

**UNITIL ENERGY SYSTEMS, INC.**

**DIRECT TESTIMONY OF  
LINDA S. MCNAMARA**

**New Hampshire Public Utilities Commission**

**Docket No. DE 17-038**

**April 3, 2017**

## TABLE OF CONTENTS

<b>I. INTRODUCTION</b>	<b>Page 1</b>
<b>II. PURPOSE OF TESTIMONY</b>	<b>Page 1</b>
<b>III. RETAIL RATE CALCULATIONS</b>	<b>Page 2</b>
<b>IV. BILL IMPACTS</b>	<b>Page 13</b>
<b>V. CONCLUSION</b>	<b>Page 14</b>

## LIST OF SCHEDULES

**Schedule LSM-1: Redline Tariffs**

**Schedule LSM-2: Non-G1 Class Retail Rate Calculations - Power Supply Charge**

**Schedule LSM-3: Non-G1 Class Retail Rate Calculations - Renewable Portfolio  
Standard Charge**

**Schedule LSM-4: G1 Class Retail Rate Calculations - Power Supply Charge**

**Schedule LSM-5: G1 Class Retail Rate Calculations - Renewable Portfolio  
Standard Charge**

**Schedule LSM-6: Class Bill Impacts**

1 **I. INTRODUCTION**

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

3 A. My name is Linda S. McNamara. My business address is 6 Liberty Lane West,  
4 Hampton, New Hampshire 03842.

5

6 **Q. For whom do you work and in what capacity?**

7 A. I am a Senior Regulatory Analyst for Unitil Service Corp. ("USC"), which  
8 provides centralized management and administrative services to all Unitil  
9 Corporation's affiliates including Unitil Energy Systems, Inc. ("UES").

10

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

12 A. In 1994 I graduated *cum laude* from the University of New Hampshire with a  
13 Bachelor of Science Degree in Mathematics. Since joining USC in June 1994, I  
14 have been responsible for the preparation of various regulatory filings, including  
15 changes to the default service charges, price analysis, and tariff changes.

16

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

19 A. Yes.

20

21 **II. PURPOSE OF TESTIMONY**

22 **Q. What is the purpose of your testimony in this proceeding?**

1 A. The purpose of my testimony is to present and explain the proposed changes to  
2 UES's Default Service Charge ("DSC") effective June 1, 2017, as reflected in the  
3 redline tariffs provided as Schedule LSM-1.

4

5 **Q. Is UES proposing any other tariff changes for effect June 1, 2017?**

6 A. Yes. UES's Summary of Low-Income Electric Assistance Program Discounts,  
7 incorporating the proposed June 1 Non-G1 (Residential) DSC, would also be  
8 affected by this change. However, because other changes to this page are  
9 currently pending in DE 16-384 for effect May 1, 2017, UES plans to file this in  
10 compliance with a Commission order.

11

12 **III. RETAIL RATE CALCULATIONS**

13 **Q. What are the proposed Non-G1 Class DSC?**

14 A. As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-  
15 G1 DSC is \$0.07886 (or 7.886¢) per kWh and the proposed G2 and Outdoor  
16 Lighting ("OL") Class fixed Non-G1 DSC is \$0.07556 (or 7.556¢) per kWh for  
17 the period June 1, 2017 through November 30, 2017. The proposed Residential  
18 Class variable Non-G1 DSC and the proposed G2 and OL Class variable Non-G1  
19 DSC for this same period are also shown on this page.

20

21 The proposed DSC are comprised of two components, as shown on Schedule  
22 LSM-1, Page 1: A Power Supply Charge and a Renewable Portfolio Standard  
23 ("RPS") Charge.

1

2 **Q. What are the proposed Power Supply Charges and RPS Charge?**

3 A. For the period June 1, 2017 through November 30, 2017, the proposed Residential  
4 Class fixed Non-G1 Power Supply Charge is \$0.07526 (or 7.526¢) per kWh, the  
5 proposed G2 and OL Class fixed Non-G1 Power Supply Charge is \$0.07196 (or  
6 7.196¢) per kWh, and the proposed fixed Non-G1 RPS Charge is \$0.00360 (or  
7 0.360¢) per kWh. These figures, as well as the variable amounts for the same  
8 period, are shown on Schedule LSM-1, Page 1.

