

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DE 17-058

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities  
Energy Service for the Period February 1, 2018, to July 31, 2018

**DIRECT TESTIMONY**

**OF**

**JOHN D. WARSHAW**

**December 11, 2017**

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1   **I. Introduction**

2   **Q. Please state your name and business address.**

3   A. My name is John D. Warshaw, and my business address is 15 Buttrick Road,  
4       Londonderry, New Hampshire.

5   **Q. Please state your position.**

6   A. I am the Manager of Electric Supply for Liberty Utilities Service Corp. (“Liberty”),  
7       which provides services to Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty  
8       Utilities (“Granite State,” “Liberty Utilities,” or “the Company”). I oversee the  
9       procurement of power for Energy Service for Granite State as well as the procurement of  
10      Renewable Energy Certificates (“RECs”).

11   **Q. Please describe your educational background and training.**

12   A. I graduated from the State University of New York Maritime College in 1977 with a  
13      Bachelor of Science in Nuclear Science. I received a Master’s in Business  
14      Administration from Northeastern University in 1986. In 1992, I earned a Master of Arts  
15      in Energy and Environmental Management from Boston University.

16   **Q. What is your professional background?**

17   A. In November 2011, I joined Liberty as Manager, Electric Supply for Granite State. Prior  
18      to my employment at Liberty, I was employed by National Grid USA Service Company  
19      (“National Grid”) as a Principal Analyst in Energy Supply – New England from 2000 to  
20      2010. In that position I conducted a number of solicitations for wholesale power to meet  
21      the needs of National Grid’s New England distribution companies. I also administered

1 both short-term and long-term power purchase agreements for National Grid's New  
2 England distribution companies. Prior to my employment at National Grid, I was  
3 employed at COM/Energy (now NSTAR) from 1992 to 2000. From 1992 to 1997, I was  
4 a Rate Analyst in Regulatory Affairs at COM/Energy responsible for supporting state and  
5 federal rate filings. In 1997, I transferred to COM/Electric to work in Power Supply  
6 Administration.

7 **Q. Have you previously testified before the New Hampshire Public Utilities**  
8 **Commission ("Commission")?**

9 A. Yes. I most recently testified before the Commission in Docket No. DE 17-058, Granite  
10 State's Energy Service rate hearing, on June 21, 2017.

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

12 A. Yes. I have testified before both the Massachusetts Department of Public Utilities and  
13 the Rhode Island Public Utilities Commission regarding electric supply and renewable  
14 portfolio procurement activities.

15 **II. Purpose of Testimony**

16 **Q. Mr. Warshaw, what is the purpose of your testimony?**

17 A. The purpose of my testimony is to support the Company's request for Commission  
18 approval of Liberty Utilities' proposed Energy Service rates for both (i) the Large and  
19 Medium Commercial and Industrial Customer Group ("Large Customer Group"<sup>1</sup>), and

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<sup>1</sup> The Large Customer Group is comprised of customers taking service under General Long-Hour Service Rate G-2 or General Service Time-Of-Use Rate G-1 of the Company's Retail Delivery Tariff.

(ii) the Residential and Small Commercial Customer Group (“Small Customer Group”<sup>2</sup>) for the six-month period February 1, 2018, through July 31, 2018. My testimony will describe the process used by Liberty Utilities to procure Energy Service for both the Large and Small Customer Groups, the proposed Energy Service rates, how the Company proposes to meet its 2017 and 2018 Renewable Portfolio Standard (“RPS”) obligations, and the resulting Renewable Portfolio Standard Adder for service rendered on and after February 1, 2018.

