

STATE OF NEW HAMPSHIRE

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Jared S. Chicoine

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Christopher J. Ellms, Jr.



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DEPARTMENT OF ENERGY

21 S. Fruit St., Suite 10  
Concord, N.H. 03301-2429

December 20, 2023

Patrick H. Taylor  
Chief Regulatory Counsel  
6 Liberty Lane West  
Hampton, NH 03842

Re: Docket DG 23-086 Northern Utilities Inc. Petition for Approval of  
Revenue Decoupling Adjustment Factor, *DOE Data Requests Set 3*  
(*RDAF*)

Dear Attorney Taylor:

On behalf of the Department of Energy (DOE), enclosed please find DOE's Response to Northern Utilities Inc. ("Northern" or "the Company")'s Data Requests Set 1 (RDAF). Although originally due on December 19, 2023 pursuant to the approved procedural, because Northern filed its data requests (DRs) one day late, on December 13 instead of December 12, 2023, the parties agreed DOE's responses on December 20, 2023 would be timely.

Consistent with the Commission's March 17, 2020 letter, this letter is being filed solely in electronic form.

Sincerely,

/s/ *Mary E. Schwarzer*

Mary E. Schwarzer  
Staff Attorney/Hearings Examiner  
[Mary.E.Schwarzer@energy.nh.gov](mailto:Mary.E.Schwarzer@energy.nh.gov)

Encl.

Cc: Discovery Service List (electronically)

Docket #: 23-086

**SERVICE LIST - DISCOVERY - Email Addresses**

Printed: 12/20/2023

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**STATE OF NEW HAMPSHIRE**  
**Before the**  
**NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**  
**DG 23-086**

**FIRST SET OF DATA REQUESTS OF NORTHERN UTILITIES INC.**  
**TO THE DEPARTMENT OF ENERGY**

Unitil Energy Systems Inc. ("UES") issues the following Data Requests to the New Hampshire Department of Energy ("DOE").

**INSTRUCTIONS**

The following instructions apply to this set of Data Requests and all subsequent Data Requests issued by UES in this proceeding:

1. Please provide all responses to the attached discovery requests in writing.
2. For the purposes of these requests, "document" as used herein, is defined as any writing of every kind in your possession, custody or control, including but not limited to letter, facsimiles, minutes and records of meetings, memoranda, reports, notes, maps, recordings, transcripts, records of telephone or other communications, photographs, vouchers, and other accounting records, lists, engineering studies, rate studies, and economic studies, electronic files, computer files.
3. The phrase "provide workpapers or documentation" means to provide all data, assumptions and calculations relied upon, including the source of and basis for all data and assumptions employed.
4. For each response, please identify the individual responsible for the information provided.
5. Please start each response on a separate page.
6. If there is no "document" (study, report, etc.) in your possession which is responsive in any way to any portion of a data request, please so indicate.
7. If requested data is duplicative of that furnished in response to another data request, please identify the response wherein the information is contained.
8. If you are unable or unwilling to produce a response to a particular request, please provide a written response and state the basis for the inability or unwillingness to furnish the requested information.
9. If you find a request to be unclear or imprecise, please request clarification, by telephone, to Patrick Taylor at 603-773-6554.
10. Responses to these requests are due no later than December 20, 2023.

**Northern Utilities, Inc. (NU) First Set of Data Requests to the Department of Energy**

In these responses, the New Hampshire Department of Energy is abbreviated “DOE.”

Northern Utilities Inc. is abbreviated “Northern” or “the Company”

These data responses were answered by Gas Director Faisal Deen Arif and Utility Analyst Ashraful Alm on December 20, 2023 in response to data requests issued by Northern on December 13, 2023.

NEW HAMPSHIRE DEPARTMENT OF ENERGY

DG 23-086 (RDAF)

Northern Utilities Inc.' Set One Data Requests to NH Department of Energy

Date Request Received: 12/13/23  
Request No. NU 1-1

Date of Response: 12/20/23  
Witnesses: Faisal Deen Arif, Gas Director  
Ashraful Alam, Utility Analyst

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**Request:**

**NU 1-1:** Please refer to DOE Technical Statement at 6, Table 3.

- a. Please provide this table in excel format
- b. Please provide supporting calculations supporting the "RDAF DY Customer Count (in DG 23-086)" amounts.
- c. Is the percentage change of 2.93% an annual increase in customer growth?

If response to part c is no, please provide the applicable compound annual growth rate.

