



EDWARD D. PARE direct dial: (401) 276-2639 epare@brownrudnick.com

July 9, 2018

10 Memorial Boulevard Providence Rhode Island 02903 tel 401.276.2600 fax 401.276.2601

VIA ELECTRONIC FILING AND FIRST CLASS U.S. MAIL

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

RE: Docket No. 4822

FirstLight Power Resources, Inc. Rebuttal Memorandum

Dear Ms. Massaro

Enclosed for filing in the above-referenced docket, please find one original and nine copies of the following documents: (1) Rebuttal Memorandum of FirstLight Power Resources Inc. and certificate of service. Please contact me should you have any questions regarding this filing. Thank you for your attention to this matter.

Sincerely,

BROWN RUDNICK LLP

Edward D. Pare, fr. | 550

63088821 v1

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

In re: The Narragansett Electric Co. d/b/a National Grid Solicitations of Long-Term Contracts for Renewable Energy and Renewable Energy Certificates (RECs), Pursuant to R.I. Gen. Laws § 39-26.1-1 et seq.

Docket No. 4822

REBUTTAL MEMORANDUM OF FIRSTLIGHT POWER RESOURCES, INC.

Pursuant to the Procedural Schedule issued by the Rhode Island Public Utilities

Commission ("PUC") on May 10, 2018 in Docket No. 4822, FirstLight Power Resources, Inc.

("FirstLight") submits this Rebuttal Memorandum.

I. COMMENTS

We appreciate the opportunity to respond to the comments submitted by Levitan Associates ("Levitan Memorandum") on behalf of the Division of Public Utilities and Carriers ("DPUC") and Office of Energy Resources ("OER"). FirstLight believes that the state's efforts to reduce greenhouse gas emissions will lead to a cleaner, more reliable energy future for Rhode Island. To ensure that the state can fully realize these goals, FirstLight offers the following response, which we believe will assist Rhode Island in developing an effective and efficient RFP process that will be conducted by Narragansett Electric Company d/b/a National Grid ("Narragansett" or "Company").

FirstLight's rebuttal focuses on the failure of the Levitan Memorandum to adequately incorporate or recognize the potential benefits to Rhode Island ratepayers of incorporating energy storage pairing in the RFP. The Levitan Memorandum instead concludes that the proposed RFP is generally consistent with the PUC's Rules and Regulations Governing Long-Term Contracting Standards for Renewable Energy ("Regulations"), although it lacks a

statement "specifying how Narragansett intends to use the products procured." Levitan Memorandum at 4. Specifically, the Levitan Memorandum states that

Item 4 [of Section 4.2(a) of the Regulations] requires the RFP to "set forth the Electric Distribution Company's intent regarding the use of energy, capacity, NEPOOL GIS Certificates, and any other attributes procured.... "R.I. Gen Laws § 39-26.1-5(b) states that "unless the commission approves otherwise, all energy and capacity purchased by an electric distribution company pursuant to this chapter shall be immediately sold by the electric distribution company into the wholesale spot market..."

Id. The Levitan Memorandum simply suggests that the deficiency "can be cured by Narragansett during regulatory proceedings." *Id.* at 5.

A. The Levitan Memorandum Does Not Adequately Address Energy Storage Pairing

Neither the draft RFP language nor the Levitan Memorandum directly addresses the benefits of energy storage pairing. Energy storage pairing with clean energy resources, such as offshore wind, would result in a greater reduction in carbon emissions while also lowering peak energy costs for Rhode Island ratepayers by moving carbon free energy from off-peak hours to on-peak hours when it is most needed. As an example, Massachusetts' recent solicitation for offshore wind attempted to directly recognize the benefits of energy storage pairing; however, the concept is largely ignored in the Rhode Island draft RFP language and in the Levitan Memorandum. Even though the draft RFP language does not necessarily preclude energy storage from pairing with clean energy resources, FirstLight strongly recommends that the PUC direct Narraganset to specify in the RFP that pairing energy storage with clean energy resources is both permissible and, in fact, preferred. Without such affirmative language, it is unlikely that paired storage developments will be offered into the RFP. Even if paired storage developments are offered, responses to other solicitations in New England suggest that the opportunities will be ignored by the electric distribution company ("EDC"), because the regulatory agency has not

specifically directed the EDC to give storage due consideration, and because the EDC has no specific incentives to include storage in the ultimate power purchase contract, despite the potential benefits that paired storage can provide to Rhode Island electric ratepayers.

