# UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY

OF

**TIMOTHY S. LYONS** 

# **EXHIBIT TSL-1**

New Hampshire Public Utilities Commission

Docket No. DE 21-030

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## SCHEDULES:

Schedule TSL-1 – Experience

Schedule TSL-2 – Proposed Revenue Decoupling Adjustment Clause Tariff

## 1 I. INTRODUCTION

2	Q.	Please state your name, occupation and business address.
3	А.	My name is Timothy S. Lyons. I am a Partner with ScottMadden, Inc. My
4		business address is 1900 West Park Drive, Suite 250, Westborough,
5		Massachusetts 01581.

## 6 Q. On whose behalf are you submitting this testimony?

A. I am submitting this testimony on behalf of Unitil Energy Systems, Inc. ("UES"
8 or the "Company").

## 9 Q. Please describe your professional experience.

- 10 A. I have more than 30 years of experience in the energy industry. I started my
- 11 career in 1985 at Boston Gas Company, eventually becoming Director of Rates
- 12 and Revenue Analysis. In 1993, I moved to Providence Gas Company, eventually
- 13 becoming Vice President of Marketing and Regulatory Affairs. Starting in 2001,
- 14 I held a number of management consulting positions in the energy industry first at
- 15 KEMA and then at Quantec, LLC. In 2005, I became Vice President of Sales and
- 16 Marketing at Vermont Gas Systems, Inc. before joining Sussex Economic
- 17 Advisors, LLC ("Sussex") in 2013. Sussex was acquired by ScottMadden in
- 18 2016.
- 19 Q. What is your educational background?
- 20 A. I hold a bachelor's degree from St. Anselm College, a master's degree in
- 21 Economics from The Pennsylvania State University, and a master's degree in

- 1 Business Administration from Babson College. A summary of my professional
- 2 and educational background, including a list of my testimony in prior
- 3 proceedings, is included in Schedule TSL-1.

#### 4 II. <u>PURPOSE OF TESTIMONY</u>

#### 5 Q. What is the purpose of your testimony?

- 6 A. The purpose of my testimony is to sponsor the Company's proposed revenue 7 decoupling mechanism ("RDM") and associated tariff. The RDM addresses the 8 basic misalignment between the structure of the Company's costs and its rates. 9 Specifically, utility distribution costs are largely fixed and change very little in the 10 short run with changes in usage levels. However, distribution rates have a 11 significant variable or usage-based component that changes revenues (and cost 12 recovery) with changes in usage levels. The RDM corrects for this misalignment 13 by adjusting the Company's actual revenues to match its authorized revenues. 14 RDMs have been approved in numerous jurisdictions, including New Hampshire, 15 and are viewed in the industry as important to the development of Energy 16 Efficiency ("EE") and Distributed Energy Resources ("DER") initiatives.
- 17

## Q. How is the remaining portion of your testimony organized?

18 A. The remaining portion of my testimony is organized into the following sections.

1		• Section III provides an overview of revenue decoupling, including the	
2		Commission's guidance in the Gas and Electric Utilities Energy Efficiency	
3		Resource Standard proceeding ("EERS proceeding") <sup>1</sup>	
4		• Section IV describes the proposed RDM.	
5		• Section V illustrates the calculation of the proposed RDM for the residential	
6		rate class.	
7	III.	<b>OVERVIEW OF REVENUE DECOUPLING</b>	
8	Q.	What is revenue decoupling?	
9	A.	Revenue decoupling breaks or "decouples" the link between utility revenues and	
10		its sales volumes, helping to ensure that a utility does not over- or under-recover	
11		its authorized revenue requirement. There are two basic forms of revenue	
12		decoupling:	
13		• Partial or Limited Revenue Decoupling – this type addresses specific	
14		variances between actual and authorized revenues, such as the impact of	
15		weather or EE. The Company's current lost revenue adjustment	
16		mechanism ("LRAM") is an example of partial or limited revenue	
17		decoupling.	
18		• Full Revenue Decoupling – this type addresses the total variance between	
19		actual and authorized revenues. The Company's proposed RDM is an	
20		example of full revenue decoupling. Variances can be measured on the	
21		basis of total revenues or revenues per customer ("RPC").	

