

**UNITIL ENERGY SYSTEMS, INC.**

**DIRECT TESTIMONY OF**

**TODD M. BOHAN**

**New Hampshire Public Utilities Commission**

**Docket No. DE 14-061**

**April 4, 2014**

000001

## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
II.	PURPOSE OF TESTIMONY.....	2
III.	SOLICITATION PROCESS .....	4
IV.	RENEWABLE PORTFOLIO STANDARD COMPLIANCE.....	9
VI.	WHOLESALE ELECTRICITY PRICES: 2013 & 2014.....	12
VII.	CONCLUSION.....	15

## LIST OF SCHEDULES

- Schedule TMB-1: Bid Evaluation Report**
- Schedule TMB-2: Request for Proposals**
- Schedule TMB-3: Customer Migration Report**
- Schedule TMB-4: RPS Compliance Cost Estimates**
- Schedule TMB-5: Historical Pricing by Customer Group**
- Schedule TMB-6: RSO Customer Notification**
- Schedule TMB-7: RSO Program Participation**
- Schedule TMB-8: ISO-NE Press Release**

1 **I. INTRODUCTION**

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

3 A. My name is Todd M. Bohan. My business address is 6 Liberty Lane West, Hampton,  
4 NH.

5 **Q. What is your relationship with Unitil Energy Systems, Inc.?**

6 A. I am employed by Unitil Service Corp. (“USC”) as a Senior Energy Analyst. USC  
7 provides management and administrative services to Unitil Energy Systems, Inc.  
8 (“UES”) and Unitil Power Corp. (“UPC”).

9 **Q. Please briefly describe your educational and business experience.**

10 A. I graduated *magna cum laude* from Saint Anselm College, Manchester, New  
11 Hampshire in 1987 with a Bachelor of Arts degree in Financial Economics. I earned a  
12 Masters in Economics from Clark University, Worcester, Massachusetts in May 1990.  
13 In September 1995, I earned a Ph.D. in Economics from Clark University. Before  
14 joining Unitil, I worked for Bay State Gas Company as a Rate Analyst. Prior to  
15 working for Bay State, I was employed as a Utility Analyst and an Economist in the  
16 Economics Department of the New Hampshire Public Utilities Commission. I joined  
17 Unitil Service Corp. in November 1998, and have been involved in various regulatory  
18 proceedings. In August of 2010, I joined the Energy Contracts group and have  
19 primary responsibilities in the areas of electric market operation and data reporting,  
20 default service administration and budgeting. In addition, I have administrative  
21 responsibilities associated with competitive electric supplier operations with Unitil.

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

3 A. Yes. I have testified before the Commission on various regulatory matters, most  
4 recently in UES's Default Service Solicitation proceeding, Docket No. DE 13-079,  
5 and UES's Stranded Cost Recovery and External Delivery Charge Reconciliation and  
6 Rate Filing, Docket No. DE 13-172.

7 **II. PURPOSE OF TESTIMONY**

8 **Q. Please describe the purpose of your testimony.**

9 A. My testimony documents the solicitation process followed by UES in its acquisition of  
10 Default Service power supplies ("DS") for its G1 and Non-G1 customers as approved  
11 by the Commission in Order No. 25,397, dated July 31, 2012 (the "Order") granting  
12 UES's Petition for Approval of Revisions to its Default Service Solicitation Process  
13 for G1 and Non-G1 Customers. With the current Request for Proposal ("RFP"), UES  
14 has contracted for a six-month default service power supply for 100% of its small  
15 customer group (Non-G1); 100% of its medium customer group (Non-G1); and 100%  
16 of its large customer group (G1) service requirements. Service begins on June 1,  
17 2014.

18 I describe how UES solicited for bids from wholesale suppliers to provide the supply  
19 requirements in accordance with the terms of the Order as UES has done in prior  
20 default service supply solicitations. I also describe how the proposals received were  
21 evaluated and the winning bidders were chosen. Supporting documentation and

