

**NORTHERN UTILITIES, INC.**

**DIRECT TESTIMONY**

**OF**

**TIMOTHY S. LYONS**

**EXHIBIT TSL-1**

**New Hampshire Public Utilities Commission**

**Docket No. DG 21-104**

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1 **I. INTRODUCTION**

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

3 A. My name is Timothy S. Lyons. I am a Partner with ScottMadden, Inc. My business  
4 address is 1900 West Park Drive, Suite 250, Westborough, Massachusetts 01581.

5  
6 **Q. On whose behalf are you submitting this testimony?**

7 A. I am submitting this testimony on behalf of Northern Utilities, Inc. (“Northern” or  
8 the “Company”).

9  
10 **Q. Please describe your professional experience.**

11 A. I have more than 30 years of experience in the energy industry. I started my career  
12 in 1985 at Boston Gas Company, eventually becoming Director of Rates and  
13 Revenue Analysis. In 1993, I moved to Providence Gas Company, eventually  
14 becoming Vice President of Marketing and Regulatory Affairs. Starting in 2001, I  
15 held a number of management consulting positions in the energy industry first at  
16 KEMA and then at Quantec, LLC. In 2005, I became Vice President of Sales and  
17 Marketing at Vermont Gas Systems, Inc. before joining Sussex Economic Advisors,  
18 LLC (“Sussex”) in 2013. Sussex was acquired by ScottMadden in 2016.

19  
20 **Q. What is your educational background?**

21 A. I hold a bachelor’s degree from St. Anselm College, a master’s degree in Economics  
22 from The Pennsylvania State University, and a master’s degree in Business

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

4

5

## II. PURPOSE OF TESTIMONY

6 **Q. What is the purpose of your testimony?**

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

18

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

20 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 • Section VI summarizes the benefits of the proposed RDM.

8

9

**III. OVERVIEW OF REVENUE DECOUPLING**

10 **Q. What is revenue decoupling?**

11 A. Revenue decoupling breaks or “decouples” the link between utility revenues and  
12 sales volumes, helping to ensure that a utility does not over- or under-recover its  
13 authorized revenue requirement. There are two basic forms of revenue decoupling:

- 14 • Partial or Limited Revenue Decoupling – this type addresses specific  
15 variances between actual and authorized revenues, such as the impact of  
16 weather or EE. The Company’s current Lost Revenue Rate (“LRR”) within  
17 the Local Delivery Adjustment Charge (“LDAC”) is an example of partial  
18 or limited revenue decoupling.
- 19 • Full Revenue Decoupling – this type addresses the total variance between  
20 actual and authorized revenues. The Company’s proposed RDM is an

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<sup>1</sup> Docket DE 15-137

1 example of full revenue decoupling. Variances can be measured on the basis  
2 of total revenues, or revenues per customer (“RPC”).  
3

4 **Q. Has the Commission approved a revenue decoupling mechanism for New**  
5 **Hampshire gas and electric utilities?**

6 A. Yes. The Commission approved a lost revenue adjustment mechanism (“LRAM”),  
7 a partial or limited revenue decoupling mechanism, for all electric and gas utilities  
8 in the EERS proceeding,<sup>2</sup> noting:

9 “...without the LRAM, or a change in the way rates are designed  
10 today, the utilities may lose revenue that the Commission has  
11 already determined in the utility’s rate case is just and reasonable  
12 for them to recover. Consequently, we approve the LRAM as  
13 proposed.”<sup>3</sup>

14 In the EERS proceeding, the Commission recognized the limitations of an LRAM  
15 and the role a full revenue decoupling mechanism can play in ensuring that the  
16 utility does not over- or under-recover its authorized revenue requirement.<sup>4</sup>