<sup>&</sup>lt;sup>1</sup> Docket DE 15-137

1	Q.	Has the Commission approved a revenue decoupling mechanism for New
2		Hampshire gas and electric utilities?
3	A.	Yes. The Commission approved an LRAM, a partial or limited revenue
4		decoupling mechanism, for all electric and gas utilities in the EERS proceeding, <sup>2</sup>
5		noting:
6		"without the LRAM, or a change in the way rates are designed
7		today, the utilities may lose revenue that the Commission has
8		already determined in the utility's rate case is just and reasonable
9		for them to recover. Consequently, we approve the LRAM as
10		proposed." <sup>3</sup>
11		In the EERS proceeding, the Commission recognized the limitations of an LRAM
12		and the role a full revenue decoupling mechanism can play in ensuring that the
13		utility does not over- or under-recover its authorized revenue requirement. <sup>4</sup>
14		The Commission therefore required utilities to seek approval of a revenue
15		decoupling mechanism, stating:
16		"We note that our approval of the LRAM does not limit our
17		subsequent consideration and approval at any time of a different
18		lost revenue recovery mechanism, and that the Joint Utilities
19		(except NHEC) are required to seek approval of a decoupling or

<sup>&</sup>lt;sup>2</sup> Docket DE 15-137, Order No 25,932

<sup>&</sup>lt;sup>3</sup> Id., p. 59

<sup>&</sup>lt;sup>4</sup> Id., p. 59-60 ("[W]e are mindful that, with an LRAM, the utilities' revenues can increase above their authorized revenue requirements from increased sales, and, for that reason and others, some parties prefer decoupling. This is because decoupling provides a reconciliation to the last-approved revenue requirement.")

1		other lost-revenue recovery mechanism as an alternate to the
2		LRAM in their first distribution rate cases after the first EERS
3		triennium, if not before." <sup>5</sup>
4		Following the EERS proceeding, the Commission approved full revenue
5		decoupling mechanisms for Liberty Utilities (EnergyNorth Natural Gas)
6		Corporation, <sup>6</sup> and Liberty Utilities (Granite State Electric) Corporation. <sup>7</sup>
7		The Company's proposed RDM is generally consistent with the revenue
8		decoupling mechanism approved for Liberty Utilities (Granite State Electric)
9		Corporation.
10	Q.	Please provide an overview of the Company's proposed RDM.
10	<b>~</b> •	Trease provide an overview of the Company's proposed RDM.
11	A.	The proposed RDM is a full revenue decoupling mechanism that reconciles
11		The proposed RDM is a full revenue decoupling mechanism that reconciles
11 12		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is
11 12 13		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is applicable to all rate classes, except the lighting and proposed electric vehicle rate
11 12 13 14		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is applicable to all rate classes, except the lighting and proposed electric vehicle rate classes. The Company proposes that the authorized RPC be adjusted annually to
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> </ol>		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is applicable to all rate classes, except the lighting and proposed electric vehicle rate classes. The Company proposes that the authorized RPC be adjusted annually to reflect three estimated annual step increases on April 1, 2022 of \$2.8 million,
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> </ol>		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is applicable to all rate classes, except the lighting and proposed electric vehicle rate classes. The Company proposes that the authorized RPC be adjusted annually to reflect three estimated annual step increases on April 1, 2022 of \$2.8 million, April 1, 2023 of \$3.6 million, and April 1, 2024 of \$3.3 million associated with
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>		The proposed RDM is a full revenue decoupling mechanism that reconciles monthly actual and authorized RPC by rate class. The proposed RDM is applicable to all rate classes, except the lighting and proposed electric vehicle rate classes. The Company proposes that the authorized RPC be adjusted annually to reflect three estimated annual step increases on April 1, 2022 of \$2.8 million, April 1, 2023 of \$3.6 million, and April 1, 2024 of \$3.3 million associated with 2021, 2022 and 2023 capital investments.

