingent on approval of the PPA. National Grid entered into the PPA subject to PUC approval of cost recovery.⁹⁶ National Grid originally

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⁹⁵ Mr. Hevert correctly stated that the PUC should look at The Narragansett Electric Company as a standalone company in the exercise of its ratemaking authority. The PUC is required to apply industry norms and recognize the need to maintain the financial health of the distribution company. In the absence of credible evidence that the PUC's decision would result in financial harm to the distribution company, the PUC may certainly consider whether National Grid plc has a natural incentive to support continued investment in renewable energy, particularly with a forward looking recovery factor complete with a reconciliation of costs.

⁹⁶ Schedule NG-1, PPA, Section 17.1, Section 19(c).

proposed the PUC approve allowing cost recovery under the Company's existing Long-Term Contracting for Renewable Energy Recovery Factor. At the hearing, Mr. Brennan agreed that what the Company required was a PUC order authorizing cost recovery of the products purchased under the PPA.⁹⁷ Because the energy is immediately sold into the wholesale energy market, the total collected from ratepayers would be those costs net the wholesale market price of energy and the sale price of RECs, either to Standard Offer customers or the market.⁹⁸

The PUC is authorized to approve an appropriate cost-recovery mechanism for PPAs approved under ACES. All PPAs, including those for Standard Offer Service and renewable energy, are typically designed to allow the utility to project the costs, usually on an annual or semi-annual basis, and to reconcile those costs at least once annually. The mechanism to recover those cost could vary, however. The PUC finds that National Grid is entitled to cost recovery through a mechanism that projects costs on at least an annual basis and allows for a reconciliation of those costs on at least an annual basis.

The PUC, however, declines to approve a specific recovery mechanism at this time. The commercial operation date is five to nine years from the date of this order. The energy markets, regulatory construct, and renewable energy policies and markets are evolving. What may appear an appropriate mechanism today might not be the best mechanism at the time the project achieves commercial operation. National Grid will be receiving periodic updates from DWW which should provide National Grid with more certainty on the commercial operation date. Therefore, approximately one year prior to National Grid's reasonable expectation that the project will achieve commercial operation, the Company shall file a proposed mechanism to recover the cost of the energy and RECs produced by the project. The PUC may also consider a request for the

⁹⁷ Hr'g. Tr. at 6, 10 (May 13, 2019).

⁹⁸ *Id*.

inclusion of carrying charges as part of cost recovery. This should further alleviate the perceived financial risks raised by Mr. Hevert.⁹⁹

Accordingly, it is hereby

(23609) ORDERED:

- The Power Purchase Agreement between The Narragansett Electric Company d/b/a
 National Grid and DWW Rev 1, LLC, filed on February 7, 2019, is approved.
- 2. The Narragansett Electric Company d/b/a National Grid is entitled to cost recovery through a mechanism that projects costs of the products delivered under the power purchase agreement between The Narragansett Electric Company d/b/a National Grid and DWW Rev I, LLC, on at least an annual basis and allows for a reconciliation of those costs on at least an annual basis.
- 3. Approximately one year prior to The Narragansett Electric Company d/b/a National Grid's reasonable expectation that the DWW Rev I, LLC project will achieve commercial operation, the Company shall file a proposed mechanism to recover the cost of the products delivered under the power purchase agreement.
- 4. The Narragansett Electric Company d/b/a National Grid's request for remuneration calculated on the cost of the payments made under the power purchase agreement is hereby denied.

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⁹⁹ See Hr'g. Tr. at 66-68 (May 10, 2019).

EFFECTIVE AT WARWICK, RHODE ISLAND PURSUANT TO AN OPEN MEETING

DECISION ON MAY 28, 2019. WRITTEN ORDER ISSUED JUNE 7, 2019.

PUBLIC UTILITIES COMMISSION



Margaret E. Curran, Chairperson

Marion S. Gold, Commissioner

Abigal Anthony, Commissioner

Notice of Right of Appeal: Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the PUC may, within 7 days from the date of the Order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or Order.