While FirstLight recognizes that the statute requires that the energy and capacity purchased must be "immediately sold" by the EDC into the wholesale spot market "unless otherwise approved by the Commission," FirstLight strongly recommends that the PUC explicitly state before the RFP is issued that energy storage is permissible and should be solicited in accordance with its existing authority. This will provide an important signal to energy storage owners and developers that pairing with clean energy resources is not only permissible but encouraged by the State of Rhode Island. It is not sufficient to leave it to Narragansett's discretion to cure the deficiency during the regulatory process. A directive from the PUC is necessary to ensure that storage paired bids are developed and meaningfully considered.

B. Lessons Learned to Enable Energy Storage Pairing With Clean Energy Resources Based on Past Solicitations

FirstLight is the largest owner of energy storage in New England and has an unmatched depth of knowledge and experience regarding how energy storage can assist New England states in reaching their respective environmental goals by moving electricity generation to the periods that yield the lowest regional emissions. One of the primary issues facing the states today as they each pursue a cleaner, more reliable future is the intermittent nature of renewable energy generation resources. Even renewable resources with more consistent output levels like offshore wind are subject to periodic downward fluctuations which can require ISO-NE to commit fossil-fired resources to serve as standby supply. Energy storage is unique in that it can serve as a bridge resource to solve the fundamental variable output of renewable resources such as wind and solar. For the purposes of this procurement, offshore wind is exceptionally well-suited to

pair with pumped hydro storage. While New England already has more than 1,800 MW of pumped storage installed, that existing opportunity to move large quantities of clean energy from periods of low demand to periods of high demand will not be adequately captured through ISO-NE spot market operation alone, and significant value will be missed by the State of Rhode Island absent procurement of paired storage service from existing pumped storage. As an example, relying on spot energy market economics alone, this volume of pumped hydro storage is historically underutilized, with approximately 70% – 75% of the clean energy it could physically move to peak periods not occurring. This underutilization provides a unique opportunity for Rhode Island to capture and leverage these existing resources in a more efficient manner, providing the state with tangible environmental, economic, and fuel security benefits.

A recent study conducted by Energyzt Advisors, LLC to ascertain the potential benefits provided by a more efficient usage of Northfield Mountain Pumped Hydro Station, New England's largest energy storage facility, found that New England could save 300,000 MT of carbon emissions per year, reduce energy costs to consumers by \$2 – \$3/MWh, and displace up to 700,000 MMBtu/month of natural gas during winter peak periods when gas is needed the most in New England. Energyzt concluded that by optimizing its energy storage throughput "Northfield offers at least \$235 million in economic benefits plus another \$8 million in estimated system benefits tied to environmental benefits." Notably this study conservatively evaluated the benefits of leveraging only two of the four units at Northfield, meaning that the potential value for Rhode Island and the region can far outweigh what has been contemplated in the study. Pairing existing energy storage with off-peak output from emissions-free assets, either on a standalone procurement basis or as a bundled contractual pairing would provide access to that value.

Even though the benefits outlined by Energyzt are readily accessible to Rhode Island, they are unlikely to be realized absent amendments to the current RFP process. Based on the experience of past renewable resource solicitations in New England, it will be insufficient to leave it to the EDC to defer to a later regulatory process the question of whether and how paired energy storage will participate in the solicitation. The existing RFP language does not provide sufficient incentive for the developers of new renewable energy resources to attempt to pair with existing energy storage short of an indirect superficial marketing or public relations benefit.

It will also be insufficient for the RFP terms to indicate that the new renewable energy resources "may be paired with energy storage systems" and that bidders "are encouraged to propose delivery profiles which they expect will add the most value for . . . ratepayers" as was provided for in the first Massachusetts Section 83C RFP, § 2.2.1.3 (emphasis added). Although including that language was an important step in recognizing the benefits of energy storage, it did not provide a sufficient signal to developers and the EDCs that bids including storage that provide value for ratepayers should be preferred. FirstLight has attempted to pair with several resources in recent procurements in Massachusetts and Connecticut with limited success due primarily to the lack of incentive for clean energy developers to do so and the lack of incentive for EDCs to select such options even where storage is offered. Out of the four, separate off-shore wind developers FirstLight approached to partner with, only one chose to include our storage as an option. The feedback that FirstLight received from other companies signaled a desire not to "complicate" their bid, inadequate understanding of the value existing storage could provide, or insufficient incentives.