 <sup>&</sup>lt;sup>5</sup> Id., p. 60
 <sup>6</sup> Docket DE 17-048, Order No. 26,122
 <sup>7</sup> Docket DE 19-064, Order No. 26,376

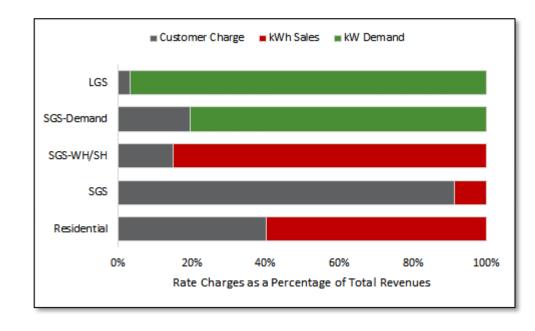
1	aggregated over the twelve-month period April through March (the "Measurement
2	Period"). The monthly variances are recorded in a deferred account with carrying
3	costs accrued at the Prime rate. <sup>8</sup> The aggregate variances and carrying costs form
4	the basis for the revenue decoupling adjustment ("RDA") and the calculation of
5	RDM adjustment factor ("RDAF") (surcharge or credit). For example, revenue
6	shortfalls (i.e., actual RPC is less than authorized RPC) during the Measurement
7	Period will result in a surcharge for the customers. Conversely, revenue surpluses
8	(actual RPC is greater than authorized RPC) during the Measurement Period will
9	result in a credit or refund to the customers.
10	In the second step, the Company will file with the Commission on June 1
11	the applicable RDAF. The filing will include an allocation of the RDA, including
12	prior period reconciliation and deferrals as a result of a cap, to each rate class, and
13	calculation of the RDAF.
14	The RDA is allocated to each rate class based on the authorized revenues
15	of each rate class in the most recent rate case, including step adjustments.
16	The RDAF is calculated as a dollar per kWh charge or credit based on the
17	RDA allocated to each rate class divided by the projected kWh sales for each rate
18	class over the prospective twelve-month period August through July ("RDM
19	Adjustment Period"). The RDAF will be charged or credited to customer bills
20	during the RDM Adjustment Period.

<sup>&</sup>lt;sup>8</sup> Interest shall be calculated at the prime rate, with said prime rate to be fixed on a quarterly basis and to be established as reported in the <u>Wall Street Journal</u> on the first business day of the month preceding the calendar quarter. If more than one interest rate is reported, the average of the reported rates shall be used.

1		The tariff for the Company's proposed RDM is included in Schedule TSL-2.
2		Upon implementation of its first RDAF, UES will incorporate the supporting
3		RDAF calculation in its RDAC tariff.
4	Q.	What are the primary benefits of the Company's proposed RDM?
5	A.	There are three primary benefits of the Company's proposed RDM:
6		1. It corrects the basic misalignment between utility rates and costs;
7		2. It supports achievement of certain policy objectives, such as EE and DER
8		initiatives; and
9		3. It helps stabilize utility cost recovery as well as customer bills.
10	Q.	Please discuss the basic misalignment between utility rates and costs.
11	A.	Electric utilities incur three types of costs in providing electric service to
12		customers:
13		• <u>Customer costs</u> – including meter, billing and a portion of distribution
14		costs that generally vary by the number of customers;
15		• <u>Demand-related costs</u> – including transmission and distribution costs that
16		generally vary by demand; and
17		• <u>Energy-related costs</u> – including variable O&M expenses that generally
18		vary by kWh sales or energy consumed.
19		Utility revenue requirements and rates are designed to recover all of these costs.
20		However, especially for residential customers, a significant portion of the revenue
21		requirements are recovered on the basis of kWh consumption charges reflecting

