

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

IN RE: THE NARRAGANSETT ELECTRIC COMPANY :
d/b/a NATIONAL GRID’S REQUEST FOR : **DOCKET NO. 4764**
APPROVAL OF EIGHT LONG-TERM RENEWABLE :
ENERGY CONTRACTS :

REPORT AND ORDER

I. Summary

On November 1, 2017, The Narragansett Electric Company d/b/a National Grid (National Grid or Company) filed with the Public Utilities Commission (PUC or Commission) eight long-term renewable energy contracts (contracts or PPAs) for approval.¹ The contracts were negotiated as part of a regional procurement process which the PUC had previously considered under the Affordable Clean Energy and Security Act (ACES).² The PUC had previously approved a proposal by National Grid to participate in the regional procurement process under a delivery commitment model,³ specifically not for the purpose of entering into long term power purchase agreements. Because the delivery commitment model was ultimately abandoned, the Company, in consultation with the Office of Energy Resources (OER), chose to pursue long term contracts. The resulting contracts were not filed under the prior ACES approval.⁴ Rather, they were filed under the Long-Term Contracting for Renewable Energy Standards Act (Long-Term Contracting

¹ Testimony, Schedules and Workpapers of Corinne M. DiDomenico; All filings in this docket can be accessed at: <http://www.ripuc.org/eventsactions/docket/4764page.html>. The parties to the docket were National Grid, the Division of Public Utilities and Carriers, Office of Energy Resources, and NextEra Energy Resources, LLC.

² R.I. Gen. Laws §§ 39-31-1 to 9.

³ Under the delivery commitment model, “instead of the [electric distribution companies] purchasing Qualified Clean Energy via [power purchase agreements], the Transmission Project provider would commit to a Performance-Based Tariff containing a Qualified Clean Energy Delivery Commitment.” Docket No. 4570 (In re: Solicitation for Proposals for Clean Energy Pursuant to R.I. Gen. Laws § 39-31-1), Notice of Request for Proposals from Private Developers for Clean Energy and Transmission, 7; [http://www.ripuc.org/eventsactions/docket/4570-NGrid-CleanEnergyRFP\(6-26-15\).pdf](http://www.ripuc.org/eventsactions/docket/4570-NGrid-CleanEnergyRFP(6-26-15).pdf).

⁴ DiDomenico Test. at 32.

Act).^{5,6} On February 9, 2018, following the exchange of discovery and an evidentiary hearing, the PUC approved the eight long-term renewable energy contracts, finding that the procurement process, evaluation criteria, and resulting contracts substantially complied with the framework and requirements of the Long-Term Contracting Act.

II. Background

In September 2015, prior to National Grid having reached 100% compliance with the Long-Term Contracting Act, the PUC approved participation in the regional procurement process under ACES for the delivery commitment model.⁷ After issuance of the Request for Proposals,⁸ evaluation of responses, and consultation with OER and the Division of Public Utilities and Carriers (Division), on October 24, 2016, National Grid chose eight projects with which to contract.

As of October 29, 2015, National Grid had achieved 103% of the Long-Term Contracting Act which required National Grid to enter into 90 MW long-term renewable energy contracts. On January 23, 2017, National Grid terminated the Champlain (Bowers Wind) long-term contract, previously approved by the PUC under the Long-Term Contracting Act. National Grid terminated

⁵ R.I. Gen. Laws §§ 39-26.1-1 to 5.