17 The Commission therefore required utilities to seek approval of a revenue  
18 decoupling mechanism, stating:

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

<sup>3</sup> Id., p. 59

<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            “We note that our approval of the LRAM does not limit our  
2            subsequent consideration and approval at any time of a different lost  
3            revenue recovery mechanism, and that the Joint Utilities (except  
4            NHEC) are required to seek approval of a decoupling or other lost-  
5            revenue recovery mechanism as an alternate to the LRAM in their  
6            first distribution rate cases after the first EERS triennium, if not  
7            before.”<sup>5</sup>

8            Following the EERS proceeding, the Commission approved full revenue  
9            decoupling mechanisms for Liberty Utilities (EnergyNorth Natural Gas)  
10           Corporation,<sup>6</sup> and Liberty Utilities (Granite State Electric) Corporation.<sup>7</sup>

11           The Company’s proposed RDM is generally consistent with the revenue  
12           decoupling mechanism approved for Liberty Utilities (Granite State Electric)  
13           Corporation and the revenue decoupling mechanism recently filed by the  
14           Company’s New Hampshire electric division (Unitil Energy Systems, Inc.)<sup>8</sup>.

15

16    **Q.    Please provide an overview of the Company’s proposed RDM.**

17    A.    The proposed RDM is a full revenue decoupling mechanism that reconciles  
18           monthly actual and authorized RPC by rate class. The proposed RDM is applicable  
19           to all rate classes. The Company proposes that the authorized RPC be adjusted

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<sup>5</sup> Id., p. 60

<sup>6</sup> Docket DE 17-048, Order No. 26,122 at pp. 45-46 (“We applaud Liberty for proposing a decoupling mechanism to replace the LRAM.”).

<sup>7</sup> Docket DE 19-064, Order No. 26,376 at pp. 9, 13 (approving a Settlement Agreement supporting the implementation of a decoupling mechanism).

<sup>8</sup> Docket DE 21-030.

1 annually to reflect three estimated annual step increases on August 1, 2022 of \$3.1  
2 million; August 1, 2023 of \$3.1 million; and August 1, 2024 of \$3.2 million  
3 associated with 2021, 2022 and 2023 capital investments.

4 The proposed RDM process will consist of two steps:

5 In the first step, the Company will record monthly variances between actual  
6 and authorized RPC for each rate class. The monthly variances are then aggregated  
7 over the twelve-month period August through July (the “Measurement Period”).  
8 The monthly variances are recorded in a deferred account with carrying costs  
9 accrued at the Prime rate.<sup>9</sup> The aggregate variances and carrying costs form the  
10 basis for the revenue decoupling adjustment (“RDA”) and the calculation of RDM  
11 adjustment factor (“RDAF”) (surcharge or credit). For example, revenue surpluses  
12 (actual RPC is greater than authorized RPC) during the Measurement Period will  
13 result in a credit or refund for the customers. Conversely, revenue shortfalls (i.e.,  
14 actual RPC is less than authorized RPC) during the Measurement Period will result  
15 in a surcharge to the customers.

16 In the second step, the Company will file with the Commission the  
17 applicable RDAF 45 days in advance of the effective date of November 1. The  
18 filing will include an allocation of the RDA, including prior period reconciliation  
19 and deferrals as a result of a cap, to each rate class, and calculation of the RDAF.

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<sup>9</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 Wall Street Journal 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 RDA is allocated to each rate class based on the authorized revenues of  
2 each rate class in the most recent rate case, including step adjustments.

3           The RDAF is calculated as a dollar per therm charge or credit based on the  
4 RDA allocated to each rate class divided by the projected therm sales for each rate  
5 class over the prospective twelve-month period November through October (“RDM  
6 Adjustment Period”). The RDAF will be charged or credited to customer bills  
7 during the RDM Adjustment Period.

8           The tariff for the Company’s proposed RDM is included in Schedule TSL-  
9 2. Upon implementation of its first RDAF, the Company will incorporate the  
10 supporting RDAF calculation in its RDAC tariff.