1 additional detail of the solicitation process is provided in the Bid Evaluation Report  
2 (“Report”), attached as Schedule TMB-1. A copy of the RFP as issued is attached as  
3 Schedule TMB-2, and an updated Customer Migration Report is attached as Schedule  
4 TMB-3. The Customer Migration Report shows monthly retail sales and customer  
5 counts supplied by competitive generation, total retail sales and customer counts (the  
6 sum of default service and competitive generation) and the percentage of sales and  
7 customers supplied by competitive generation. The report provides a rolling 13-month  
8 history which covers the period from February 2013 through February 2014.  
9 Renewable Portfolio Standard ("RPS") Compliance Cost Estimates are included as  
10 Schedule TMB-4. My testimony reviews UES’s approach to compliance with the  
11 RPS which went into effect in January 2008. Schedule TMB-4 details projected  
12 obligations and price assumptions for the coming rate period. The price assumptions  
13 listed in Schedule TMB-4 are based on recent market data and information and  
14 alternative compliance payment prices. Schedule TMB-5 provides historical price  
15 data by customer group that is no longer subject to confidential treatment. This  
16 schedule provides pricing histories associated with the most recent three-month rate  
17 periods for G1 customers or six-month rate periods for Non-G1 customers for which  
18 all pricing is currently subject to the Federal Energy Regulatory Commission’s  
19 quarterly reporting requirements. Schedule TMB-6 includes a copy of the notification  
20 for the discontinuance of the Renewable Source Option (“RSO”) program, and  
21 Schedule TMB-7 provides a final summary of the RSO program participation and

1 activity. Lastly, Schedule TMB-8 provides a copy of a recent ISO-NE press release  
2 regarding 2013 wholesale electricity prices in New England.

3 **Q. Please summarize the approvals UES is requesting from the Commission.**

4 A. UES requests that the Commission:

- 5 • Find that: UES has followed the solicitation process approved by the Commission;  
6 UES's analysis of the bids submitted was reasonable; and UES has supplied a  
7 reasonable rationale for its choice of the winning suppliers.
- 8 • Find that: the price estimates of renewable energy certificates ("RECs") proposed  
9 by UES, based on actual purchases or current market prices and information, are  
10 appropriate for inclusion in retail rates.
- 11 • On the basis of these findings, conclude that the power supply costs resulting from  
12 the solicitation are reasonable and that the amounts payable to the sellers under the  
13 supply agreements are approved for inclusion in retail rates.
- 14 • Issue an order granting the approvals requested herein on or before April 11, 2014,  
15 which is five (5) business days after the date of this filing.

16 **III. SOLICITATION PROCESS**

17 **Q. Please discuss the Solicitation Process UES employed to secure the supply**  
18 **agreement for default service power supplies.**

19 A. In the same manner as its prior solicitations for default service supplies, UES  
20 conducted an open solicitation in which it actively sought interest among potential

1 suppliers and provided potential suppliers with access to sufficient information to  
2 enable them to assess the risks and obligations associated with providing the services  
3 sought. UES did not discriminate in favor of or against any individual potential  
4 supplier who expressed interest in the solicitation. UES negotiated with all potential  
5 suppliers who submitted proposals to obtain the most favorable terms from each  
6 potential supplier. The structure, timing and requirements associated with the  
7 solicitation are fully described in the RFP issued on March 4, 2014. This is attached  
8 as Schedule TMB-2 and is summarized in the Report attached as Schedule TMB-1.

9 **Q. Does this solicitation differ from those recently issued by UES, and if so please**  
10 **explain?**

11 A. The solicitation process followed is the same as in prior solicitations for UES. What  
12 has changed is the duration and structure of the default service supplies sought. In  
13 accordance with the Commission's Order, UES is transitioning its default service  
14 procurement as follows:

- 15 • For the large customer default service supply (G1), UES has moved from a three-  
16 month period to a six-month period. In addition, the pricing solicited is for a  
17 variable monthly price comprised of the real-time locational marginal price for the  
18 New Hampshire load zone weighted by the hourly loads of all G1 customers who  
19 take default service plus a fixed monthly adder. The fixed monthly adder covers  
20 the non-energy wholesale charges which are then added to the variable energy cost

1 to determine the wholesale cost. The solicitation asks suppliers to bid fixed  
2 monthly adders (which can vary by month, but must be fixed for the month).

- 3 • For the small customer and medium customer default service supplies  
4 (collectively, Non-G1), UES is moving from a laddered approach where a 25%  
5 share is purchased for 12 or 24 months to a model where a 100% share is  
6 purchased for a six-month period. In addition, UES is soliciting separately for its  
7 small and medium customer groups.
- 8 • The current solicitation is the second solicitation under which UES is now fully  
9 transitioned to its new default service procurement methodology approved by the  
10 Commission in docket DE 12-003.