⁶ National Grid originally filed the contracts under seal, requesting confidential treatment of the pricing, certain commercial terms, and certain evaluation materials. The PUC's Rules and Regulations Governing Long-Term Contracting Standards for Renewable Energy, Section 5.5 requires National Grid to file public copies of all long-term contracts for which it is seeking approval. A hearing was scheduled on the Motion for Protective Treatment. At the hearing, National Grid represented that all of the counterparties had agreed to make the contracts public. Following the hearing, the PUC granted confidential treatment to certain workpapers and schedules, primarily related to the scoring materials, cost review reports, and inputs used to develop market forecasts. The PUC determined that these materials constituted commercial or other financial information obtained from a person, firm or corporation which is of a privileged and confidential nature, and therefore fit within the parameters of *The Providence Journal v. Convention Center Authority*, 774 A.2d 40, 47 (R.I. 2001) and qualified for protection from disclosure under R.I. Gen. Laws § 38-2-2(4)(b). Hr'g Tr. at 93-94 (Nov. 20, 2017). Following the hearing, unredacted copies of the contracts were filed with the PUC. Revised copies of other materials found not to fall within the exception were also filed. At the evidentiary hearing held on February 5, 2018, the PUC granted similar protection to certain data responses and memoranda filed in the docket based on their reliance on confidential materials for analyses. Hr'g Tr. at 8-9 (Feb. 5, 2018).

⁷ Order No. 22365 (In re: Solicitation for Proposals for Clean Energy Projects Pursuant to R.I. Gen. Laws § 39-31-1) (Mar. 23, 2016); http://www.ripuc.org/eventsactions/docket/4570-NGrid-Ord22365_3-23-13.pdf.

⁸ The Request for Proposals was developed by Massachusetts distribution companies, the Massachusetts Department of Energy Resources, CT DEEP, National Grid and the Rhode Island Office of Energy Resources. DiDomenico Test. at 9.

the contract as a result of an event of default by Bowers Wind. The Bowers Wind project had a 48 MW nameplate capacity. Based on its capacity factor, the contract capacity of the Bowers Wind project toward meeting the Long-Term Contracting Standard was 18.3 MW. Thus, the long-term contracting goal of 90 MW was left short.

The eight PPAs currently before the PUC on November 1, 2017 were each for twenty-year terms and were executed on May 25, 2017.⁹ Each of the PPAs was executed by parties in Rhode Island, Connecticut, and Massachusetts. The capacity of the projects was allocated to each participating state. Thus, while the total nameplate capacity of all eight projects was 344.08 MW, Rhode Island's share was less. In total, the eight PPAs represent approximately 43.8 MW of nameplate capacity from newly developed renewable energy resources. The resulting contract capacity from these resources for meeting the Long-Term Contracting Standard was 12.9 MW, based on the respective capacity factors for each resource. Following PUC approval of each of these PPAs, even when the projects reach commercial operation, there will still be 5.4 MW of long-term contracting capacity left to procure.

⁹ The Long-Term Contracting Act anticipates fifteen-year contract terms, but gives the PUC discretion to approve contracts for longer terms. R.I. Gen. Laws § 39-26.1-3(a).

The following chart summarizes the Projects:

Project	Nameplate	Capacity Factor	RI share of project	Contract capacity	Price (energy + RECs)
Cassadaga Wind	126.0 MW	43.02%	15% of 90% that will be delivered into New England	8.1 MW	Variable
Scituate Solar	10.0 MW	19.42%	50%	1 MW	\$93.66/MWh
Hope Farm Solar	10.0 MW	19.42%	50%	1 MW	\$93.66/MWh
Woods Hill Solar	20.0 MW	18.9%	7.5%	0.3 MW	\$99.49/MWh
Sanford Airport Solar	49.36 MW	20.2%	7.5%	0.7 MW	\$78.95/MWh
Chinook Solar	30.0 MW	19.7%	7.5%	0.4 MW	\$81.75/MWh
Farmington Solar	49.36 MW	17.6%	7.5%	0.7 MW	\$84.85/MWh
Quinebaug Solar	49.36 MW	19.6%	7.5%	0.7 MW	\$89.17/MWh

III. Commission Findings and Analysis

A. Standard of Review

R.I. Gen. Laws § 39-26.1-3 of the Long-Term Contracting Act sets out the standard of review and criteria the PUC must use in making its decision.¹⁰ Under the Act, the PUC must make each of the findings set out in the following five section headings.