11

12 **Q. What are the primary benefits of the Company’s proposed RDM?**

13 A. There are three primary benefits of the Company’s proposed RDM:

- 14 1. It corrects the basic misalignment between utility rates and costs;  
15 2. It supports achievement of certain policy objectives, such as EE initiatives; and  
16 3. It helps stabilize utility cost recovery as well as customer bills.

17

18 **Q. Please discuss the basic misalignment between utility rates and costs.**

19 A. Gas utilities incur three types of costs in providing natural gas service to customers:

- 20           • Customer costs – including meter, billing and a portion of distribution costs  
21 that generally vary by the number of customers;

- 1 • Demand-related costs – including transmission and distribution costs that
- 2 generally vary by demand; and
- 3 • Commodity-related costs – including variable Operating and Maintenance
- 4 expenses that generally vary by therm sales or natural gas consumed.

5 Utility revenue requirements and rates are designed to recover all of these costs.  
6 However, especially for residential customers, a significant portion of the revenue  
7 requirements are recovered on the basis of consumption charges reflecting usage at  
8 the time rates are established (i.e., rates are set based on an assumed level of usage).  
9 Thus, to the extent that actual usage is significantly lower than the assumed level  
10 of usage in rates, the utility rates no longer recover the authorized revenue  
11 requirements. Conversely, to the extent that actual usage is significantly higher  
12 than the assumed level of usage in rates, then utility rates recover more than the  
13 authorized revenue requirements.

14 Revenue decoupling corrects for this misalignment by adjusting revenues  
15 to match the authorized revenue requirements.

16

17 **Q. Has the Commission recognized this misalignment between utility rates and**  
18 **costs?**

19 A. Yes. In the EERS proceeding, the Commission noted this misalignment in the  
20 context of energy savings due to EE programs. The Commission stated: “With

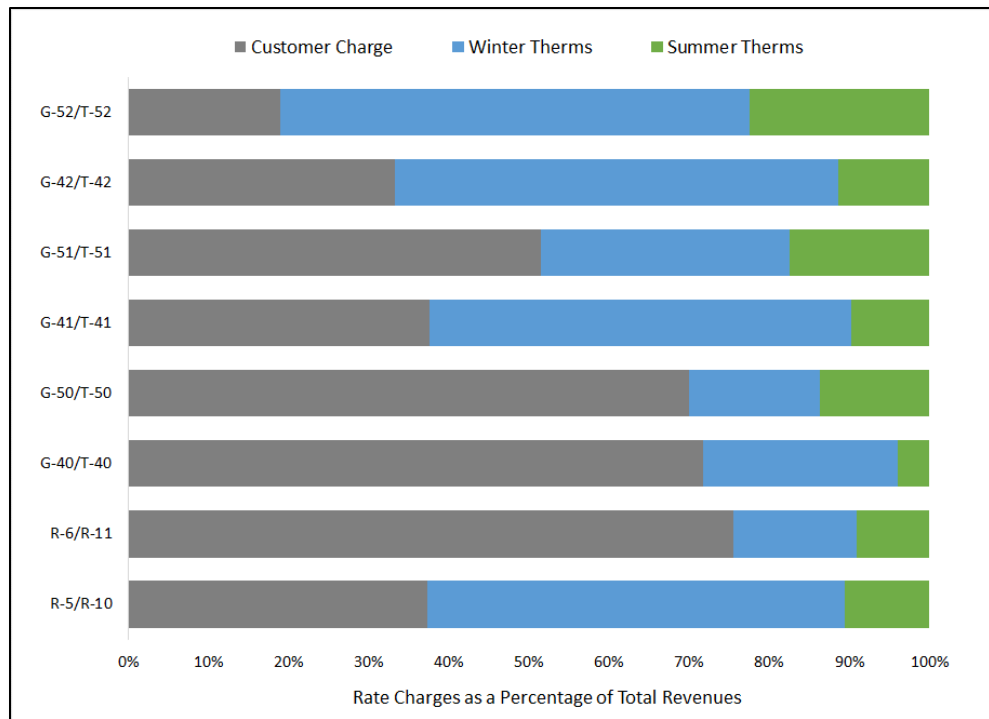
1 increased energy savings comes decreased utility revenues due to standard rate  
2 design, which recovers costs through a variable, or consumption-based, rate.”<sup>10</sup>