11 **Q. How did UES ensure that the RFP was circulated to a large audience?**

12 A. UES announced the electronic availability of the RFP to all participants in NEPOOL  
13 by notifying all members of the NEPOOL Markets Committee and the NEPOOL  
14 Participants Committee via email. UES also announced the issuance of the RFP via  
15 email to a list of power suppliers and other entities such as distribution companies,  
16 consultants, brokers and members of public agencies who have previously expressed  
17 interest in receiving copies of UES's solicitations. UES followed up the email  
18 announcements with telephone calls to the power suppliers to solicit their interest. In  
19 addition, UES issued a media advisory to a number of power markets publications  
20 announcing the issuance of the RFP.

21

1 **Q. What information was provided in the RFP to potential suppliers?**

2 A. The RFP described the details of UES's default service, the related customer-  
3 switching rules, and the form of power service sought. To gain the greatest level of  
4 market interest in supplying the load, UES provided potential bidders with appropriate  
5 and accessible information. Data provided included historical hourly default service  
6 loads and daily capacity tags for each customer group; class average load shapes;  
7 historical monthly retail sales and customer counts by rate class and supply type; a  
8 generic listing of large customers showing annual sales, peak demands, and capacity  
9 tag values as well as supply type (default service or competitive generation); and the  
10 evaluation loads, which are the estimated monthly volumes that UES would use to  
11 weigh bids in terms of price. The retail sales report and the historical loads and  
12 capacity tag values were updated prior to initial bidding to provide the latest  
13 information available. All documents and data files were provided to potential  
14 suppliers via UES's corporate website ([www.unitil.net/rfp](http://www.unitil.net/rfp)).

15 **Q. How did UES evaluate the bids received?**

16 A. UES evaluated the bids on both quantitative and qualitative criteria, including price,  
17 creditworthiness, willingness to extend adequate credit to UES to facilitate the  
18 transaction, capability of performing the terms of the RFP in a reliable manner and the  
19 willingness to enter into contractual terms acceptable to UES. UES compared the  
20 pricing strips proposed by the bidders by calculating weighted average prices for the  
21 supply requirement using the evaluation loads that were issued with the RFP.

1 UES selected TransCanada Power Marketing, Ltd. (“TransCanada”) as the winning  
2 bidder of the small customer (Non-G1) supply requirement (100% share) and  
3 Dominion Energy Marketing, Inc. (“Dominion”) as the winning bidder of the medium  
4 customer (Non-G1) supply requirement (100% share). Nextera Energy Power  
5 Marketing, LLC (“Nextera”) was selected as the supplier of the large customer (G1)  
6 supply requirement (100% share). All three transactions are for a period of six  
7 months. UES believes that TransCanada, Dominion and Nextera offered the best  
8 overall value in terms of both price and non-price considerations for the supply  
9 requirements sought.

10 **Q. Please describe the contents of the Bid Evaluation Report.**

11 A. Schedule TMB-1 contains the Bid Evaluation Report which further details the  
12 solicitation process, the evaluation of bids, and the selection of the winning bidders.  
13 The Report contains a narrative discussion of the solicitation process. A confidential  
14 section labeled “Tab A” follows the narrative. Tab A includes additional discussion  
15 regarding the selection of the winning bidders and presents several supporting exhibits  
16 that list the suppliers who participated as well as the pricing they submitted and other  
17 information considered by UES in evaluating final proposals, including redlined  
18 versions of the final supply agreements. UES seeks protective treatment of all  
19 materials provided in Tab A.

20 On the basis of the information and analysis contained in the Bid Evaluation Report,  
21 UES submits that it has complied with the Commission’s requirements, and that the

1 resulting default service power supply costs are reasonable and that the amounts  
2 payable to the sellers under the supply agreements should be approved for inclusion in  
3 retail rates.

4 **Q. Please indicate the planned issuance date, filing date and expected approval date**  
5 **associated with UES's next default service solicitation.**

6 A. Similar to the current solicitation, UES's next default service solicitation will be for  
7 one hundred percent (100%) of the small, medium and large customer supply  
8 requirements for a six-month period. Delivery of supplies will begin on December 1,  
9 2014. UES plans to issue an RFP for these supplies on August 26, 2014, with a filing  
10 for approval of solicitation results planned for September 26, 2014 and approval  
11 anticipated by October 3, 2014.