¹⁰ The Commission shall approve the contract if it determines that: (1) The contract is commercially reasonable which means terms and pricing that are reasonably consistent with what an experienced power market analyst would expect to see in transactions involving newly developed renewable energy resources. Commercially reasonable shall include having a credible project operation date, as determined by the Commission, but a project need not have completed the requisite permitting process to be considered commercially reasonable. If there is a dispute about whether any terms or pricing are commercially reasonable, the Commission shall make the final determination after evidentiary hearings; (2) the requirements for the annual solicitation have been met; and (3) the contract is consistent with the purposes of R.I. Gen. Laws § 39-26-1. The Long-Term Contracting Act directs that no contracts should be awarded unless its price is below the forecasted market price of energy and renewable-energy certificates over the term of the proposed contract, using common industry standard forecasting methodologies as have been previously by the Commission. In such solicitations, the electric-distribution company may elect not to acquire capacity, but shall acquire all environmental attributes and energy. Finally, as a condition of contract approval, the Commission must require that all approved projects, regardless of their location, provide other direct economic benefits to Rhode Island, such as job creation, increased property tax revenues, or other similar revenues, deemed substantial by the Commission. R.I. Gen. Laws §§ 39-26.1-3, 26.1-5(e).

1. The PPAs are commercially reasonable

The undisputed testimony was that each of the PPAs was commercially reasonable in that they represented terms and conditions that an experienced power market analyst would expect to see in transactions involving newly developed renewable resources. National Grid witness Corinne M. DiDomenico, Manager of Environmental Transactional, Energy Procurement at National Grid, stated that the PPAs were commercially reasonable. Her opinion was based on the robustness of the solicitation process and results along with the two-stage evaluation process that was employed as the basis for her opinion that the PPAs were commercially reasonable. For example, she noted that there were thirty-one respondents to the Request for Proposals that was issued to 600 individuals and entities. She explained that during the Stage One review, the evaluation team disqualified three of the bids and that the remaining bids were within a reasonable range of competitiveness. Finally, the quantitative and qualitative analyses conducted during the Stage Two evaluation process further reduced the number of qualified applicants based on pricing, siting and permitting, project development status and operational viability, experience and capability, financing, price risk and firmness, and contractual allocation risk.¹¹

Division and OER witness Ellen Cool, of Levitan and Associates, determined that the proposed PPAs were selected through a competitive procurement process, leading her to conclude that the proposals received were consistent with market conditions for similar long-term contracts at the time the procurement was conducted. She listed four other reasons for finding the PPAs to be commercially reasonable: (1) all bids were evaluated against the same model PPA terms and conditions, placing all bids on a level playing field; (2) the bid prices were within a reasonable competitive range; (3) all PPAs were for newly developed renewable energy resources; and (4) the

¹¹ DiDomenico Test. at 23-29.

development schedule for the projects is reasonable and generally consistent with the development milestones for other similar type projects.¹²

2. The PPAs resulted from a process comporting with the Long-Term Contracting Act process requirements

The PUC must determine whether National Grid followed an approved timetable and method for solicitation and execution of the contracts.¹³ The PUC has previously approved solicitation methodologies and subsequent changes to them within the Long-Term Contracting Act. In October 2015, National Grid had entered into long-term contracts for more than 90 MW of new renewable energy resources and had satisfied the requirements of the Long Term Contracting Standard. However, the subsequent cancellation of the Bowers Wind PPA created a shortage in the long-term contracting capacity. The Company, accordingly, proposed to fill that shortfall with a different regional procurement. The question for the PUC, therefore, is whether the Company substantially complied with the specific requirements of the Long Term Contracting Standard. Of particular importance is whether the solicitation process allowed for a reasonable amount of negotiating discretion to engage in commercially reasonable, arms-length negotiations over final contract terms.¹⁴ The PUC found that the standard was met.