**Q. Please provide the list of schedules attached to your testimony.**

A.	Schedule JDW-1	Energy Service RFP February 1, 2018, through July 31, 2018
	Schedule JDW-2	Energy Service Procurement Summary
	Schedule JDW-3	Comparison of Change in Futures Prices to Change in Procurement Costs
	Schedule JDW-4	Energy Service Contract for the Large Customer Group February 1, 2018, through July 31, 2018, with Vitol Inc.
	Schedule JDW-5	Vitol Inc. Master Power Agreement marked to show changes from standard
	Schedule JDW-6	Energy Service Contract for the Small Customer Group February 1, 2018, through July 31, 2018, with Exelon Generation Company, LLC
	Schedule JDW-7	Summary of May 1, 2017, RPS Solicitation

**III. Energy Service Bidding Process**

**Q. Mr. Warshaw, why does Liberty Utilities need to procure Energy Service for both the Large and Small Customer Groups for the period beginning February 1, 2018?**

A. Pursuant to the procurement process approved by the Commission, which I describe later in my testimony, Liberty Utilities procures power supply through contracts having a

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<sup>2</sup> The Small Customer Group is comprised of customers taking service under Domestic Service Rate D; Domestic Service - Optional Peak Load Pricing Rate D-10; Outdoor Lighting Service Rate M; Limited Total Electrical Living Rate T; General Service Rate G-3; or Limited Commercial Space Heating Rate V of the Company’s Retail Delivery Tariff.

1 three-month term for the Large Customer Group and a six-month term for the Small  
2 Customer Group. Liberty Utilities' currently effective Energy Service supply contracts  
3 for both the Large and Small Customer Groups expire on January 31, 2018. Therefore, to  
4 assure that Energy Service will continue to be available, Liberty Utilities requires new  
5 Energy Service supply arrangements beginning February 1, 2018.

6 **Q. Please describe the process Liberty Utilities used to procure its Energy Service**  
7 **supply for the period beginning February 1, 2018.**

8 A. Liberty Utilities conducted its procurement of Energy Service supply in accordance with  
9 applicable law and Commission directives. The Company complied with the solicitation,  
10 bid evaluation, and procurement process set forth in the Settlement Agreement dated  
11 November 18, 2005, which agreement was approved by the Commission in Order No.  
12 24,577 (Jan. 13, 2006) in Docket No. DE 05-126, amended by Order No. 24,922 (Dec.  
13 19, 2008) in Docket No. DE 08-011, amended by Order No. 25,601 (Nov. 27, 2013) in  
14 Docket No. DE 13-018, and further amended by Order No. 25,806 (Sept. 2, 2015) in  
15 Docket No. DE 15-010 (as amended through these subsequent orders, the "Settlement  
16 Agreement"). On November 1, 2017, Liberty Utilities issued a request for proposals  
17 ("RFP") for certain power supply services and sought suppliers for Liberty Utilities'  
18 Energy Service covering both the Large and Small Customer Groups.

19 **Q. Was the Company's solicitation for the period beginning February 1, 2018,**  
20 **consistent with the Commission approved process for Energy Service?**

21 A. Yes, Liberty Utilities' Energy Service RFP was conducted consistent with the Settlement  
22 Agreement.

1 **Q. Could you describe the nature of the RFP that Liberty Utilities issued?**

2 A. On November 1, 2017, Liberty Utilities issued a RFP to approximately twenty-five  
3 potential suppliers soliciting power for the period February 1, 2018, through July 31,  
4 2018. Liberty Utilities also distributed the RFP to all members of the New England  
5 Power Pool (“NEPOOL”) Markets Committee and posted the RFP on Liberty Utilities’  
6 energy supply website. As a result, the RFP had wide distribution throughout the New  
7 England energy supply marketplace. The RFP requested fixed pricing for each month of  
8 service on an as-delivered energy basis. Prices could vary by month and by service, that  
9 is, the prices did not have to be uniform across the entire service period or between the  
10 three load blocks. A copy of the RFP is provided as Schedule JDW-1.

11 **IV. Results of Energy Service Bidding**

12 **Q. Mr. Warshaw, did Liberty Utilities receive responses to the RFP?**

13 A. Yes. Indicative proposals were received on November 28, 2017. Final proposals were  
14 received on December 5, 2017. None of the bidders made their provision of Liberty  
15 Utilities’ Energy Service contingent upon the provision of any other service.

