# UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF

### LINDA S. MCNAMARA

New Hampshire Public Utilities Commission

Docket No. DE 18-035

April 6, 2018

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# 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
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Schedule LSM-6:	Class Bill Impacts

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1	T	INTRODUCTION
1	1.	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, 2018, 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, 2018?
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 that will affect this
9		page are currently pending in DE 18-036 for effect May 1, 2018, UES plans to
10		file this in compliance with a Commission order.
11		
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12	III.	RETAIL RATE CALCULATIONS
12 13	III. Q.	RETAIL RATE CALCULATIONS What are the proposed Non-G1 Class DSC?
13	Q.	What are the proposed Non-G1 Class DSC?
13 14	Q.	What are the proposed Non-G1 Class DSC? As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-
13 14 15	Q.	What are the proposed Non-G1 Class DSC? As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor
13 14 15 16	Q.	What are the proposed Non-G1 Class DSC? As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor Lighting ("OL") Class fixed Non-G1 DSC is \$0.07377 (7.377¢) per kWh for the
13 14 15 16 17	Q.	What are the proposed Non-G1 Class DSC? As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor Lighting ("OL") Class fixed Non-G1 DSC is \$0.07377 (7.377¢) per kWh for the period June 1, 2018 through November 30, 2018. The proposed Residential Class
13 14 15 16 17 18	Q.	<ul> <li>What are the proposed Non-G1 Class DSC?</li> <li>As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor</li> <li>Lighting ("OL") Class fixed Non-G1 DSC is \$0.07377 (7.377¢) per kWh for the</li> <li>period June 1, 2018 through November 30, 2018. The proposed Residential Class</li> <li>variable Non-G1 DSC and the proposed G2 and OL Class variable Non-G1 DSC</li> </ul>
13 14 15 16 17 18 19	Q.	<ul> <li>What are the proposed Non-G1 Class DSC?</li> <li>As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor</li> <li>Lighting ("OL") Class fixed Non-G1 DSC is \$0.07377 (7.377¢) per kWh for the</li> <li>period June 1, 2018 through November 30, 2018. The proposed Residential Class</li> <li>variable Non-G1 DSC and the proposed G2 and OL Class variable Non-G1 DSC</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	Q.	What are the proposed Non-G1 Class DSC? As shown on Schedule LSM-1, Page 1, the proposed Residential Class fixed Non-G1 DSC is \$0.08238 (8.238¢) per kWh and the proposed G2 and Outdoor Lighting ("OL") Class fixed Non-G1 DSC is \$0.07377 (7.377¢) per kWh for the period June 1, 2018 through November 30, 2018. The proposed Residential Class variable Non-G1 DSC and the proposed G2 and OL Class variable Non-G1 DSC for this same period are also shown on this page.

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1		
2	Q.	What are the proposed Power Supply Charges and RPS Charge?
3	A.	For the period June 1, 2018 through November 30, 2018, the proposed Residential
4		Class fixed Non-G1 Power Supply Charge is \$0.08067 (8.067¢) per kWh, the
5		proposed G2 and OL Class fixed Non-G1 Power Supply Charge is \$0.07206
6		(7.206¢) per kWh, and the proposed fixed Non-G1 RPS Charge is \$0.00171
7		(0.171 ¢) 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 proposed Non-G1 fixed DSC rates compare to the Non-G1 fixed
11		DSC rates in effect last summer?
12	A.	The Residential Class fixed Non-G1 DSC in effect last summer, June 2017
13		through November 2017, was \$0.07886 (7.886¢) per kWh. The proposed
14		Residential Class fixed Non-G1 DSC of \$0.08238 (8.238¢) per kWh is an
15		increase of \$0.00352 (0.352¢) per kWh.
16		
17		The G2 and OL Class fixed Non-G1 DSC in effect last summer, June 2017
18		through November 2017, was \$0.07556 (7.556¢) per kWh. The proposed G2 and
19		OL Class fixed Non-G1 DSC of $0.07377 (7.377¢)$ per kWh is a decrease of
20		\$0.00179 (0.179¢) per kWh.
21		
22	Q.	How do the proposed Non-G1 fixed DSC rates compare to the current rate?

1	A.	The proposed Residential Class fixed Non-G1 DSC of \$0.08238 (8.238¢) per
2		kWh is a decrease of $0.01796 (1.796¢)$ per kWh from the current DSC of
3		0.10034 (10.034¢) per kWh. The proposed G2 and OL Class fixed Non-G1
4		DSC of \$0.07377 (7.377¢) per kWh is a decrease of \$0.02004 (2.004¢) per kWh
5		from the current DSC of $0.09381 (9.381¢)$ per kWh. These decreases reflect
6		lower contract costs for the period June 1, 2018 through November 30, 2018
7		compared to the contract costs for the current period December 1, 2017 through
8		May 31, 2018.
9		
10	Q.	Please describe the calculation of the Non-G1 class DSC.
11	A.	The rate calculations for the Non-G1 class Power Supply Charges, fixed and
12		variable, are provided on Schedule LSM-2, Page 1. The rate calculations for the
13		Non-G1 class RPS Charges, fixed and variable, are provided on Schedule LSM-3,
14		Page 1. Both charges are calculated in a similar manner.
15		
16		Variable pricing is calculated by dividing the total costs for the month, including a
17		partial reconciliation of costs and revenues through February 28, 2018, by the
18		estimated monthly kWh purchases for the Residential Class and the G2 and OL
19		Class. An estimated loss factor of 6.4% is then added to arrive at the proposed
20		retail variable charges. Fixed pricing is calculated in a similar manner, except
21		that the calculation is based on each class's total for the entire six month period.
22		