1		usage at the time rates are established (i.e., rates are set based on an assumed level
2		of usage). Thus, to the extent that actual usage is significantly lower than the
3		assumed level of usage in rates, the utility rates no longer recover the authorized
4		revenue requirements. Conversely, to the extent that actual usage is significantly
5		higher than the assumed level of usage in rates, then utility rates recover more
6		than the authorized revenue requirements.
7		Revenue decoupling corrects for this misalignment by adjusting revenues
8		to match the authorized revenue requirements.
9	Q.	Has the Commission recognized this misalignment between utility rates and
10		costs?
11	A.	Yes. In the EERS proceeding, the Commission noted this misalignment in the
12		context of energy savings due to EE programs. The Commission stated:
13		"With increased energy savings comes decreased utility revenues
14		due to standard rate design, which recovers costs through a
15		variable, or consumption-based, rate."9
16	Q.	Do the Company's current rates exhibit this misalignment between utility
17		costs and rates?
18	A.	Yes. The portion of the Company's charges that are based on consumption (kWh
19		sales or kW demand) is significant, as shown in Figure 1.

<sup>&</sup>lt;sup>9</sup> Docket DE 15-137, Order No 25,932, p. 59



## Figure 1: Consumption Revenues as Percentage of Total Revenues<sup>10</sup>

2

The Figure shows that a significant portion of the Company's residential and commercial distribution revenues are recovered through usage (kWh) and demand (kW) charges. For example, the Figure shows that approximately 60 percent of Residential revenues are recovered through consumption charges.

7 Q. Has the Company experienced a decline in customer usage that would impact

8 the Company's ability to recover its costs through consumption charges?

9 A. Yes. The Company has experienced a decline in energy usage per customer over

10 the last 10 years, as shown in Figure 2 (below).

<sup>&</sup>lt;sup>10</sup> Source: Settlement Agreement in Docket DE 16-384, Attachment 4, p. 1

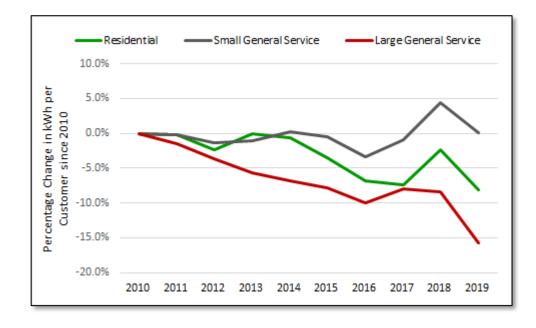


Figure 2: Percentage Change in kWh per Customer (2010-2019)<sup>11</sup>

2

The Figure shows use per customer for the Residential and Large General Service ("LGS") rate classes has declined by 8.1 percent and 15.7 percent, respectively, while the use per customer for Small General Service ("SGS") has remained approximately the same.

## 7 Q. Please discuss how revenue decoupling supports certain policy objectives?

8 A. The proposed RDM supports certain policy objectives, such as EE and DER

9 initiatives. Recovery of fixed costs through variable charges creates an inherent

- 10 financial disincentive for utilities to promote initiatives that reduce customer
- 11 consumption and has been referenced as a "primary barrier to aggressive utility

12 investment in energy efficiency."<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Company's FERC Form 1 Filings, 2010-2019

<sup>&</sup>lt;sup>12</sup> National Action Plan for Energy Efficiency (2007): Aligning Utility Incentives with Investment in Energy Efficiency, at p. ES-3

- The RDM removes this financial disincentive, facilitating policies aimed
   to encourage EE and DER initiatives.
- 3 Q. Has the utility industry recognized the benefits of RDM in achieving policy
- 4 objectives?
- A. Yes. The benefits of revenue decoupling are recognized throughout the U.S. Full
  revenue decoupling is currently in effect in 22 jurisdictions throughout the U.S.,
  including New Hampshire. In New England, full revenue decoupling is currently
  in effect for 19 of 26 electric and gas utilities.<sup>13</sup>
- 9 Revenue decoupling is recognized by the utility industry as an essential 10 tool in promoting EE and DER initiatives. An ACEEE report states: "For energy 11 efficiency to flourish, the use of decoupling needs to be expanded so that utilities 12 can recover their fixed costs even if sales decline."14 The Solar Electric Power 13 Association ("SEPA"), in discussing issues for the Photovoltaic ("PV") industry, 14 concludes: "Decoupling can eliminate the disincentives that utilities face when 15 customers deploy DR [Demand Response], such as solar PV, by clearly breaking 16 the link between electricity sales and the amount of revenue recovered, while also 17 sharing or eliminating upside and downside risks between the utility and 18 ratepayers." <sup>15</sup> "[R]emoval of the throughput incentive...can free the utility to

<sup>&</sup>lt;sup>13</sup> S&P Global Market Intelligence. Data as of October 5, 2020.