3

4 **Q. Do the Company’s current rates exhibit this misalignment between utility  
5 costs and rates?**

6 A. Yes. The portion of the Company’s charges that are based on consumption (therm  
7 sales) is significant, as shown in Figure 1.

8 **Figure 1: Consumption Revenues as Percentage of Total Revenues<sup>11</sup>**



9

10 The Figure shows that a significant portion of the Company’s residential and  
11 commercial distribution revenues are recovered through usage (therms). For

<sup>10</sup> Docket DE 15-137, Order No 25,932, p. 59

<sup>11</sup> Source: Settlement Agreement in Docket DG 17-070, Exhibit 2.

1 example, the Figure shows that approximately 60 percent of Residential Heating  
2 (R-5 and R-10 rate classes) revenues are recovered through consumption charges.

3

4 **Q. Please discuss how revenue decoupling supports certain policy objectives.**

5 A. The proposed RDM supports certain policy objectives, such as EE initiatives.  
6 Recovery of fixed costs through variable charges creates an inherent financial  
7 disincentive for utilities to promote initiatives that reduce customer consumption  
8 and has been referenced as a “primary barrier to aggressive utility investment in  
9 energy efficiency.”<sup>12</sup>

10 The RDM removes this financial disincentive, facilitating policies aimed to  
11 encourage EE initiatives. The Commission has noted: “Decoupling . . . was  
12 designed to sever the link between sales and revenues to remove [a utility’s]  
13 disincentive to promote energy conservation that is inherent in traditional  
14 ratemaking.”<sup>13</sup>

15

16 **Q. Has the utility industry recognized the benefits of RDM in achieving policy  
17 objectives?**

18 A. Yes. Revenue decoupling is recognized by the utility industry as an essential tool  
19 in promoting EE initiatives. An ACEEE report states: "For energy efficiency to

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

<sup>13</sup> Docket DG 19-145, Order No 26,306 at p. 7.

1 flourish, the use of decoupling needs to be expanded so that utilities can recover  
2 their fixed costs even if sales decline.”<sup>14</sup> Moreover, the benefits of revenue  
3 decoupling are recognized in regulatory jurisdictions throughout the U.S. Full  
4 revenue decoupling is currently in effect in 22 jurisdictions, including New  
5 Hampshire. In New England, full revenue decoupling is currently in effect for 20  
6 of 26 electric and gas utilities, as shown in Schedule TSL-3.<sup>15</sup>

7  
8  
9 **IV. NORTHERN’S PROPOSED REVENUE DECOUPLING MECHANISM**

10 **Q. What are the key features of the Company’s proposed RDM?**

11 A. There are seven key features of the Company’s proposed RDM discussed in this  
12 section, including:

- 13 1. Type of RDM
- 14 2. Revenue Adjustments
- 15 3. Applicable Rate Classes
- 16 4. Deferred Account
- 17 5. Class Allocation
- 18 6. Factor Calculation
- 19 7. Adjustment Cap

20  

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

<sup>15</sup> S&P Global Market Intelligence. Data as of April 12, 2021.

1           **1. Type of RDM**

2           **Q.    What type of RDM is the Company proposing?**

3           A.    The Company’s proposed RDM is a full revenue decoupling mechanism. The  
4           proposed RDM reconciles monthly variances between actual and authorized RPC  
5           for each rate class. As discussed earlier, full revenue decoupling better  
6           accomplishes the Commission’s policy objective to sever the link between  
7           volumes and revenues, providing a greater incentive to pursue energy efficiency, as  
8           compared to partial or limited revenue decoupling.