1	Q.	Have you made any adjustments to the reconciliation balances included in
2		the Power Supply and RPS charges?
3	A.	In order to determine the reconciliation amount included in the Non-G1 class
4		power supply charge, the reconciliation balance as of February 28, 2018 was
5		adjusted to recognize that estimated revenue in March, April, and May 2018
6		should excede costs for this same period by an estimated \$2,011,150. This
7		adjustment recognizes that estimated costs for March, April and May 2018 are
8		below the average cost for the entire period, December 2017-May 2018, while
9		revenue will be primarily based on the fixed Power Supply Charge, of which most
10		Non-G1 customers pay, and is determined using an average of costs for the entire
11		December 2017-May 2018 period. This adjustment brings the February 28, 2018
12		balance from \$1,490,731 to (\$520,418).
13		
14		In order to determine the reconciliation amounts included in the Non-G1 class
15		RPS, the reconciliation balance as of February 28, 2018 was adjusted to recognize
16		that the current RPS charges, in effect through May 31, 2018, include a credit for
17		the overcollection as of February 28, 2017.
18		
19		Since UES reconciles its costs on an annual basis, only a portion of the total
20		reconciliation balances are reflected in the proposed Power Supply and RPS rates.
21		UES apportioned the Power Supply balance and the RPS balance based on kWh
22		over the twelve month period June 2018 through May 2019. The Power Supply
23		reconciliation balance is further divided between the Residential Class and the

1		G2/OL Class, based on kWh. This calculation is provided on Page 1 of Schedule
2		LSM-2 for Power Supply and Page 1 of Schedule LSM-3 for RPS.
3		
4	Q.	Have you provided details on the reconciliation?
5	A.	Support for the February 28, 2018 Non-G1 class power supply reconciliation
6		balance is provided on Schedule LSM-2, Page 2. Support for the February 28,
7		2018 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 collecton beginning June 1, 2018. Details for costs for the period
10		March 2017 through February 2018 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 2017 through February 2018, these amounts totaled
22		\$38,713.94.

23

1	Q.	Have you provided support for the total forecast costs shown on Page 1,
2		lines 2 and 10 of Schedule LSM-2?
3	A.	The details of forecasted costs for the period June 1, 2018 through November
4		30, 2018 are provided on Schedule LSM-2, Page 5. Line items for the various
5		costs included in default service are shown and include: Non-G1 Class
6		(Residential) DS Supplier Charges, Non-G1 Class (G2 and OL) DS Supplier
7		Charges, GIS Support Payments, Supply Related Working Capital, Provision
8		for Uncollected Accounts, Internal Company Administrative Costs, Legal
9		Charges, Consulting Outside Service Charges, and the default service portion
10		of the annual PUC Assessment allocated to the Non-G1 Class.
11		
12	Q.	Have you provided support for the total forecast costs shown on Page 1,
13		line 2 of Schedule LSM-3?
14	A.	The details of forecasted costs for the period June 1, 2018 through November
15		30, 2018 are provided on Schedule LSM-3, Page 5. Costs include RECs and
16		the associated working capital.
17		
18	Q.	How is working capital calculated?
19	A.	Working capital included in the Power Supply Charge equals the sum of
20		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, 2018 both rely on the results
15		of the 2017 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 26.21 days and the Non-G1 class RPS Charge
18		working capital calculation uses (237.09) 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	А.	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	А.	Schedule LSM-1, Page 3, shows the proposed G1 Power Supply Charges,
11		excluding the supplier charge component, of \$0.00275, or 0.275¢, per kWh in
12		June 1, 2018 through November 30, 2018. The wholesale supply charge
13		determined each month will be added to this amount to yield the monthly G1 class
14		Power Supply Charge.
15		
16		Also shown on Schedule LSM-1, Page 3, is the proposed G1 RPS Charge of
17		\$0.00184 (0.184¢) per kWh in June 1, 2018 through November 30, 2018.
18		
19	Q.	Have you prepared a comparison of the proposed G1 DSC to the current
20		rate?
21	А.	No. As the total G1 class DSC is not yet known, a comparison to current rates
22		was not performed.
23		