16 **Q. Was participation in this RFP similar to past RFPs?**

17 A. Yes, participation was similar to past solicitations.

18 **Q. How do the current futures prices for electricity and natural gas compare to the**  
19 **futures prices at the time of the Company’s previous two solicitations?**

20 A. The futures market prices for electricity and natural gas at the time of receiving final bids  
21 for the May 1, 2017, and November 1, 2016, solicitations as well as current futures

1 market prices are shown in Schedule JDW-3. These are the most recent solicitations for  
2 the Small Customer Group. As shown, current electric wholesale and natural gas prices  
3 are slightly lower when compared to the November 1, 2016, solicitation when final bids  
4 were received on December 6, 2016, but electric wholesale prices are slightly higher  
5 when compared to the May 1, 2017, solicitation when final bids were received on June  
6 13, 2017. The current purchase price is significantly higher when compared to the  
7 November 1, 2016, solicitation for the same service period. This can be attributed to a  
8 doubling of the cost of meeting the forward capacity obligation in New England and  
9 uncertainty regarding what the actual costs will be during Winter 2017-2018.

10 **Q. Did Liberty Utilities select any of the proposals received in response to the RFP?**

11 Yes. Liberty Utilities evaluated the bids received and selected the supplier that: (i)  
12 provided a bid that was conforming to the RFP; (ii) had the lowest price; (iii) met the  
13 credit requirements described in the RFP; and (iv) passed our qualitative evaluation. On  
14 December 5, 2017, Liberty Utilities entered into a wholesale Transaction Confirmation  
15 with Vitol Inc. ("Vitol"), the winning bidder for both of the two Large Customer Group  
16 blocks, to provide Energy Service to the Large Customer Group for the six-month period  
17 February 1, 2018, through July 31, 2018. Together, a Transaction Confirmation and a  
18 Master Power Agreement provide the terms for the purchase of Energy Service from a  
19 supplier. A copy of the Transaction Confirmation and Master Power Agreement  
20 between Vitol and Liberty Utilities with certain confidential sections redacted, is attached  
21 hereto as Schedule JDW-4. A copy of the Vitol Master Power Agreement marked to



1 show differences from the standard master power agreement is attached hereto as  
2 Schedule JDW-5.

3 Also on December 5, 2017, Liberty Utilities entered into a wholesale Transaction  
4 Confirmation with Exelon Generation Company, LLC ("Exelon"), the winning bidder for  
5 the Small Customer Group block, to provide Energy Service to the Small Customer  
6 Group for the six-month period February 1, 2018, through July 31, 2018. Together, a  
7 Transaction Confirmation and a Master Power Agreement provide the terms for the  
8 purchase of Energy Service from a supplier. A copy of the Transaction Confirmation  
9 between Exelon and Liberty Utilities with certain confidential sections redacted, is  
10 attached hereto as Schedule JDW-6. A copy of the Exelon Master Power Agreement was  
11 filed with the Commission on March 20, 2006, in Docket No. DE 06-115 (Energy  
12 Service proceeding), and the First Amendment to that Master Power Agreement was filed  
13 with the Commission on September 15, 2009, in Docket No. DE 09-010 (Energy Service  
14 proceeding).

15 **V. Renewable Portfolio Standard**

16 **Q. Mr. Warshaw, what are the RPS obligations for 2018?**

17 A. As specified in the RPS law, RSA 362-F, a provider of electricity must obtain and retire  
18 certificates sufficient in number and class type to meet the following minimum  
19 percentages of total megawatt-hours of electricity supplied by the provider to its  
20 customers that year:

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<b>NH-RPS Classes</b>	<b>2018</b>
RPS Class I	7.5%
RPS Class I Thermal	1.2%
RPS Class II	0.5%
RPS Class III	8.0%
RPS Class IV	1.5%
Total	18.7%

2     **Q.     How does Liberty Utilities expect to satisfy its RPS obligations consistent with the**  
3     **RPS rules as promulgated by the Commission?**