9  
10          **Q.    What is the primary benefit of the proposed RPC approach?**

11          A.    The primary benefit of the proposed RPC approach is the recognition of new  
12          customer revenues. The Company expects to add new customers and incur  
13          incremental costs to serve new customers during the term of the RDM. The  
14          incremental costs are related to providing new customers with access to the  
15          distribution system and meeting their demand requirements. Under the RPC  
16          approach, the Company retains the RPC associated with serving new customers that  
17          is used to offset the costs associated with new customers.

18                   By comparison, under a total revenue approach, the Company does not  
19          retain incremental revenues to offset the incremental costs, creating an adverse  
20          financial impact when adding new customers.

21

1           **2. Revenue Adjustments**

2       **Q.    Is the Company proposing annual adjustments to the authorized RPC?**

3       A.    Yes. The Company proposes that the authorized RPC be adjusted annually to reflect  
4           three estimated step increases on August 1, 2022 of \$3.1 million, August 1, 2023  
5           of \$3.1 million, and August 1, 2024 of \$3.2 million associated with the 2021, 2022  
6           and 2023 capital investments, as discussed in the testimony of Company witnesses  
7           Messrs. Christopher Goulding and Daniel Nawazelski.

8                        Schedule TSL-4 shows derivation of the authorized RPC for the first step  
9           increase on August 1, 2022. Specifically, the Schedule shows the authorized RPC  
10          is based on the authorized revenues divided by the number of customers included  
11          in the authorized rate design. The authorized revenues are based on the target  
12          distribution revenues plus the step increase.

13                      For example, the authorized RPC in August 2022 for the residential heating  
14          class of \$40.49 is based on the authorized revenues of \$51,687 divided by the  
15          number of customers included in the authorized rate design of 1,277. The  
16          authorized revenues of \$51,687 are based on the target distribution revenues of  
17          \$48,504 plus the 2022 step increase of \$3,183.

18

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

20       A.    The Company proposes the annual adjustments to align the authorized revenue  
21          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

4 **3. Applicable Rate Classes**

5 **Q. What rate classes would the proposed RDM apply to?**

6 A. The Company proposes that the RDM be applicable to the Company's Residential  
7 Heating and Non-Heating Service (Schedules R-5 and R10 combined, and R-6),  
8 Commercial and Industrial Service (Schedules G-40, G-50, G-41, G-42, G-51, and  
9 G-52) customer classes. The revenues associated with special contracts will not be  
10 included as part of the RDM.

11

12 **4. Deferred Account**

13 **Q. Is the Company proposing to establish a deferred account to record variances**  
14 **between actual and authorized RDM?**

15 A. Yes. The Company proposes to establish a deferred account to record monthly  
16 variances between actual and authorized RPC. The monthly variances will be  
17 calculated by rate class and then recorded in a deferred account with carrying costs  
18 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 surpluses (i.e., actual RPC greater than authorized RPC) during the Measurement  
22 Period will result in a credit or refund to customers, while revenue shortfalls (i.e.,



1 actual RPC less than authorized RPC) during the Measurement Period will result  
2 in a surcharge to customers.

3

4 **Q. What is the proposed process to establish the RDAF?**

5 A. The Company proposes to file with the Commission the applicable RDAF 45 days  
6 before the effective date of November 1. The filing will include an allocation of  
7 the RDA to each rate class, and the calculation of the RDAF. The RDA is allocated  
8 to each rate class based on the authorized revenues of each rate class in the most  
9 recent rate case, including step adjustments. The RDAF will be calculated as a  
10 dollar per therm charge or credit based on the RDA allocated to each rate class  
11 divided by the projected therm sales for each rate class over the RDM Adjustment  
12 Period (prospective 12-month period November through October). The RDAF will  
13 be charged or credited to customer bills during the RDM Adjustment Period. The  
14 RDM process will follow the schedule below.