It must be noted that the procurement here failed to follow the solicitation methodology and timeline for long-term contracts under the Long-Term Contracts Act approved by the PUC in prior dockets. The respondents did not even know at the time they were bidding on the regional

¹² Cool Mem. at 7 (Jan. 19, 2018); [http://www.ripuc.org/eventsactions/docket/4764-DPU-OER-Comments-Levitan\(1-19-18\).pdf](http://www.ripuc.org/eventsactions/docket/4764-DPU-OER-Comments-Levitan(1-19-18).pdf).

¹³ “The timetable and method for solicitation and execution of such contracts shall be proposed by the electric-distribution company, and shall be subject to review and approval by the commission prior to issuance by the company. The electric-distribution company shall, subject to review and approval of the commission, select a reasonable method of soliciting proposals from renewable-energy developers, which shall include, at a minimum, an annual public solicitation, but may also include individual negotiations.” R.I. Gen. Laws § 39-26.1-3(b).

¹⁴ *Id.*

RFP that National Grid would consider PPAs since the Company specifically said it would not. Nevertheless, the PUC was satisfied that the procurement process here was at least as robust as those approved by the PUC in the previous procurements under the Long-Term Contracting Standards. The instant Request for Proposals was issued to 600 individuals and entities, with thirty-one projects responding. There followed a two-stage quantitative and qualitative review process by multiple reviewers out of the thirty-one proposals, after which eight were selected. The PUC found this constituted a robust procurement process. The PUC further found that the parties were able to engage in arms-length negotiations over final contract terms.

Despite the failure to engage in a single process from start to finish, because the process followed was a regional RFP in which National Grid was a participant, there was sufficient notice to a broad enough range of project developers to allow them to present strong bids for consideration by all requestors. The requirements of the regional RFP and resulting evaluation process were at least as robust as that required by the approved solicitation methodology under the Long-Term Contracts Act.

Notwithstanding the preceding findings, the PUC cautions that a change in circumstances necessitating a change from one standard of review to another would, ordinarily, require the Company to return to the PUC for further consideration and process approval. In this case, the Company's unilateral switch to a different standard apparently caused no harm. Going forward, however, the Company is advised to return to the PUC for approval of any necessary amendments to its procurement process, particularly where there is a change from one legislative mandate to another.

3. The contracts are consistent with the purposes of the Long-Term Contracting Act

The primary purpose of the Long-Term Contracting Act are to encourage and facilitate the creation of commercially reasonable long-term contracts between electric distribution companies and developers or sponsors of newly developed renewable energy resources. Other purposes are stabilizing long-term energy prices, enhancing environmental quality, and creating jobs in Rhode Island in the renewable energy sector. Additional purposes include facilitating the financing of renewable energy generation within the jurisdictional boundaries of the state or adjacent state or federal waters or providing direct economic benefit to the State.

The PUC found that the eight PPAs meet the purposes of the Long-Term Contracting Act. Because the pricing is known over the term of the contracts, they may provide a level of stability of pricing over the long term. If the contracts remain below market, they will provide an economic benefit to Rhode Islanders. Further, because two of the projects will be developed in Rhode Island, new jobs might be created. Finally, development of new renewable energy resources in the region should reduce greenhouse gas emissions and other air pollutants from power generation.