12 **IV. RENEWABLE PORTFOLIO STANDARD COMPLIANCE**

13 **Q. Please explain how UES is complying with the Renewable Portfolio Standard**  
14 **requirements.**

15 A. In accordance with the settlement agreement dated July 16, 2009, UES typically issues  
16 two REC RFPs annually, each for approximately 50% of its projected REC  
17 obligations. In addition, UES may make REC purchases outside of the RFP process  
18 when it finds it advantageous to do so. For 2013 and 2014 RPS compliance, UES  
19 completed a REC RFP in late February 2014. UES has made some additional  
20 purchases outside of the REC RFP issuance. Tab A includes an exhibit summarizing

1 UES's REC purchases for RPS compliance. UES anticipates issuing another REC  
2 RFP in late 2014.

3 **Q. Please describe UES's estimates of RPS compliance costs.**

4 A. The current solicitation is for default service power supplies to be delivered beginning  
5 June 1, 2014. Schedule TMB-4 lists the percentage of sales and the resulting REC  
6 requirement for each class of RECs for RPS compliance along with UES's cost  
7 estimates for the period beginning June 2014. UES's cost estimates are based on  
8 current market prices as communicated by brokers of renewable products, recent  
9 purchases of RECs, and alternative compliance payment rates for 2014.

10 **Q. Does UES's estimate of RPS costs incorporate the latest RPS requirements for**  
11 **2014?**

12 A. Yes. The following table provides a summary of the RPS requirements.

<b>NH Renewable Portfolio Standards: 2014</b>					
<b>Calendar Year</b>	<b>Class I*</b>	<b>Class I Thermal</b>	<b>Class II</b>	<b>Class III</b>	<b>Class IV</b>
2014	5.00%	0.40%	0.30%	3.00%	1.40%
*Class I is the gross requirement. The Class I requirement less the Class I Thermal Carve-Out requirement is 4.60%.					

13

14 Schedule TMB-4 RPS Compliance Costs Estimates incorporates the latest RPS  
15 requirements shown here.

16

1 **V. RENEWABLE SOURCE OPTION**

2 **Q. The Commission recently approved the closing of UES’s RSO program. Could**  
3 **you provide a brief summary of where things are regarding the termination of**  
4 **this voluntary program?**

5 A. Certainly. The RSO Program was an optional service that allowed Domestic and  
6 Regular General Service default service customers to financially support renewable  
7 generation. Through the program, customers could have 25 percent, 50 percent or 100  
8 percent of their consumption matched with purchases of Class I and Class II RECs.  
9 These REC purchase obligations were in addition to UES’s RPS obligations.  
10 Customers who chose to participate were billed an additional charge – the Renewable  
11 Source Option Charge (“RSOC”), per Schedule RSO of the Company’s tariff, based  
12 on the level of participation chosen.

13 After a number of years of operation, the participation rate remained at 0.04% of  
14 eligible residential customers and 0.01% of eligible small commercial customers.  
15 Accordingly, UES petitioned the Commission to terminate the voluntary RSO  
16 Program. On November 22, 2013, the Commission issued Order No. 25,597, in  
17 Docket No. DE 13-262, approving the discontinuation of the RSO Program. In its  
18 Order, the Commission directed UES to provide some detail on how it would notify  
19 existing RSO customers of the program’s discontinuation and to maintain information  
20 on alternatives for the purchase of RECs on the Company’s website.

21

1 **Q. Has UES complied with these Commission directives?**

2 A. Yes. Schedule TMB-6 provides a copy of the filing made with the Commission to  
3 explain how it would notify customers. A copy of the letter was sent to all RSO  
4 customers on December 16, 2013. In addition, information regarding renewable  
5 energy supply options is being maintained on UES's website as follows:  
6 [http://www.unitil.com/energy-for-residents/electric-information/energy-supply-  
options/competitive-supply#renewables](http://www.unitil.com/energy-for-residents/electric-information/energy-supply-<br/>7 options/competitive-supply#renewables)

8 **Q. Please provide a final summary of the RSO program.**

9 A. Schedule TMB-7 provides the number of customers that participated in the program  
10 by rate class and RSO option chosen, along with kilowatt-hour consumption and  
11 revenue by program option, rate class and billing month. The number of Class I and  
12 Class II RECs that will be purchased as a result of the RSO program is also included  
13 in Schedule TMB-7. A presentation of all the RSO program costs and revenues, along  
14 with the remaining program balance, is provided in the testimony of Ms. Linda  
15 McNamara.