C. Recommendations

FirstLight recommends that the PUC direct the Company to provide language in the RFP that would both enable energy storage pairing and encourage the selection of bids based on the

potential benefits offered to ratepayers under such a bid. Based on experience with the Massachusetts Section 83C RFP, FirstLight recommends that the language in the currently proposed RFP should clarify that an energy storage bid should be paired with a specific project, or simply offered on a standalone basis with the flexibility for such storage contract to be used to store off-peak energy from multiple or all of Rhode Island's offshore wind procurements. Further, the RFP statement of intent specifying how Narragansett intends to use the products procured should specify that if storage is procured, the energy and capacity purchased from the newly developed renewable energy resource will be sold into the wholesale market according to the terms provided in the storage service contract.

Soliciting paired energy storage bids would further the purposes of the Long-Term Contracting Standard, because it would "facilitate the creation of commercially reasonable long-term contracts between electric distribution companies and developers or sponsors of newly developed renewable energy resources," by improving the economic value of renewable energy generation, stabilizing long-term energy prices by shifting delivery from off-peak to on-peak periods, and enhancing environmental quality. R.I. Gen. Laws, § 39-26.1-1. Without storage, the energy and capacity purchased from the newly developed renewable energy resource "shall be immediately sold by the electric distribution company into the wholesale spot market" (unless the Commission approves otherwise). R.I.G.L. § 39-26.1-5(b). The difference between the proceeds and the payments to the renewable project plus the EDC's 2.75% incentive would then be netted annually and credited or charged to all distribution customers. R.I.G.L. §§ 39-26.1-4, 39-26.1-5(f). However, this does not provide any EDC incentive to improve the economic value

¹ There is no need to collocate storage with the intermittent generation resource as long as both are delivered into the ISO-NE Pool Transmission Facilities ("PTF").

of the contract by pairing the resource with energy storage which could reduce the total cost to distribution customers.

The lack of EDC incentive needs to be addressed. For example, if an energy storage service is offered on a standalone basis or paired with any or all of Rhode Island's procurements, the otherwise unavailable potential net revenues that could be realized from shifting renewable generation to on-peak periods could be shared to provide an appropriate incentive to the Company to maximize the total value of the energy storage and long term renewable energy contracts to ratepayers.

Finally, as FirstLight stated in its Initial Comments, the language of Rhode Island's RFP in soliciting energy storage bids should avoid restricting the definition of qualifying energy storage that may be paired with a newly developed renewable resource in order to maximize competitiveness of the solicitation and the number of bids that can be made available for consideration. FirstLight Initial Comments at 5. FirstLight also strongly recommends that Rhode Island not restrict energy storage pairing to projects co-located or delivered into specific nodes, but instead permit flexible storage pairing offers where the storage resource is at a different location and where the storage service value can be maximized through standalone storage pairing service bids that can be matched up with multiple clean energy projects. We support the current PTF delivery point as proposed and urge the Commission to retain that provision. See id.

II. CONCLUSION

In summary, FirstLight recommends the following modifications to the proposed RFP:

• The RFP should solicit energy storage service delivered to the ISO-NE PTF and either (1) paired with a specific new renewable energy resource developer's bid, or (2) as a standalone offer of energy storage service that can be paired with any resource ultimately selected in this RFP, and available to be paired with all other renewable energy resources procured by Rhode Island;

- The RFP should state that the energy and capacity purchased from the newly developed renewable energy resource will be sold into the wholesale market according to the terms provided in the storage service contract;
- The RFP should state that bids that include energy storage service and maximize net benefits to ratepayers are preferred;
- The RFP should provide an appropriate incentive to the EDC to maximize the value of the new renewable energy resource contracts to ratepayers when paired with energy storage service contracts.

Respectfully submitted,

FIRSTLIGHT POWER RESOURCES, INC.

By:

Len Greene

Director, Government & Regulatory Affairs

FirstLight Power Resources 143 West Street, Suite E

New Milford, CT 06483

Tel: 860-795-4310

Len.Greene@firstlightpower.com

Dated: July 9, 2018

63087495 v5

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of July, 2018, the original and nine (9) copies were mailed by first class United States mail to the Clerk of the Rhode Island Public Utilities Commission. In addition, electronic copies of the foregoing documents were served via email to the service list compiled by the Clerk in this docket.

Edward D. Pare, Jr.