Dates	Activity
August 1 through July 31	Measure and record monthly in a deferred account the revenue variances between actual and authorized RPC
On or about September 17 (45 days before November 1)	File with the Commission the RDAF based on the aggregate monthly revenue variances and monthly carrying costs on the deferred account balances
November 1 through October 31	Apply the RDAF to customer bills

15

16 **5. Class Allocation**

1 **Q. How will the revenue decoupling adjustment be allocated to each rate class?**

2 A. The RDA will be allocated to each rate class based on the proportion of authorized  
3 revenues in the most recent rate case, including step adjustments.

4

5 **6. Factor Calculation**

6 **Q. How will the RDAF be calculated?**

7 A. The RDAF will be calculated on a dollar per therm basis for each rate class based  
8 on the RDA allocated to each rate class divided by the projected class therm sales  
9 for the RDM Adjustment Period (November through October). The RDAF will be  
10 applied to customer bills during the RDM Adjustment Period.

11

12 **7. Adjustment Cap**

13 **Q. Is the Company proposing any adjustment cap?**

14 A. Northern proposes to limit the RDA to two- and one-half percent (2.5%) of total  
15 revenues from delivered sales for the most recent twelve-month period, August  
16 through July, with revenue for externally supplied customers being adjusted by  
17 imputing the Company's cost of gas charges for that period. To help mitigate  
18 customer bill impacts, the cap would be applicable only to revenue shortfalls.  
19 Under-recovered revenues in excess of the adjustment cap would be held in the  
20 deferred account with carrying costs and included in the next RDAF filing.

21

1           **V. ILLUSTRATIVE CALCULATION OF DECOUPLING MECHANISM**

2       **Q. How will the Company implement the proposed RDM?**

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

4                   In the first step, the Company calculates the monthly variances between  
5                   actual and authorized RPC for each rate class. The variances are calculated monthly  
6                   and then aggregated over the twelve-month period August through July (the  
7                   Measurement Period). The monthly variances are recorded in a deferred account  
8                   with carrying costs accrued at the Prime rate. The aggregate variances and carrying  
9                   costs form the basis for the RDA and the calculation of RDAF (surcharge or credit).  
10                  For example, 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. Conversely, if the Company experiences  
13                  a revenue shortfall (actual revenues are less than authorized revenues) during the  
14                  Measurement Period, the RDM will result in a surcharge for customers.

15                  In the second step, the Company files with the Commission the applicable  
16                  RDAF 45 days before the effective date of November 1. The filing will include an  
17                  allocation of the RDA to each rate class, and calculation of the RDAF. The RDA is  
18                  allocated to each rate classes based on the authorized revenues of each rate class in  
19                  the most recent rate case, including step adjustments. The RDAF will be calculated  
20                  as a dollar per therm charge or credit based on the RDA allocated to each rate class  
21                  divided by the projected therm sales for each rate class over the RDM Adjustment

1           Period (twelve-month period November through October). The RDAF will be  
 2           charged or credited to customer bills during the RDM Adjustment Period.