9

10 **Q. How do the Non-G1 fixed DSC rates compare to the current rate?**

11 A. The proposed Residential Class fixed Non-G1 DSC of \$0.07886 (or 7.886¢) per  
12 kWh is an increase of \$0.00196 (or 0.196¢) per kWh from the current DSC of  
13 \$0.07690 (or 7.690¢) per kWh. The proposed G2 and OL Class fixed Non-G1  
14 DSC of \$0.07556 (or 7.556¢) per kWh is an increase of \$0.00232 (or 0.232¢) per  
15 kWh from the current DSC of \$0.07324 (or 7.324¢) per kWh. These increases  
16 reflect higher contract costs for the period June 1, 2017 through November 30,  
17 2017 compared to the contract costs for the current period December 1, 2016  
18 through May 31, 2017.

19

20 **Q. Please describe the calculation of the Non-G1 class DSC.**

21 A. The rate calculations for the Non-G1 class Power Supply Charges, fixed and  
22 variable, are provided on Schedule LSM-2, Page 1. The rate calculations for the

1 Non-G1 class RPS Charges, fixed and variable, are provided on Schedule LSM-3,  
2 Page 1. Both charges are calculated in a similar manner.

3

4 Variable pricing is calculated by dividing the total costs for the month, including a  
5 partial reconciliation of costs and revenues through February 28, 2017, by the  
6 estimated monthly kWh purchases for the Residential Class and the G2 and OL  
7 Class. An estimated loss factor of 6.4% is then added to arrive at the proposed  
8 retail variable charges. Fixed pricing is calculated in a similar manner, except  
9 that the calculation is based on each class's total for the entire six month period.

10

11 **Q. Have you made any adjustments to the reconciliation balances included in**  
12 **the Power Supply and RPS charges?**

13 A. In order to determine the reconciliation amount included in the Non-G1 class  
14 power supply charge, the reconciliation balance as of February 28, 2017 was  
15 adjusted to recognize that estimated revenue in March, April, and May 2017  
16 should exceed costs for this same period by an estimated \$2,259,768. This  
17 adjustment recognizes that estimated costs for March, April and May 2017 are  
18 below the average cost for the entire period, December 2016-May 2017, while  
19 revenue will be primarily based on the fixed Power Supply Charge, of which most  
20 Non-G1 customers pay, and is determined using an average of costs for the entire  
21 December 2016-May 2017 period. This adjustment brings the February 28, 2017  
22 balance from \$2,384,997 to \$125,229.

23

1 In order to determine the reconciliation amounts included in the Non-G1 class  
2 RPS, the reconciliation balance as of February 28, 2017 was adjusted to account  
3 for an estimate of RECs yet to be purchased. The Non-G1 class RPS  
4 reconciliation balance also includes an adjustment to recognize that the current  
5 RPS charges, in effect through May 31, 2017, include a credit for the  
6 overcollection as of February 29, 2016.

7  
8 Since UES reconciles its costs on an annual basis, only a portion of the total  
9 reconciliation balances are reflected in the proposed Power Supply and RPS rates.  
10 UES apportioned the Power Supply balance and the RPS balance based on kWh  
11 over the twelve month period June 2017 through May 2018. The Power Supply  
12 reconciliation balance is further divided between the Residential Class and the  
13 G2/OL Class, based on kWh. This calculation is provided on Page 1 of Schedule  
14 LSM-2 for Power Supply and Page 1 of Schedule LSM-3 for RPS.