4     A.     On February 18, 2009, Liberty Utilities entered into an amended settlement agreement  
5     with the Commission Staff and the Office of Consumer Advocate intended to resolve all  
6     issues associated with the process by which Liberty Utilities would comply with the  
7     requirements of the RPS law and the PUC 2500 rules (“Amended RPS Settlement”). The  
8     Amended RPS Settlement was approved by the Commission in Order No. 24,953 (Mar.  
9     23, 2009) in Docket No. DE 09-010. The Company may satisfy RPS obligations by  
10    providing either RECs for each RPS class from the New England Power Pool Generation  
11    Information System (“NEPOOL-GIS”) or by making an Alternative Compliance  
12    Payment (“ACP”) to the State of New Hampshire’s Renewable Energy Fund. As  
13    specified in the Amended RPS Settlement, Liberty Utilities requested bidders to provide  
14    a separate RPS Compliance Adder with their bids. This RPS Compliance Adder is the  
15    incremental charge by a bidder for agreeing to take on the RPS obligation with the  
16    Energy Service obligation.

1 **Q. If a winning bidder's RPS Compliance Adder is accepted, how would the bidder**  
2 **satisfy the RPS obligation?**

3 A. The supplier assumes the RPS obligation for its transaction when the RPS compliance  
4 adder is accepted. This means that the supplier must deliver RECs to satisfy each RPS  
5 class obligation to the Company's NEPOOL-GIS account, or it must pay the Company  
6 the ACP for the undelivered RECs. The quantity of RECs required is calculated by  
7 multiplying the RPS obligation percentage for each REC class by the electricity sales for  
8 the term of the transaction.

9 **Q. What were the criteria Liberty Utilities used to evaluate any RPS Compliance**  
10 **Adder which may have been provided by a bidder?**

11 A. Liberty Utilities compared the adder provided by a bidder to the prices it received in its  
12 November 1, 2017, RPS solicitation.

13 **Q. Did Liberty Utilities accept an RPS Compliance Adder provided by a bidder?**

14 A. Yes. Liberty Utilities accepted the RPS Compliance Adder submitted by Exelon, the  
15 winning bidder to serve the Small Customer Group. The combination of Exelon's  
16 Energy Service bid prices and RPS Compliance Adder resulted in the lowest cost to  
17 Liberty Utilities Small Customer Group. Vitol, the winning bidder for the Large  
18 Customer Group, did not submit an RPS Compliance Adder.

1   **Q.    Is Liberty Utilities proposing any changes to the Renewable Performance Standard**  
2       **Adder at this time?**

3    A.    Yes. Liberty Utilities is proposing to change the Commission-approved Renewable  
4       Performance Standard Adder to reflect the results of its recent RPS solicitations to meet  
5       the RPS obligations of 2018 and the acceptance of Exelon's RPS Compliance Adder.  
6       Liberty Utilities is proposing to use a different RPS Adder for the Large Customer Group  
7       since Liberty Utilities accepted the RPS Compliance Adder from the winning bidder for  
8       the Small Customer Group.

9       Liberty Utilities issued a request for proposals on November 1, 2017, for the acquisition  
10      of New Hampshire RPS compliant RECs to meet its 2017 and 2018 obligations. The  
11      results of Liberty Utilities' November 1, 2017, solicitation are included in Schedule  
12      JDW-2, Exhibit 10. At this time, Liberty Utilities has completed its analysis of the bids  
13      but has not started contract negotiations with the bidders. Liberty Utilities will notify the  
14      winning bidders by December 31, 2017, and will provide an update in the next Energy  
15      Service filing scheduled for June 2018. Liberty Utilities proposes to use a combination  
16      of the bid prices for RPS classes for which it received bids in its November 1, 2017, RPS  
17      solicitation for the RPS Adder.