**Response:**

- a. Please see DOE response to NU 1-1 - Attachment-1 (live Excel), Tab titled: Avg No of Customers (Test Year (TY) vs Decoupling Year One (DY1)).
- b. Please see DOE response to NU 1-1 - Attachment-2 (Northern's live Excel, with highlights by DOE. This is provided in live Excel only). Please note that the primary source of these data is Northern's original submission, Testimony of S. Elena Demeris (Sept 15, 2023) Attachment SED-1 (pp. 12 and 13).
- c. No. The percentage change of 2.93% is the increase in the average number of customers, by various rate class groups<sup>1</sup>, between the Test Year (TY) 2020 (from DG 21-104 settlement Attachment 3, p.31 and DY1 data. See DOE response to NU 1-1 - Attachment-3, live Excel) and the Decoupling Year 1 (DY1; spanning i.e., August 1, 2022 to October 31, 2023).

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<sup>1</sup> The "Rate Class Group" is defined in Northern's Tariff 12, Section IX, Sub-Section 4.0 (12). It is DOE's understanding that Northern's data (which is what DOE used in its analysis) underscore this definition.

DOE calculates the applicable compound annual growth rate<sup>2</sup> as 1.45%. Please see DOE response to NU 1-1 - Attachment-1, Tab titled: Cust. Comp. Growth Rate.

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<sup>2</sup> Assuming two years from TY 2020 to DY1 (2022-23).

**Average Number of Customers - Test Year (TY) vs. RDAF Design Year 1 (DY1)**

	<b>TY Customer Count (in DG 21-104)</b>	<b>RDAF DY1 Customer Count (in DG 23-086)</b>	<b>Change</b>	<b>% Change</b>
R-5 & R-10: Residential Heating	26,815	27,896	1,081	4.03%
R-5: Residential Heating	26,171			
R-10: Residential Low Income Heating	644			
R6: Residential Non-Heating	1,277	1,259	(18)	-1.41%
<b>Subtotal: Residential</b>	<b>28,091</b>	<b>29,155</b>	<b>1,063</b>	<b>3.78%</b>
G-40 : C&I Low Annual & High Winter Use	5,234	5210	(25)	-0.47%
G-41: C&I Medium Annual & High Winter Use	704	692	(12)	-1.73%
G-42: C&I High Annual & High Winter Use	31	29	(2)	-5.11%
G-50: C&I Low Annual & Low Winter Use	831	825	(7)	-0.82%
G-51: C&I Medium Annual & Low Winter Use	267	277	10	3.85%
G-52: C&I High Annual & Low Winter Use	33	35	2	7.07%
<b>Subtotal: C&amp;I</b>	<b>7,101</b>	<b>7,068</b>	<b>(33)</b>	<b>-0.46%</b>
<b>Total</b>	<b>35,192</b>	<b>36,222</b>	<b>1,030</b>	<b>2.93%</b>

Sources:

- See p.31 on [https://www.puc.nh.gov/regulatory/Docketbk/2021/21-104/LETTERS-MEMOS-TARIFFS/21-104\\_2021.09.17\\_NORTHERN\\_ATT\\_SETTLEMENT-AGREEMENT.PDF](https://www.puc.nh.gov/regulatory/Docketbk/2021/21-104/LETTERS-MEMOS-TARIFFS/21-104_2021.09.17_NORTHERN_ATT_SETTLEMENT-AGREEMENT.PDF)  
1. TARIFFS/21-104\_2021.09.17\_NORTHERN\_ATT\_SETTLEMENT-AGREEMENT.PDF  
See DG 23-086 Filing Attachment SED-1 RDAF  
2. Tabs: Base Revenue Res & Base Revenue Gen Service

**Average Number of Customers - Test Year (TY) vs. RDAF Design Year 1 (DY1)**

	<b>TY 2020 Customer Count (in DG 21-104)</b>	<b>RDAF DY1 (2022-23) Customer Count (in DG 23-086)</b>	<b>Change</b>	<b>DOE Reported Growth Rate (% Change)</b>	<b>Calculated Compound Growth Rate (%)</b>
R-5 & R-10: Residential Heating	26,815	27,896	1,081	4.03%	2.00%
R-5: Residential Heating	26,171				
R-10: Residential Low Income Heating	644				
R6: Residential Non-Heating	1,277	1,259	(18)	-1.41%	-0.71%
<b>Subtotal: Residential</b>	<b>28,091</b>	<b>29,155</b>	<b>1,063</b>	<b>3.78%</b>	<b>1.87%</b>
G-40 : C&I Low Annual & High Winter Use	5,234	5210	(25)	-0.47%	-0.24%
G-41: C&I Medium Annual & High Winter Use	704	692	(12)	-1.73%	-0.87%
G-42: C&I High Annual & High Winter Use	31	29	(2)	-5.11%	-2.59%
G-50: C&I Low Annual & Low Winter Use	831	825	(7)	-0.82%	-0.41%
G-51: C&I Medium Annual & Low Winter Use	267	277	10	3.85%	1.90%
G-52: C&I High Annual & Low Winter Use	33	35	2	7.07%	3.47%
<b>Subtotal: C&amp;I</b>	<b>7,101</b>	<b>7,068</b>	<b>(33)</b>	<b>-0.46%</b>	<b>-0.23%</b>
<b>Total</b>	<b>35,192</b>	<b>36,222</b>	<b>1,030</b>	<b>2.93%</b>	<b>1.45%</b>