<sup>&</sup>lt;sup>14</sup> ACEEE The Future of the Utility Industry and the Role of Energy Efficiency (June 2014), at p. viii

<sup>&</sup>lt;sup>15</sup> SEPA Decoupling Utility Profits from Sales: Issues for the Photovoltaic Industry (February 2009), p. 26

1		pursue cost-effective resources without undermining their shareholder
2		interests." <sup>16</sup>
3		
4	IV.	UES'S PROPOSED REVENUE DECOUPLING MECHANISM
5	Q.	What are the key features of the Company's proposed RDM?
6	A.	There are seven key features of the Company's proposed RDM discussed in this
7		section, including:
8		1. Type of RDM
9		2. Revenue Adjustments
10		3. Applicable Rate Classes
11		4. Deferred Account
12		5. Class Allocation
13		6. Factor Calculation
14		7. Adjustment Cap
15		1. <u>Type of RDM</u>
16	Q.	What type of RDM is the Company proposing?
17	Q.	The Company's proposed RDM is a full revenue decoupling mechanism. The
18	71.	
		proposed RDM reconciles monthly variances between actual and authorized RPC
19		for each rate class. As discussed earlier, full revenue decoupling provides greater
20		benefits than partial or limited revenue decoupling.

#### 1 Q. What is the primary benefit of the proposed RPC approach?

- 2 A. The primary benefit of the proposed RPC approach is consideration for new
- customer revenues. The Company expects to add new customers and incur
  incremental costs to serve new customers during the term of the RDM. The
  incremental costs are related to providing new customers with access to the
  distribution system and meeting their demand requirements. Under the RPC
  approach, the Company retains the incremental RPC associated with serving new
- 8 customers that is used to offset the incremental costs.
- 9 By comparison, under a total revenue approach, the Company does not
  10 retain incremental revenues to offset the incremental costs, creating an adverse
  11 financial impact when adding new customers.
- 12

#### 2. <u>Revenue Adjustments</u>

#### 13 Q. Is the Company proposing annual adjustments to the authorized RPC?

- 14 A. Yes. The Company proposes that the authorized RPC be adjusted annually to
- 15 reflect three estimated step increases on April 1, 2022 of \$2.8 million, April 1,
- 16 2023 of \$3.6 million, and April 1, 2024 of \$3.3 million associated with the 2021,
- 17 2022 and 2023 capital investments, as discussed in the testimony of Company
- 18 witnesses Messrs. Christopher Goulding and Daniel Nawazelski.

## 19 Q. Why is the Company proposing the annual adjustments?

A. The Company proposes the annual adjustments to align the authorized revenue
requirements with the authorized RPC. In other words, as the Company's

- 1 authorized revenue requirement increases as a result of the step increases, the
- 2 Company's authorized RPC should similarly increase.
- 3

## 3. <u>Applicable Rate Classes</u>

- 4 Q. What rate classes would the proposed RDM apply to?
- 5 A. The Company proposes that the RDM be applicable to the Company's Domestic
- 6 Delivery Service (Schedule D), Domestic Delivery Service (Schedule TOU-D),
- 7 Regular General Service (Schedule G2), Regular General Service (Schedule G2
- 8 kWh meter), Regular General Service (Schedule G2-Quick Recovery Water
- 9 Heating and Space Heating), and Large General Service (Schedule G1)) customer
- 10 classes. The Company proposes to exclude the lighting and proposed electric
- 11 vehicle rate schedules.
- 12

#### 4. Deferred Account

## 13 Q. Is the Company proposing to establish a deferred account to record

## 14 variances between actual and authorized RDM?

- A. Yes. The Company proposes to establish a deferred account to record monthly
  variances between actual and authorized RPC. The monthly variances will be
  calculated by rate class and then recorded in a deferred account with carrying
  costs at the Prime rate.
- 19 The aggregate monthly variances and carrying costs form the basis for the 20 RDA and the calculation of RDAF (surcharge or credit). For example, revenue 21 shortfalls (i.e., actual RPC less than authorized RPC) during the Measurement 22 Period will result in a surcharge to customers while revenue surpluses (i.e., actual

RPC greater than authorized RPC) during the Measurement Period will result in a
 credit or refund to customers.