15  
16 **Q. Please explain the adjustment to the RPS reconciliation balance mentioned**  
17 **above regarding the estimate of RECs yet to be purchased.**

18 A. This adjustment recognizes that RPS revenue includes recovery of estimated RPS  
19 costs. However, these costs have not yet been fully paid but are being accrued.  
20 In order to prevent refunding these amounts until all RECs for a given year have  
21 been purchased, UES has added the amounts it has already collected in rates to  
22 the reconciliation balance. This helps ensure that once the RPS compliance  
23 period is complete, the proper balance is credited, or charged. Customers are

1 compensated for the timing differences between when RPS costs are collected  
2 versus when they are actually paid via the working capital calculation.  
3

4 **Q. Have you provided details on the reconciliation?**

5 A. Support for the February 28, 2017 Non-G1 class power supply reconciliation  
6 balance is provided on Schedule LSM-2, Page 2. Support for the February 28,  
7 2017 Non-G1 class RPS reconciliation balance is provided on Schedule LSM-3,  
8 Page 2. As described above, those figures have been adjusted in order to arrive at  
9 the figures for collection beginning June 1, 2017. Details for costs for the period  
10 March 2016 through February 2017 are provided on Page 3 of Schedule LSM-2  
11 and LSM-3. Page 4 of Schedule LSM-2 and LSM-3 provides revenue details.  
12

13 **Q. How does UES account for credits to net metering customers?**

14 A. The Company includes in the Total Non-G1 Class DS Supplier Charges, in the  
15 Non-G1 Class Power Supply Charge, the amounts credited to, or paid to, small  
16 customer generator net metering customers with an excess of 600 kWh banked at  
17 the end of the March billing cycle who opt to be credited or paid in accordance  
18 with the PUC 900 rules. In addition, UES includes any monthly amounts credited  
19 to, or paid to, large customer generators or group net metering customers  
20 including any required annual credit reconciliation in accordance with PUC 900.  
21 For the period March 2016 through February 2017, these amounts totaled  
22 \$14,299.46.  
23

1

2 **Q. Have you provided support for the total forecast costs shown on Page 1,**  
3 **lines 2 and 10 of Schedule LSM-2?**

4 A. The details of forecasted costs for the period June through November 2017 are  
5 provided on Schedule LSM-2, Page 5. Line items for the various costs  
6 included in default service are shown and include: Non-G1 Class (Residential)  
7 DS Supplier Charges, Non-G1 Class (G2 and OL) DS Supplier Charges, GIS  
8 Support Payments, Supply Related Working Capital, Provision for  
9 Uncollected Accounts, Internal Company Administrative Costs, Legal  
10 Charges, Consulting Outside Service Charges, and the default service portion  
11 of the annual PUC Assessment allocated to the Non-G1 Class.

12

13 **Q. Have you provided support for the total forecast costs shown on Page 1,**  
14 **line 2 of Schedule LSM-3?**

15 A. The details of forecasted costs for the period June through November 2017 are  
16 provided on Schedule LSM-3, Page 5. Costs include RECs and the associated  
17 working capital.

18

19 **Q. How is working capital calculated?**

20 A. Working capital included in the Power Supply Charge equals the sum of  
21 working capital for Non-G1 Class (Residential) DS Supplier Charges, plus

1 Non-G1 Class (G2 and OL) DS Supplier Charges<sup>1</sup>, plus GIS Support  
2 Payments, as shown on Schedule LSM-2, Pages 3 and 5. It is calculated by  
3 taking the product of Non-G1 Class (Residential) DS Supplier Charges plus  
4 Non-G1 Class (G2 and OL) DS Supplier Charges plus GIS Support Payments  
5 and the number of days lag divided by 365 days (i.e. the working capital  
6 requirement) and multiplying it by the prime rate.

7  
8 The calculation of working capital for RECs is included in the RPS Charge  
9 and is shown on Schedule LSM-3, Pages 3 and 5. It is calculated by taking  
10 the product of RECs and the number of days lead divided by 365 days (i.e. the  
11 working capital requirement) and multiplying it by the prime rate.