**CALCULATION OF REVENUE DECOUPLING ADJUSTMENT FACTOR ("RDAF")**

**PEAK - NOVEMBER 1, 2023 THROUGH APRIL 30, 2024**

Line #	Description	Class Groups				Reference
		Residential Heating R-5, R-10	Residential Non Heating R-6	C&I High Load Factor G-50, G-51, G-52	C&I Low Load Factor G-40, G-41, G-42	
1	Beginning Balance - November 1, 2022	\$0	\$0	\$0	\$0	Pages 2, 4, 6, 8, Line 1
2	Monthly Revenue Variances (MRV) - November 1, 2022 - April 30, 2023	(\$3,246,301)	(\$8,549)	\$150,580	(\$687,996)	Pages 2, 4, 6, 8, Col. C, Line 27
3	Collections/(Credits) associated with current RDAF (thru April 2023)	\$0	\$0	\$0	\$0	Pages 2, 4, 6, 8, Col. D, Σ(L. 1 to L. 9)
4	Carrying Costs - (November 2022 - April 2023)	(\$57,123)	(\$164)	\$2,697	(\$7,198)	Pages 2, 4, 6, 8, Col. H
5	Revenue Decoupling Adjustment (RDA) for (credit)/collection	(\$3,303,425)	(\$8,713)	\$153,277	(\$695,193)	L. 1 + L. 2 + L. 3 + L. 4
6	RDA Cap (+/-)	\$696,310	\$15,664	\$150,931	\$411,389	Page 10
7	RDA Deferral	(\$2,607,114)	\$0	\$2,345	(\$283,804)	[Line 5]-Line 6
8	RDA eligible for credit/(collection)	(\$696,310)	(\$8,713)	\$150,931	(\$411,389)	L. 5 - L. 7
9	Estimated Firm Sales & Firm Transportation Volumes (therms) (November 1, 2023 - April 30, 2024)	16,052,326	148,279	13,530,217	24,340,176	Page 14
10	<b>Peak RDAF Rate (\$/therm)</b>	<b>\$0.0434</b>	<b>\$0.0588</b>	<b>(\$0.0112)</b>	<b>\$0.0169</b>	-1*(L. 8 / L. 9)

**OFF-PEAK - MAY 1, 2024 THROUGH OCTOBER 31, 2024**

Line #	Description	Class Groups				Reference
		Residential Heating R-5, R-10	Residential Non Heating R-6	C&I High Load Factor G-50, G-51, G-52	C&I Low Load Factor G-40, G-41, G-42	
1	Beginning Balance - August 1, 2022	\$0	\$0	\$0	\$0	Pages 3, 5, 7, 9, Line 1
2	Monthly Revenue Variances (MRV) - August 1, 2022 - October 31, 2022; May 1, 2023 - October 31, 2023 (1)	(\$548,296)	(\$6,681)	\$37,589	(\$3,606)	Pages 3, 5, 7, 9, Col. C, Line 27
3	Collections/(Credits) associated with current RDAF (thru October 2023)	\$0	\$0	\$0	\$0	Pages 3, 5, 7, 9, Col. D, Σ(L. 1 to L. 15)
4	Carrying Costs - (August 22 - October 2023)	(\$33,889)	(\$386)	\$2,341	(\$297)	Pages 3, 5, 7, 9, Col. H
5	Revenue Decoupling Adjustment (RDA) for credit/(collection)	(\$582,184)	(\$7,067)	\$39,931	(\$3,903)	L. 1 + L. 2 - L. 3 + L. 4
6	RDA Cap (+/-)	\$281,733	\$11,771	\$106,975	\$216,745	Page 11
7	RDA Deferral	(\$300,451)	\$0	\$0	\$0	[Line 5]-Line 6
8	RDA eligible for credit/(collection)	(\$281,733)	(\$7,067)	\$39,931	(\$3,903)	L. 5 - L. 7
9	Estimated Firm Sales & Firm Transportation Volumes (therms) (May 1, 2024 - October 31, 2024)	2,631,203	75,754	11,462,614	5,173,303	Page 14
10	<b>Off Peak RDAF Rate (\$/therm)</b>	<b>\$0.1071</b>	<b>\$0.0933</b>	<b>(\$0.0035)</b>	<b>\$0.0008</b>	-1*(L. 8 / L. 9)