#### 3 Q. What is the proposed process to establish the RDAF?

4 A. The Company proposes to file with the Commission on June 1 the applicable 5 RDAF. The filing will include an allocation of the RDA to each rate class, and 6 the calculation of the RDAF. The RDA is allocated to each rate class based on the 7 authorized revenues of each rate class in the most recent rate case, including step adjustments. The RDAF will be calculated as a dollar per kWh charge or credit 8 9 based on the RDA allocated to each rate class divided by the projected kWh sales 10 for each rate class over the RDM Adjustment Period (prospective 12-month 11 period August through July). The RDAF will be charged or credited to customer 12 bills during the RDM Adjustment Period. The RDM process will follow the 13 schedule below.

Dates	Activity
April 1 through March 31	Measure and record monthly in a deferred account the revenue variances between actual and authorized RPC
June 1	File with the Commission the RDAF based on the aggregate monthly revenue variances and monthly carrying costs on the deferred account balances
August 1 through July 31	Apply the RDAF to customer bills

14

## 15 5. Class Allocation

## 16 Q. How will the revenue decoupling adjustment be allocated to each rate class?

1	A.	The RDA will be allocated to each rate class (except Lighting and Electric
2		Vehicle rate classes) based on the proportion of authorized revenues in the most
3		recent rate case, including step adjustments.
4		6. <u>Factor Calculation</u>
5	Q.	How will the RDAF be calculated?
6	A.	The RDAF will be calculated on a dollar per kWh basis for each rate class based
7		on the RDA allocated to each rate class divided by the projected class kWh sales
8		for the RDM Adjustment Period (August through July). The RDAF will be
9		applied to customer bills during the RDM Adjustment Period.
10		7. <u>Adjustment Cap</u>
11	Q.	Is the Company proposing any adjustment cap?
12	A.	UES proposes to limit the RDA to two and one half (2.5%) percent of total
13		revenues from delivered sales for the most recent twelve-month period, April to
14		March, with revenue for externally supplied customers being adjusted by
15		imputing the Company's default service charges for that period. The cap would be
16		applicable only to revenue shortfalls to help mitigate customer bill impacts.
17		Under-recovered revenues in excess of the adjustment cap would be held in the
18		deferred account with carrying costs and included in the next RDAF filing.
19	V.	<b>ILLUSTRATIVE CALCULATION OF DECOUPLING MECHANISM</b>

# 20 Q. How will the Company implement the proposed RDM?

21 A. As explained above, the proposed RDM process consists of two steps:

1	In the first step, the Company calculates the monthly variances between
2	actual and authorized RPC for each rate class. The variances are calculated
3	monthly and then aggregated over the twelve-month period April through March
4	(the Measurement Period). The monthly variances are recorded in a deferred
5	account with carrying costs accrued at the Prime rate. The aggregate variances
6	and carrying costs form the basis for the RDA and the calculation of RDAF
7	(surcharge or credit). For example, if the Company experiences a revenue
8	shortfall (actual revenues are less than authorized revenues) during the
9	Measurement Period, the RDM will result in a surcharge for customers.
10	Conversely, if the Company experiences a revenue surplus (actual revenues are
11	greater than authorized revenues) during the Measurement Period, the RDM will
12	result in a credit or refund to customers.
13	In the second step, the Company files with the Commission on June 1 the
14	applicable RDAF. The filing will include an allocation of the RDA to each rate
15	class, and calculation of the RDAF. The RDA is allocated to each rate classes
16	based on the authorized revenues of each rate class in the most recent rate case,
17	including step adjustments. The RDAF will be calculated as a dollar per kWh
18	charge or credit based on the RDA allocated to each rate class divided by the
19	projected kWh sales for each rate class over the RDM Adjustment Period (twelve-
20	month period August through July). The RDAF will be charged or credited to
21	customer bills during the RDM Adjustment Period.