16 **VI. WHOLESALE ELECTRICITY PRICES: 2013 & 2014**

17 **Q. Please provide a brief summary of wholesale electricity prices in New  
18 England/New Hampshire during the winter 2013-14 period.**

19 A. The New England region experienced both high and volatile wholesale electricity  
20 prices during the winter 2013-14 period. These high prices and volatility were driven  
21 by two major factors: (1) high consumer demand, particularly due to the occurrence of

1 extreme cold temperatures on several occasions during this period; and (2) high fuel  
2 prices, namely natural gas, driven by competition for heating purposes and pipeline  
3 constraints limiting supply availability. The following table shows details regarding

<b>NH Load Zone (4002): Monthly Locational Marginal Prices</b>					
	<b>Avg Price</b>	<b>Pct Change</b>	<b>Highest Price</b>	<b>St. Deviation</b>	<b>St. Deviation</b>
<b>Month</b>	<b>(\$s per MWH)</b>	<b>(vs. Prev.)</b>	<b>(\$s per MWH)</b>	<b>(\$s per MWH)</b>	<b>(Prev. Yr.)</b>
<b>Dec-13</b>	\$97.58	126%	\$1,274.29	85.6	19.4
<b>Jan-14</b>	\$149.98	82%	\$632.67	91.8	67.2
<b>Feb-14</b>	\$150.61	42%	\$571.06	78.6	61.6
<b>Mar-14</b>	\$113.07	112%	\$390.80	84.2	24.7

4 New Hampshire electricity prices during the winter 2013-14 period.

5 The data shows that wholesale electricity prices in New Hampshire in the winter 2013-  
6 14 period were both much higher and more volatile than in the winter 2012-13 period.

7 **Q. How did factors influencing the natural gas market have an impact on electricity**  
8 **prices during this period?**

9 A. Not surprisingly, the demand for natural gas is high during the winter period as a  
10 primary source for heating purposes. At the same time, natural gas is also a major fuel  
11 source for electric generation in the New England region accounting for roughly half  
12 of the electricity generated. As a result, natural gas prices in the New England region  
13 were much higher than they were in the winter 2012-13 period contributing to higher  
14 wholesale electricity prices in the region. Below are details regarding New England  
15 natural gas prices during the winter 2013-14 period and winter 2012-13 period.

<b>Tennessee Gas Pipeline (Zone 6 Delivered): Average Monthly Spot Prices</b>					
	<b>Avg Price</b>		<b>Avg Price</b>	<b>\$ Change</b>	<b>Pct Change</b>
<b>Month</b>	<b>(\$ per MMBtu)</b>	<b>Month</b>	<b>(\$ per MMBtu)</b>	<b>(Prev. Yr.)</b>	<b>(Prev. Yr.)</b>
<b>Dec-13</b>	\$12.758	<b>Dec-12</b>	\$5.818	\$6.940	119%
<b>Jan-14</b>	\$24.353	<b>Jan-13</b>	\$10.125	\$14.228	141%
<b>Feb-14</b>	\$20.198	<b>Feb-13</b>	\$16.253	\$3.945	24%

1 Additional information regarding the relationship between natural gas prices and  
 2 wholesale electricity prices in New England is available in a recent press release by  
 3 ISO New England (March 18, 2014) entitled: “2013 Wholesale Electricity Prices in  
 4 New England Rose on Higher Natural Gas Prices” and provided in Schedule TMB-8.

5 **Q. Are these higher natural gas prices contributing to higher expected electricity**  
 6 **prices in New England in 2014?**

7 A. While it is difficult to state with exact certainty what impact higher past natural gas  
 8 prices may have on future wholesale electricity prices, one thing is certain at the  
 9 moment: expectations are that wholesale electricity prices for the summer 2014 period  
 10 will be higher than the summer 2013 period. For New England, the expectation is that  
 11 prices will be approximately 20% higher in summer 2014 vs. summer 2013. The  
 12 average NYMEX future price for 2013 was \$45 per MWh.<sup>1</sup> The average NYMEX  
 13 future price for 2014 is \$54 per MWh<sup>2</sup> representing a 20% increase over last year at  
 14 this time.

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<sup>1</sup> \$45 per MWh is the average of the March 28, 2013 monthly on-peak and off-peak prices expected for the period June through November 2013.

<sup>2</sup> \$54 per MWh is the average of the March 28, 2014 monthly on-peak and off-peak prices expected for the period June through November 2014.

1 **VII. CONCLUSION**

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

3 A. Yes, it does.

4