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**Residential Heating - R-5 and R-10**  
**Peak Period - November to April**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
Attachment SED-1 RDAF  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	31
2 Actual	Sep-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	30
3 Actual	Oct-22	\$0	\$0	\$0	\$0	\$0	5.50%	\$0	\$0	31
4 Actual	Nov-22	\$0	\$220,550	\$0	\$220,550	\$110,275	5.50%	\$499	\$221,048	30
5 Actual	Dec-22	\$221,048	(\$1,378,058)	\$0	(\$1,157,009)	(\$467,980)	5.50%	(\$2,186)	(\$1,159,195)	31
6 Actual	Jan-23	(\$1,159,195)	(\$646,873)	\$0	(\$1,806,068)	(\$1,482,632)	7.00%	(\$8,815)	(\$1,814,883)	31
7 Actual	Feb-23	(\$1,814,883)	(\$682,231)	\$0	(\$2,497,114)	(\$2,155,998)	7.00%	(\$11,577)	(\$2,508,691)	28
8 Actual	Mar-23	(\$2,508,691)	(\$264,632)	\$0	(\$2,773,323)	(\$2,641,007)	7.00%	(\$15,701)	(\$2,789,024)	31
9 Actual	Apr-23	(\$2,789,024)	(\$495,058)	\$0	(\$3,284,082)	(\$3,036,553)	7.75%	(\$19,342)	(\$3,303,425)	30
10 Actual	May-23	(\$3,303,425)	\$0	\$0	(\$3,303,425)	(\$3,303,425)	7.75%	(\$21,744)	(\$3,325,168)	31
11 Actual	Jun-23	(\$3,325,168)	\$0	\$0	(\$3,325,168)	(\$3,325,168)	7.75%	(\$21,181)	(\$3,346,349)	30
12 Actual	Jul-23	(\$3,346,349)	\$0	\$0	(\$3,346,349)	(\$3,346,349)	8.25%	(\$23,447)	(\$3,369,797)	31
13 Estimate	Aug-23	(\$3,369,797)	\$0	\$0	(\$3,369,797)	(\$3,369,797)	8.25%	(\$23,612)	(\$3,393,408)	31
14 Estimate	Sep-23	(\$3,393,408)	\$0	\$0	(\$3,393,408)	(\$3,393,408)	8.25%	(\$23,010)	(\$3,416,418)	30
15 Estimate	Oct-23	(\$3,416,418)	\$0	\$0	(\$3,416,418)	(\$3,416,418)	8.25%	(\$23,938)	(\$3,440,357)	31
16 Estimate	Nov-23	(\$3,440,357)	\$0	\$55,541	(\$3,495,898)	(\$3,468,127)	8.25%	(\$23,517)	(\$3,519,415)	30
17 Estimate	Dec-23	(\$3,519,415)	\$0	\$112,931	(\$3,632,345)	(\$3,575,880)	8.25%	(\$25,056)	(\$3,657,401)	31
18 Estimate	Jan-24	(\$3,657,401)	\$0	\$153,745	(\$3,811,146)	(\$3,734,274)	8.25%	(\$26,094)	(\$3,837,240)	31
19 Estimate	Feb-24	(\$3,837,240)	\$0	\$156,023	(\$3,993,263)	(\$3,915,252)	8.25%	(\$25,594)	(\$4,018,857)	29
19 Estimate	Mar-24	(\$3,837,240)	\$0	\$132,317	(\$3,969,557)	(\$3,903,399)	8.25%	(\$27,276)	(\$3,996,833)	31
20 Estimate	Apr-24	(\$3,996,833)	\$0	\$86,114	(\$4,082,947)	(\$4,039,890)	8.25%	(\$27,319)	(\$4,110,266)	30
21 Estimate	May-24	(\$4,110,266)	\$0	\$0	(\$4,110,266)	(\$4,110,266)	8.25%	(\$28,721)	(\$4,138,987)	31
22 Estimate	Jun-24	(\$4,138,987)	\$0	\$0	(\$4,138,987)	(\$4,138,987)	8.25%	(\$27,989)	(\$4,166,976)	30
23 Estimate	Jul-24	(\$4,166,976)	\$0	\$0	(\$4,166,976)	(\$4,166,976)	8.25%	(\$29,118)	(\$4,196,094)	31