# 22 Q. Please illustrate the first step.

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- 1 A. In the first step, the Company will calculate monthly variances between actual
- 2 and authorized RPC for each rate class, as illustrated for the residential rate class
  - in Figure 3 (below).
- 4 5

3

Figure 3: Monthly Residential Revenue Variance Calculation
(Illustrative) <sup>17</sup>

Illustrative Calculation			Actual		Authorized				Variance Over / (Under)	
Variance Over / (Under)		Revenues	Customers	RPC		Revenues	Customers	RPC	RPC	Revenues
April	s	3,257,856	68,038	\$ 47.88	s	3,241,647	67,032 \$	48.36	\$ (0.48) \$	(32,416
May		3,182,845	69,198	46.00		3,167,010	68,175	46.45	(0.46)	(31,67)
June		3,587,396	69,527	51.60		3,569,548	68,499	52.11	(0.51)	(35,69
July		4,088,899	69,738	58.63		4,068,556	68,707	59.22	(0.58)	(40,68
August		4,297,058	69,659	61.69		4,275,679	68,629	62.30	(0.61)	(42,75
September		3,700,345	70,498	52.49		3,681,936	69,456	53.01	(0.52)	(36,81
October		3,045,100	69,270	43.96		3,029,950	68,246	44.40	(0.44)	(30,30
November		3,178,749	68,893	46.14		3,162,934	67,875	46.60	(0.46)	(31,62
December		3,661,798	68,580	53.39		3,643,580	67,567	53.93	(0.53)	(36,43
January		3,786,463	68,017	55.67		3,767,625	67,012	56.22	(0.55)	(37,67
February		3,571,127	67,951	52.55		3,553,360	66,947	53.08	(0.52)	(35,53
March		3,495,168	68,142	51.29		3,477,779	67,134	51.80	(0.51)	(34,77
12ME March	Ş	42,852,802	827,509		Ş	42,639,604	815,280		Ş	(426,39

6

7 8	The Figure shows a four-phase process for each month assuming a 1.00 percent
9	reduction in average revenue per customer for the residential sector. In the first
10	phase, the Company calculates the authorized RPC per month by dividing the
11	authorized monthly revenues by authorized monthly number of customers. In the
12	second phase, the Company calculates the actual monthly RPC by dividing the
13	actual revenues by the actual number of customers. In the third phase, the
14	Company calculates the monthly variances between the actual and authorized
15	RPC. In the final phase, the Company calculates the monthly revenue variance by
16	multiplying the RPC variance with the actual number of customers.
17	The monthly revenue variances will be recorded in a deferred account
18	with carrying costs accrued through the year at the Prime rate, as illustrated for
10	

19 the residential rate class in Figure 4 (below).

<sup>&</sup>lt;sup>17</sup> The illustrative calculation assumes a 1.00 percent reduction in revenue per customer each month

Illustrative Calculation	Def	erred Account		Revenue	Carrying	Carrying	Deferred Account
Deferred Account Balance	St	arting Balance		Variance	Costs Rate	Costs	Ending Balance
April	ş		Ş	(32,416)	0.27% \$	(44)	\$ (32,460
May		(32,460)	\$	(31,670)	0.27%	(131)	\$ (64,261
June		(64,261)	\$	(35,695)	0.27%	(222)	\$ (100,179
July		(100,179)	\$	(40,686)	0.27%	(326)	\$ (141,191
August		(141,191)	\$	(42,757)	0.27%	(440)	\$ (184,388
September		(184,388)	\$	(36,819)	0.27%	(549)	\$ (221,757
October		(221,757)	\$	(30,300)	0.27%	(642)	\$ (252,698
November		(252,698)	\$	(31,629)	0.27%	(727)	\$ (285,054
December		(285,054)	\$	(36,436)	0.27%	(821)	\$ (322,312
January		(322,312)	\$	(37,676)	0.27%	(924)	\$ (360,912
February		(360,912)	\$	(35,534)	0.27%	(1,026)	\$ (397,471
March		(397,471)	\$	(34,778)	0.27%	(1,124)	\$ (433,372
12ME March			\$	(426,396)	\$	(6,976)	\$ (433,372