3

4   **Q.    Please illustrate the first step.**

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

**Figure 2: Monthly Residential Heating Revenue Variance Calculation  
 (Illustrative)<sup>16</sup>**

Illustrative Calculation	Actual Residential Heating			Authorized Residential Heating			Variance Over / (Under)			
	Variance Over / (Under)	Revenues	Customers	RPC	Revenues	Customers	RPC	Variance Over / (Under)	RPC	Revenues
August	\$	1,081,951	27,217	\$ 39.75	\$ 1,076,569	26,815	\$ 40.15	\$ (0.40)	\$	(10,766)
September		1,283,256	27,217	47.15	1,276,871	26,815	47.62	(0.47)		(12,769)
October		1,775,342	27,217	65.23	1,766,509	26,815	65.88	(0.65)		(17,665)
November		2,635,287	27,217	96.82	2,622,176	26,815	97.79	(0.96)		(26,222)
December		3,694,761	27,217	135.75	3,676,379	26,815	137.10	(1.35)		(36,764)
January		4,118,742	27,217	151.33	4,098,251	26,815	152.84	(1.51)		(40,983)
February		3,747,792	27,217	137.70	3,729,146	26,815	139.07	(1.37)		(37,291)
March		3,287,159	27,217	120.78	3,270,805	26,815	121.98	(1.20)		(32,708)
April		2,260,725	27,217	83.06	2,249,478	26,815	83.89	(0.83)		(22,495)
May		1,663,286	27,217	61.11	1,655,011	26,815	61.72	(0.61)		(16,550)
June		1,238,872	27,217	45.52	1,232,709	26,815	45.97	(0.45)		(12,327)
July		1,054,859	27,217	38.76	1,049,611	26,815	39.14	(0.39)		(10,496)
12ME July	\$	27,842,031	326,604		\$ 27,703,514	321,778		\$		(277,035)

10  
 11           The Figure shows a four-phase process for each month assuming a 1.00 percent  
 12           reduction in average revenue per customer for the residential sector. In the first  
 13           phase, the Company calculates the authorized RPC per month by dividing the  
 14           authorized monthly revenues by authorized monthly number of customers. In the  
 15           second phase, the Company calculates the actual monthly RPC by dividing the  
 16           actual revenues by the actual number of customers. In the third phase, the Company  
 17           calculates the monthly variances between the actual and authorized RPC. In the

<sup>16</sup> The illustrative calculation assumes a 1.00 percent reduction in revenue per customer each month

1 final phase, the Company calculates the monthly revenue variance by multiplying  
 2 the RPC variance with the actual number of customers.

3 The monthly revenue variances will be recorded in a deferred account with  
 4 carrying costs accrued through the year at Prime rate, as illustrated for the  
 5 residential rate class in Figure 3 (below).

6 **Figure 3: Deferred Account Balance (Illustrative)**<sup>17</sup>

Illustrative	Deferred Account	Revenue	Carrying	Carrying	Deferred Account
Deferred Account Balance	Starting Balance	Variance	Costs Rate	Costs	Ending Balance
August	\$ -	\$ (10,766)	0.27%	\$ (15)	\$ (10,780)
September	(10,780)	(12,769)	0.27%	(46)	(23,595)
October	(23,595)	(17,665)	0.27%	(88)	(41,348)
November	(41,348)	(26,222)	0.27%	(147)	(67,718)
December	(67,718)	(36,764)	0.27%	(233)	(104,715)
January	(104,715)	(40,983)	0.27%	(339)	(146,036)
February	(146,036)	(37,291)	0.27%	(446)	(183,774)
March	(183,774)	(32,708)	0.27%	(542)	(217,024)
April	(217,024)	(22,495)	0.27%	(618)	(240,137)
May	(240,137)	(16,550)	0.27%	(673)	(257,360)
June	(257,360)	(12,327)	0.27%	(714)	(270,400)
July	(270,400)	(10,496)	0.27%	(747)	(281,643)
August	(281,643)		0.27%	(763)	(282,406)
September	(282,406)		0.27%	(765)	(283,171)
October	(283,171)		0.27%	(767)	(283,938)
<b>Total</b>	<b>\$</b>	<b>(277,035)</b>	<b>\$</b>	<b>(6,903)</b>	<b>(283,938)</b>

7 The Figure shows that carrying costs of \$6,903 will be accumulated through the  
 8 year at the assumed Prime Rate. The aggregate monthly variances and carrying  
 9 costs form the basis for the RDA and the calculation of RDAF surcharge or credit  
 10 depending on the revenue variances.<sup>18</sup>

12

13 **Q. Please discuss the second step in calculating the RDM adjustment.**

<sup>17</sup> The illustrative calculation assumes a Prime Rate of 3.25 percent, or 0.2708 percent monthly

<sup>18</sup> The illustrative calculation shows RDA based on 12 months' ending July balance. However, the Company's proposed RDA filed will also include estimated carrying costs through October 31.