4. At the time of evaluation, using industry standard forecasting methodologies, the pricing of each PPA included pricing that was below the forecasted market price of energy and renewable energy certificates over the full contract term

The unrefuted testimony in this matter was that the software models used for evaluating the pricing of the PPAs compared to the forecasted market price of energy and renewable energy certificates over the twenty-year contract terms were within industry standards. Navigant Consulting, the firm used by the evaluation teams, employed a forecasting model called PROMOD. The Division's consultant, Levitan and Associates used its own model called AURORAxmp. Division witness Cool explained that differences in the models' assumptions,

inputs, and algorithms led to somewhat different results. She nevertheless concluded that despite those differences, the two models had good agreement that the PPAs would, compared to a reference case, result in direct positive benefits. She also noted that Levitan and Associates's modeling showed that the PPAs' prices were below the forecasted market price over the term of the contracts.¹⁵

In written submissions and at the February 5, 2018 evidentiary hearing, the witnesses explained that market prices were forecasted prior to execution of the contracts. Both Ms. DiDomenico and Ms. Cool agreed that because much of the forecasting is affected by assumptions relative to natural gas pricing, which is inherently volatile, there is no guarantee that the forecasted above- or below-market costs of long-term contracts will hold true. However, both witnesses advised the PUC that the evaluation and determination of whether long-term contracts are above- or below-market needs to be based upon assumptions at a single point in time. Otherwise, until such time as the PUC were to rule, the forecast would be a moving target. This would result in uncertainty to all participants to the contracting process.¹⁶

The PUC recognized the difficulties associated with forecasts. The PUC found that, although the pricing of the PPAs may, at different times, prove to be above-market, at the time they were evaluated using two generally accepted industry standard models, the forecasted pricing appeared to be below market. While other evaluation methods (including timing of evaluation) may exist, the methods presented by the parties were reasonable. Moreover, no party presented any faults with these methods or alternatives to the contrary. For all of the foregoing reasons, the PUC accepted the testimony of the witnesses that, at the time of the evaluation, the price for energy

¹⁵ Cool Mem. at 3-6.

¹⁶ National Grid Response to PUC-1-10; [http://www.ripuc.org/eventsactions/docket/4764-NGrid-DR-PUC1\(11-30-17\).pdf](http://www.ripuc.org/eventsactions/docket/4764-NGrid-DR-PUC1(11-30-17).pdf); Cool Mem. at 6; Hr'g Tr. at 28-36; 70-71 (Feb. 15, 2018).

and renewable energy certificates was less than the forecasted market price for the twenty-year period reviewed.

5. The contracts may reasonably be found to provide other direct economic benefits to Rhode Island, such as job creation, increased tax revenues or other similar revenues

Consistent with prior PUC decisions, in their discussion of whether the PPAs resulted in economic benefit to Rhode Island, the witnesses focused on general benefits to customers that would from contracts projected to be priced lower than the market for energy and RECs. Of note, too is that there are two PPAs for projects located in Rhode Island that should result in Rhode Island tax revenue and may result in local jobs.¹⁷ Therefore, based on prior PUC standards and the facts of this case, the PUC found that the contracts may reasonably be found to provide other direct economic benefits to Rhode Island.

Accordingly, it is hereby

(23102) ORDERED:

The following Power Purchase Agreements, dated May 25, 2017, and filed with the Public Utilities Commission on November 1, 2017, are hereby approved in accordance with R.I. Gen. Laws §§ 39-26.1-3 and 39-26.1-4:

1. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Cassadega Wind LLC.
2. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Scituate RI Solar, LLC.
3. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Hope Farm Solar, LLC.

¹⁷ See Hr'g. Tr. at 46 (Feb. 5, 2018).

4. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Woods Hill Solar, LLC.
5. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Sanford Airport Solar, LLC.
6. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Chinook Solar, LLC.
7. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Farmington Solar, LLC.
8. Power Purchase Agreement between The Narragansett Electric Company d/b/a National Grid and Quinebaug Solar, LLC.

EFFECTIVE AT WARWICK, RHODE ISLAND PURSUANT TO AN OPEN MEETING
DECISION ON FEBRUARY 9, 2018. WRITTEN ORDER ISSUED APRIL 9, 2018.

PUBLIC UTILITIES COMMISSION



Margaret E. Curran

Margaret E. Curran, Chairperson

Marion S. Gold

Marion S. Gold, Commissioner

Abigail Anthony

Abigail 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.