#### Figure 4: Deferred Account Balance (Illustrative)<sup>18</sup>

The Figure shows that carrying costs of \$6,976 will be accumulated through the year at the assumed Prime Rate. The aggregate monthly variances and carrying costs form the basis for the RDA and the calculation of RDAF surcharge or credit depending on the revenue variances.<sup>19</sup>

#### 7 Q. Please discuss the second step in calculating the RDM adjustment.

- 8 A. In the second step, the Company will file on June 1 the applicable RDAF based
- 9 on the RDA for the Measurement Period. The filing will include allocation of the
- 10 RDA to rate classes, and calculation of the RDAF.
- 11 The RDA will be allocated to each rate classes based on each class'
- 12 authorized revenues, including step adjustments, as shown in Figure 5 (below).

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<sup>&</sup>lt;sup>18</sup> The illustrative calculation assumes a Prime Rate of 3.25 percent, or 0.2708 percent monthly

<sup>&</sup>lt;sup>19</sup> The illustrative calculation shows RDA based on 12 months' ending March balance. However, the Company's proposed RDA filed on June 1 will also include estimated carrying costs through July 31.

Illustrative Revenue Decoupling		Authorized	Authorized	
Adjustment Allocation	R	evenues (\$)	Revenues (%)	Allocated RDA (\$)
Residential (Domestic)	\$	42,639,604	60.13%	\$ (260,603
Regular General Service (G2)		19,097,967	26.93%	(116,722
Regular General Service (G2 - kWh Meter)		100,190	0.14%	(612
Regular General Service (G2 - QRWH)		199,187	0.28%	(1,217
Large General Service (G1)		8,871,050	12.51%	(54,218
Total	Ş	70,907,996	100.00%	\$ (433,372

## Figure 5: Deferred Account Balance (Illustrative)<sup>20</sup>

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1

The Figure shows that the residential class revenues are 60.13 percent of total
Company revenues. Accordingly, the deferred account balance allocated to the
residential class is \$260,603.
The allocated RDA forms the basis for the calculation of RDAF for each
rate class, as shown in Figure 6 (below).

8

## Figure 6: Calculation of RDAF (Illustrative)

Illustrative Revenue Decoupling			Illustrative Projected	Charge/ (Refund)
Adjustment Factor Calculation	Charge	e/ (Refund) (\$)	Sales (kWh)	(\$/kWh)
Residential (Domestic)	\$	260,603	516,000,000	\$ 0.0005
Regular General Service (G2)		116,722	312,500,000	0.0003
Regular General Service (G2 - kWh Meter)		612	450,000	0.0013
Regular General Service (G2 - QRWH)		1,217	4,500,000	0.0002
Large General Service (G1)		54,218	320,000,000	0.0001
Total	ŝ	433,372	1,153,450,000	

9

10 The Figure shows that the RDAF for the Residential class will be \$0.00051 per

11 kWh. The adjustment factor would be implemented on customer bills during the

12 August through July RDM Adjustment Period.

# 13 Q. Please describe how the RDAF will appear on customer bills.

 $<sup>^{20}</sup>$  The illustrative deferred account balance assumes that only the Residential class experienced a revenue change.

- 1 A. For billing purposes, the Company plans to add the RDAF to the Distribution
- 2 Charge component.

## 3 Q. Is the proposed RDM subject to reconciliation?

- 4 A. Yes. As described in Section 7.0 of the proposed tariff, the RDM is subject to
- 5 reconciliation. Specifically, the actual revenues received by the Company
- 6 through application of the RDAF to customer bills is reconciled to the RDM
- 7 adjustment amount.
- 8 Q. Does this conclude your direct testimony?
- 9 A. Yes, it does.

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