Edward D. Pare, fr. 1000

63089664 v1

Docket No. 4822 -- National Grid – RFP for Long-Term Contracting for Renewable Energy and RECs up to 400 MW

Service List updated 6/22/18

Name/Address	E-mail Distribution	Phone
National Grid	jhabib@keeganwerlin.com;	617-951-1354
John K. Habib, Esq.	kmahoney@keeganwerlin.com;	
Keegan Werlin LLP	Laura.Bickel@nationalgrid.com;	
99 High Street, Suite 2900	Joanne.scanlon@nationalgrid.com;	_
Boston, MA 02110		404 504 4556
Jon Hagopian, Esq.	Jon.hagopian@dpuc.ri.gov;	401-784-4775
ivision of Public Utilities & Carriers	John.bell@dpuc.ri.gov;	
89 Jefferson Blvd.	Jonathan.Schrag@dpuc.ri.gov;	
Warwick, RI 02888	Al.contente@dpuc.ri.gov;	
Ellen Cool	egc@levitan.com;	
Levitan & Associates		
James Crowley, Esq.	jcrowley@clf.org;	401-228-1905
Conservation Law Foundation	. 1 0 10	
235 Promenade St., Suite 560	jelmer@clf.org;	
Providence, RI 02908	The state of the s	
NextEra Energy Resources, LLC	jkeoughjr@keoughsweeney.com;	401-724-3600
Joseph A. Keough Jr., Esquire		
Keough + Sweeney, Ltd.		
	Brian.J.Murphy@nexteraenergy.com;	
Brian J. Murphy Esq.		
NextEra Energy Resources, LLC	200	
FirstLight Power Resources	EPare@brownrudnick.com;	401-276-2639
Edward D. Pare, Esq.	JReyes@brownrudnick.com;	
Jesse S. Reyes, Esq.	PAfonso@brownrudnick.com;	
Brown Rudnick LLP	Marc.Silver@firstlightpower.com;	
Marc Silver, FirstLight Power Resources	Len.Green@firstlightpower.com;	
Vineyard Wind, LLC	seth@handylawllc.com;	401-626-4839
Seth Handy, Esq.	erochon@vineyardwind.com;	
Handy Law, LLC	erochon@vineyardwind.com,	
Emily Rochon, Vineyard Wind LLC		
Office of Energy Resources	Andrew.Marcaccio@doa.ri.gov;	
Andrew Marcaccio, Esq.		
Carol Grant, Commissioner	Christopher.Kearns@energy.ri.gov;	
Christopher Kearns, OER	Nicholas.Ucci@energy.ri.gov;	
Nicholas Ucci, OER	Carol.Grant@energy.ri.gov;	
File an original & 9 copies w/:	Luly.massaro@puc.ri.gov;	401-780-2017
Luly E. Massaro, Commission Clerk	Linda.george@puc.ri.gov;	
Linda George, PUC Counsel	Alan.nault@puc.ri.gov;	
Public Utilities Commission	Todd.bianco@puc.ri.gov;	

89 Jefferson Blvd.	Cynthia.WilsonFrias@puc.ri.gov;	
Warwick, RI 02888	Margaret.Hogan@puc.ri.gov;	
Francis Fullaro, Executive Director	fpullaro@renew-ne.org;	646-734-8768
RENEW Northeast		
Melissa Reynolds, Director Bus. Dev.	Melissa.reynolds@eversource.com;	860-728-4637
David Peloquin, Eversource	david.peloquin@eversource.com;	860-665-3554
Steven Zuretti, Director, Gov. Affairs	Steven.Zuretti@brookfieldrenewable.com;	310-849-3210
Brookfield Renewable		
Sebastian Hald Buhl, Orsted	sebhb@orsted.com;	857-260-8362
Frederick Zalcman, Orsted	FRZAL@orsted.com;	617-792-4333
Liam Paskvan	lpaskvan@PierceAtwood.com;	207-791-1306
Michelle Carpenter, Green Development	mc@green-ri.com;	401-295-4998
Buzz Becker, Hexagon Energy	bbecker@hexagon-energy.com;	434-326-4623
Seth Handy, Esq.	seth@handylawllc.com;	401-626-4839
Ram Seetharaman, Solar Micronics	ramsee72@gmail.com;	
Ganesan Visvabharathy, Solar Micronics	visva@solarmicronics.co;	
Yolanda Yolanda, Solar Micronics	yolanda@solarmicronics.co;	
Jamie Dickerson, NECEC	jdickerson@necec.org;	
Janet Besser, NECEC	jbesser@necec.org	