18   **Q.    How did Liberty Utilities calculate the Renewable Portfolio Standard Adder?**

19    A.    As shown in Schedule JDW-2, Exhibit 11, Liberty Utilities used the prices it received in  
20       its November 1, 2017, RPS solicitation. The retail RPS costs were calculated on a per  
21       megawatt-hour (MWh) basis. The Company divided the calculated retail RPS costs by

1           ten in order to convert the units from dollars per MWh to a cents per kilowatt-hour (kWh)  
2           rate to determine the Renewable Portfolio Standard Adder.

3   **Q.    What happens if Liberty Utilities' actual RPS compliance costs are different from**  
4   **those used in calculating the Renewable Portfolio Standard Adder?**

5   A.   Liberty Utilities reconciles its costs of RPS compliance with the revenue billed to  
6       customers from the Renewable Portfolio Standard Adder. This reconciliation occurs as  
7       part of the annual Energy Service reconciliation. The next annual Energy Service  
8       reconciliation filing will occur in June 2018.

9   **Q.    Has Liberty Utilities been able to contract for RECs?**

10  A.   Yes. In June 2017, Liberty Utilities was able to contract for Class I and Class IV RECs  
11       to help meet a portion of its 2017 RPS obligations. A summary of the results of Liberty  
12       Utilities' May 1, 2017, RPS solicitation is included in Schedule JDW-7.

13  **Q.    When will Liberty Utilities issue the next REC request for proposals?**

14  A.   Liberty Utilities plans to issue a RPS solicitation in May 2018 to procure RECs to satisfy  
15       the remaining 2017 and 2018 RPS obligations. Through that solicitation, Liberty Utilities  
16       will attempt to procure the quantity of RECs necessary to satisfy the remaining 2017 and  
17       2018 obligations for load that will be serviced under Energy Service supply contracts.

1 **VI. Energy Service Commodity Costs**

2 **Q. Mr. Warshaw, please summarize the power supply cost at the retail meter based on**  
3 **Liberty Utilities' expected procurement cost used to develop the proposed retail**  
4 **rates.**

5 A. The load-weighted average of the power supply costs for the Large Customer Group for  
6 February 1, 2018, through July 31, 2018, is 8.694¢ per kWh compared to the load-  
7 weighted average of 8.283¢ per kWh for the period August 1, 2017, through January 31,  
8 2018. The load-weighted average of the power supply costs for the Small Customer  
9 Group for February 1, 2018, through July 31, 2018, is 8.931¢ per kWh compared to the  
10 load-weighted average of 8.644¢ per kWh for the period August 1, 2017, through January  
11 31, 2018. The power supply costs at the retail customer meter (¢ per kWh) were  
12 calculated by multiplying the commodity prices at the wholesale level (\$ per MWh) by  
13 the applicable loss factor and then dividing the results by ten. The applicable loss factors  
14 can be found in the RFP summary in Schedule JDW-2. The loss factor is a calculated  
15 ratio of wholesale purchases to retail deliveries.

16 **Q. How will Liberty Utilities reconcile any difference in costs associated with Energy**  
17 **Service?**

18 A. To the extent that the actual cost of procuring Energy Service varies from the amounts  
19 billed to customers for the service, Liberty Utilities will reconcile the difference through  
20 the reconciliation mechanism pursuant to Liberty Utilities' Energy Service Adjustment  
21 Provision contained in its currently effective Retail Delivery Tariff.

**VII. CONCLUSION**

**Q. Mr. Warshaw, when will Liberty Utilities issue the next RFP for Energy Service?**

A. The Large Customer Group rates and the Small Customer Group Rates proposed in this filing will both end on July 31, 2018. Per the terms of the Settlement Agreement, Liberty Utilities will issue a RFP for both groups in May 2018. For purposes of notice to the Commission, the following table illustrates Liberty Utilities' proposed timeline for the next RFP:

<b>RFP Process Steps</b>	<b>May 2018 RFP</b>
RFP Issued	May 1, 2018
Indicative Bids Due	June 5, 2018
Final Bids Due	June 12, 2018
Energy Service Filing to Commission	June 18, 2018
Commission Order Needed	June 25, 2018
Service Begins	August 1, 2018

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

A. Yes, it does.

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