12  
13 The calculation of working capital included in the Power Supply Charge and  
14 the RPS Charge for the period beginning June 1, 2017 both rely on the results  
15 of the 2016 Default Service and Renewable Energy Credits Lead Lag Study,  
16 presented by Mr. Nawazelski. The Non-G1 class Power Supply Charge  
17 working capital calculation uses 26.55 days and the Non-G1 class RPS Charge  
18 working capital calculation uses (288.59) days.

19

20 **Q. What is the proposed G1 Class DSC?**

---

<sup>1</sup> In actuals, the supplier charges are provided in total in the column "Total Non-G1 Class DS Supplier Charges".

1 A. The proposed G1 class DSC are comprised of two components, as shown on  
2 Schedule LSM-1, Page 3: A Power Supply Charge and a Renewable Portfolio  
3 Standard (“RPS”) Charge. The wholesale supplier charge included in the Power  
4 Supply Charge will be determined each month based on the sum of fixed monthly  
5 adders and variable energy prices, and therefore, the total DSC for the G1 class is  
6 not known at this time.

7

8 **Q. What is the proposed Power Supply Charge, exclusive of supplier charges,  
9 and RPS Charge?**

10 A. Schedule LSM-1, Page 3, shows the proposed G1 Power Supply Charges,  
11 excluding the supplier charge component, of \$0.00793 (or 0.793¢) per kWh in  
12 June through November 2017. The wholesale supply charge determined each  
13 month will be added to this amount to yield the monthly G1 class Power Supply  
14 Charge.

15

16 Also shown on Schedule LSM-1, Page 3, is the proposed G1 RPS Charge of  
17 \$0.00162 (or 0.162¢) per kWh in June through November 2017.

18

19 **Q. Have you prepared a comparison of the proposed G1 DSC to the current  
20 rate?**

21 A. No. As the total G1 class DSC is not yet known, a comparison to current rates  
22 was not performed.

23

1 **Q. Please describe the calculation of the G1 class DSC.**

2 A. The rate calculations for the Power Supply Charges, excluding wholesale supplier  
3 charges, are provided on Schedule LSM-4, Page 1. The rate calculations for the  
4 RPS Charges are provided on Schedule LSM-5, Page 1. Both charges are  
5 calculated in the same manner.

6

7 Each charge is calculated by dividing the costs for each month, including a partial  
8 reconciliation of costs and revenues through February 28, 2017, by the estimated  
9 G1 kWh purchases for the corresponding month. An estimated loss factor of  
10 4.591% is then added to arrive at the proposed retail charges.

11

12 Similar to the Non-G1 power supply and RPS balances, the G1 class power  
13 supply and RPS reconciliation balances as of February 28, 2017 were adjusted in  
14 order to determine the reconciliation amount for this filing. Adjustments were  
15 made to reflect that the current DSC include reconciliation of the February 29,  
16 2016 power supply and RPS balances, to incorporate the difference between the  
17 estimated supplier cost and revenue in March 2017, and to adjust to account for  
18 RPS. These adjustments are shown on Page 1 of Schedule LSM-4 and LSM-5.

19

20 **Q. Have you provided details on the reconciliation?**

21 A. Support for the February 28, 2017 G1 class power supply reconciliation balance is  
22 provided on Schedule LSM-4, Page 2. Support for the February 28, 2017 G1  
23 class RPS reconciliation balance is provided on Schedule LSM-5, Page 2. As

1 described above, those figures have been adjusted in order to arrive at the figures  
2 for collection beginning June 1, 2017. Details for costs for the period March 2016  
3 through February 2017 are provided on Page 3 of Schedule LSM-4 and LSM-5.  
4 Page 4 of Schedule LSM-4 and LSM-5 provides revenue details.

5

6 **Q. Have you provided support for the total forecast costs shown on Page 1,**  
7 **line 2 of Schedule LSM-4?**

8 A. The details of forecasted costs included in the Power Supply Charge for the  
9 period June through November 2017 are provided on Schedule LSM-4, Page  
10 5. Line items for the various costs included in default service are shown and  
11 include: Total G1 Class DS Supplier Charges, GIS Support Payments, Supply  
12 Related Working Capital, Provision for Uncollected Accounts, Internal  
13 Company Administrative Costs, Legal Charges, Consulting Outside Service  
14 Charges, and the default service portion of the annual PUC Assessment  
15 allocated to the G1 Class. At the end of each month, UES will determine the  
16 supplier charge to be added to the monthly Power Supply Charge.