1     A.     In the second step, the Company will file the applicable RDAF based on the RDA  
 2             for the Measurement Period. The filing will include allocation of the RDA to rate  
 3             classes, and calculation of the RDAF.

4             The RDA will be allocated to each rate class based on each class’s  
 5             authorized revenues, including step adjustments, as shown in Figure 4 (below).

6                     **Figure 4: Decoupling Adjustment Allocation (Illustrative)<sup>19</sup>**

Illustrative Revenue Decoupling Adjustment	Authorized Revenues (\$)	Authorized Revenues (%)	Allocated RDA (\$)
Residential Non-Heating (R-6)	\$ 737,886	1.45%	\$ (4,112)
Residential Heating (R-5/R-10)	27,702,514	54.37%	(154,385)
C&I Low Annual, High Winter (G-40)	8,274,293	16.24%	(46,112)
C&I Low Annual, Low Winter (G-50)	1,201,344	2.36%	(6,695)
C&I Medium Annual, High Winter (G-41)	6,421,989	12.60%	(35,790)
C&I Medium Annual, Low Winter (G-51)	1,638,520	3.22%	(9,131)
C&I High Annual, High Winter (G-42)	1,895,204	3.72%	(10,562)
C&I High Annual, Low Winter (G-52)	3,077,325	6.04%	(17,150)
<b>Total</b>	<b>\$ 50,949,076</b>	<b>100.00%</b>	<b>\$ (283,938)</b>

7  
 8             The Figure shows that the Residential Heating class revenues are 54.37 percent of  
 9             total Company revenues. Accordingly, the deferred account balance allocated to  
 10            the Residential Heating class is \$154,385.

11            The allocated RDA forms the basis for the calculation of RDAF for each  
 12            rate class, as shown in Figure 5 (below).

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<sup>19</sup> The RDA will be allocated to each rate class based on each class’s authorized revenues. For illustrative purpose, Figure 4 currently shows the Company’s proposed revenues plus 2022 step increase in the ‘Authorized Revenues (\$)’ column. The illustrative deferred account balance assumes that only the Residential class experienced a revenue change.

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**Figure 5: Calculation of RDAF (Illustrative)**

Illustrative Revenue Decoupling Adjustment	Charge/ (Refund) (\$)	Adjusted Test Year Sales	Charge/ (Refund) (\$/therm)
Residential Non-Heating (R-6)	\$ 4,112	237,269	\$ 0.0173
Residential Heating (R-5/R-10)	154,385	20,067,257	0.0077
C&I Low Annual, High Winter (G-40)	46,112	10,880,833	0.0042
C&I Low Annual, Low Winter (G-50)	6,695	1,474,573	0.0045
C&I Medium Annual, High Winter (G-41)	35,790	14,423,832	0.0025
C&I Medium Annual, Low Winter (G-51)	9,131	4,761,300	0.0019
C&I High Annual, High Winter (G-42)	10,562	5,889,772	0.0018
C&I High Annual, Low Winter (G-52)	17,150	16,417,274	0.0010
<b>Total</b>	<b>\$ 283,938</b>	<b>74,152,109</b>	

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The Figure shows that the RDAF for the Residential Heating class will be

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\$0.0077 per therm. The adjustment factor would be implemented on customer

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bills during the November through October RDM Adjustment Period.

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

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

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**Q. Is the proposed RDM subject to reconciliation?**

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A. Yes. As described in Section 7.0 of the proposed tariff, the RDM is subject to reconciliation. Specifically, the actual revenues received by the Company through application of the RDAF to customer bills is reconciled to the RDM adjustment amount.

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

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1 A. Yes, it does.