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1	Q.	Please describe the calculation of the G1 class DSC.
2	A.	The rate calculations for the Power Supply Charges, exclusing 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, 2018, 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, 2018 were adjusted in
14		order to determine the reconcilation amount for this filing. Adjustments were
15		made to reflect that the current DSC include reconciliation of the February 28,
16		2017 power supply and RPS balances, and to incorporate the difference between
17		the estimated supplier cost and revenue in March 2018. These adjustments are
18		shown on Page 1 of Schedule LSM-4 and LSM-5.
19		
20	Q.	Have you provided support for the total forecast costs shown on Page 1,
21		line 2 of Schedule LSM-4?
22	А.	The details of forecasted costs included in the Power Supply Charge for the
23		period June 1, 2018 through November 30, 2018 are provided on Schedule

1		LSM-4, Page 5. Line items for the various costs included in default service
2		are shown and include: Total G1 Class DS Supplier Charges, GIS Support
3		Payments, Supply Related Working Capital, Provision for Uncollected
4		Accounts, Internal Company Administrative Costs, Legal Charges, Consulting
5		Outside Service Charges, and the default service portion of the annual PUC
6		Assessment allocated to the G1 Class. At the end of each month, UES will
7		determine the supplier charge to be added to the monthly Power Supply
8		Charge.
9		
10	Q.	Have you provided support for the total forecast costs shown on Page 1,
11		line 2 of Schedule LSM-5?
12	A.	The details of forecasted costs included in the RPS Charge for the period June
13		1, 2018 through November 30, 2018 are provided on Schedule LSM-5, Page
14		5. Costs include Renewable Energy Credits ("RECs") and the associated
15		Working Capital.
16		
17	Q.	How is working capital calculated?
18	A.	Working capital included in the Power Supply Charge equals the sum of
19		working capital for Total G1 Class DS Supplier Charges plus GIS Support
20		Payments and is shown on Schedule LSM-4, Pages 3 and 5. It is calculated
21		by taking the product of Total G1 Class DS Supplier Charges plus GIS
22		Support Payments and the number of days lag divided by 365 days (i.e. the
23		working capital requirement) and multiplying it by the prime rate. As the

1	Total G1 Class DS Supplier Charges for the upcoming rate period are not yet
2	known, UES has estimated power supply costs for the purpose of estimating
3	working capital. The estimate of power supply costs is based on the
4	forecasted G1 class kWh purchases and an estimated price per kWh. The
5	estimated price per kWh was determined by comparing a historical
6	relationship between G1 and Non-G1 class supplier pricing and then applying
7	that relationship to the current average Non-G1 supplier price per kWh.
8	Actual working capital will be determined using the actual supplier charges in
9	each month.
10	
11	The calculation of working capital for RECs is included in the RPS Charge
12	and is shown on Schedule LSM-5, Pages 3 and 5. It is calculated by taking
13	the product of RECs and the number of days lead divided by 365 days (i.e. the
14	working capital requirement) and multiplying it by the prime rate.
15	
16	The calculation of working capital included in the Power Supply Charge and
17	the RPS Charge, effective June 1, 2018, both rely on the results of the 2017
18	Default Service and Renewable Energy Credits Lead Lag Study. The G1
19	class Power Supply Charge working capital calculation uses 12.67 days and
20	the G1 class RPS Charge working capital calculation uses (245.08) days.
21	
22	
22	

23

### 1 IV. BILL IMPACTS

2	Q.	Have you included any bill impacts associated with the proposed DSC rate
3		changes?
4	А.	Typical bill impacts isolating the impact of changes to the DSC have been
5		provided in Schedule LSM-6. These impacts do not include changes pending for
6		effect May 1, 2018 in DE 18-036. Total bill impacts to G1 customers are
7		unknown at this time and have therefore been excluded from Schedule LSM-6.
8		
9		Pages 1 and 2 provide a table comparing the existing rates to the proposed rates
10		for the residential and General Service rate classes. These pages also show the
11		impact on a typical bill for each class in order to identify the effect of each rate
12		component on a typical bill.
13		
14		Page 3 shows bill impacts versus current rates to the residential class based on the
15		mean and median use. Page 3 is provided in a format similar to Pages 1 and 2.
16		
17		Page 4 provides the overall average class bill impacts as a result of changes to the
18		DSC versus current rates. As shown, for customers on Default Service, the
19		residential class will decrease by approximately 9.3%, general service will
20		decrease by approximately 11.4%, and outdoor lighting will decrease by
21		approximately 5.7%.
22		

1		Pages 5 through 9 of Schedule LSM-6 provide typical bill impacts versus current
2		rates for all classes, excluding G1, for a range of usage levels.
3		
4		Pages 10 and 11 provide a table comparing rates in effect in June 2017 to the
5		proposed rates for the residential and General Service rate classes. These pages
6		also show the impact on a typical bill for each class in order to identify the effect
7		of each rate component on a typical bill. Residential customers taking fixed
8		default service will see increases of approximately 5.5% compared to last
9		summer, due to increases in the DSC as well as increases to delivery charges. G2
10		and outdoor lighting customers taking fixed default service will see increases of
11		roughly 1-3% compared to last summer, due to increases in delivery charges,
12		offset slightly by a decrease in the default service charge.
13		
14	V.	CONCLUSION
15	Q.	Does that conclude your testimony?
16	A.	Yes, it does.