17

18 **Q. Have you provided support for the total forecast costs shown on Page 1,**  
19 **line 2 of Schedule LSM-5?**

20 A. The details of forecasted costs included in the RPS Charge for the period June  
21 through November 2017 are provided on Schedule LSM-5, Page 5. Costs  
22 include Renewable Energy Credits (“RECs”) and the associated Working  
23 Capital.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**Q. How is working capital calculated?**

A. Working capital included in the Power Supply Charge equals the sum of working capital for Total G1 Class DS Supplier Charges plus GIS Support Payments and is shown on Schedule LSM-4, Pages 3 and 5. It is calculated by taking the product of Total G1 Class DS Supplier Charges plus GIS Support Payments and the number of days lag divided by 365 days (i.e. the working capital requirement) and multiplying it by the prime rate. As the Total G1 Class DS Supplier Charges for the upcoming rate period are not yet known, UES has estimated power supply costs for the purpose of estimating working capital. The estimate of power supply costs is based on the forecasted G1 class kWh purchases and an estimated price per kWh. The estimated price per kWh was determined by comparing a historical relationship between G1 and Non-G1 class supplier pricing and then applying that relationship to the current average Non-G1 supplier price per kWh. Actual working capital will be determined using the actual supplier charges in each month.

The calculation of working capital for RECs is included in the RPS Charge and is shown on Schedule LSM-5, Pages 3 and 5. It is calculated by taking the product of RECs and the number of days lead divided by 365 days (i.e. the working capital requirement) and multiplying it by the prime rate.

1 The calculation of working capital included in the Power Supply Charge and  
2 the RPS Charge, effective June 1, 2017, both rely on the results of the 2016  
3 Default Service and Renewable Energy Credits Lead Lag Study. The G1  
4 class Power Supply Charge working capital calculation uses 1.26 days and the  
5 G1 class RPS Charge working capital calculation uses (302.01) days.

6

7 **IV. BILL IMPACTS**

8 **Q. Have you included any bill impacts associated with the proposed DSC rate**  
9 **changes?**

10 A. Typical bill impacts isolating the impact of changes to the DSC have been  
11 provided in Schedule LSM-6. These impacts do not include changes pending for  
12 effect May 1, 2017 in DE 16-384. Total bill impacts to G1 customers are  
13 unknown at this time and have therefore been excluded from Schedule LSM-6.

14

15 Pages 1 and 2 provide a table comparing the existing rates to the proposed rates  
16 for the residential and General Service rate classes. These pages also show the  
17 impact on a typical bill for each class in order to identify the effect of each rate  
18 component on a typical bill.

19

20 Page 3 shows bill impacts to the residential class based on the mean and median  
21 use. Page 3 is provided in a format similar to Pages 1 and 2.

22

1 Page 4 provides the overall average class bill impacts as a result of changes to the  
2 DSC. As shown, for customers on Default Service, the residential class will  
3 increase by approximately 1.2%, general service will increase by approximately  
4 1.6%, and outdoor lighting will increase by approximately 0.8%.

5  
6 Pages 5 through 9 of Schedule LSM-6 provide typical bill impacts for all classes,  
7 excluding G1, for a range of usage levels.

8  
9 Pages 10 and 11 provide a table comparing rates in effect in June 2016 to the  
10 proposed rates for the residential and General Service rate classes. These pages  
11 also show the impact on a typical bill for each class in order to identify the effect  
12 of each rate component on a typical bill. Most Non-G1 customers taking fixed  
13 default service will see increases of 7.9 to 15.8% compared to last summer,  
14 mainly due to an increase in the DSC.

15

16 **V. CONCLUSION**

17 **Q. Does that conclude your testimony?**

18 **A.** Yes, it does.