24 Estimate	Aug-24	(\$4,196,094)	\$0	\$0	(\$4,196,094)	(\$4,196,094)	8.25%	(\$29,321)	(\$4,225,415)	31
25 Estimate	Sep-24	(\$4,225,415)	\$0	\$0	(\$4,225,415)	(\$4,225,415)	8.25%	(\$28,574)	(\$4,253,988)	30
26 Estimate	Oct-24	(\$4,253,988)	\$0	\$0	(\$4,253,988)	(\$4,253,988)	8.25%	<u>(\$29,726)</u>	(\$4,283,714)	31
27 Total			(\$3,246,301)	\$696,671				(\$522,358)		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**Residential Heating - R-5 and R-10**  
**Off Peak Period - May to October**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
Attachment SED-1 RDAF  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$ 20,032	\$0	\$20,032	\$10,016	4.00%	\$34	\$20,066	31
2 Actual	Sep-22	\$20,066	\$ (199,103)	\$0	(\$179,038)	(\$79,486)	4.00%	(\$261)	(\$179,299)	30
3 Actual	Oct-22	(\$179,299)	\$ (161,665)	\$0	(\$340,964)	(\$260,132)	5.50%	(\$1,215)	(\$342,179)	31
4 Actual	Nov-22	(\$342,179)	\$0	\$0	(\$342,179)	(\$342,179)	5.50%	(\$1,547)	(\$343,726)	30
5 Actual	Dec-22	(\$343,726)	\$0	\$0	(\$343,726)	(\$343,726)	5.50%	(\$1,606)	(\$345,332)	31
6 Actual	Jan-23	(\$345,332)	\$0	\$0	(\$345,332)	(\$345,332)	7.00%	(\$2,053)	(\$347,385)	31
7 Actual	Feb-23	(\$347,384.86)	\$0	\$0	(\$347,385)	(\$347,385)	7.00%	(\$1,865)	(\$349,250)	28
8 Actual	Mar-23	(\$349,250.27)	\$0	\$0	(\$349,250)	(\$349,250)	7.00%	(\$2,076)	(\$351,327)	31
9 Actual	Apr-23	(\$351,326.63)	\$0	\$0	(\$351,327)	(\$351,327)	7.75%	(\$2,238)	(\$353,565)	30
10 Actual	May-23	(\$353,564.53)	\$ 15,620	\$0	(\$337,945)	(\$345,755)	7.75%	(\$2,276)	(\$340,221)	31
11 Actual	Jun-23	(\$340,220.62)	\$ (223,042)	\$0	(\$563,263)	(\$451,742)	7.75%	(\$2,878)	(\$566,140)	30
12 Actual	Jul-23	(\$566,140)	\$ (136)	\$0	(\$566,277)	(\$566,209)	8.25%	(\$3,967)	(\$570,244)	31
13 Estimate	Aug-23	(\$570,244)	\$0	\$0	(\$570,244)	(\$570,244)	8.25%	(\$3,996)	(\$574,240)	31
14 Estimate	Sep-23	(\$574,240)	\$0	\$0	(\$574,240)	(\$574,240)	8.25%	(\$3,894)	(\$578,133)	30
15 Estimate	Oct-23	(\$578,133)	\$0	\$0	(\$578,133)	(\$578,133)	8.25%	(\$4,051)	(\$582,184)	31
16 Estimate	Nov-23	(\$582,184)	\$0	\$0	(\$582,184)	(\$582,184)	8.25%	(\$3,948)	(\$586,132)	30
17 Estimate	Dec-23	(\$586,132)	\$0	\$0	(\$586,132)	(\$586,132)	8.25%	(\$4,107)	(\$590,239)	31
18 Estimate	Jan-24	(\$590,239)	\$0	\$0	(\$590,239)	(\$590,239)	8.25%	(\$4,124)	(\$594,363)	31
19 Estimate	Feb-24	(\$594,363)	\$0	\$0	(\$594,363)	(\$594,363)	8.25%	(\$3,885)	(\$598,249)	29
20 Estimate	Mar-24	(\$594,363)	\$0	\$0	(\$594,363)	(\$594,363)	8.25%	(\$4,153)	(\$598,517)	31
21 Estimate	Apr-24	(\$598,517)	\$0	\$0	(\$598,517)	(\$598,517)	8.25%	(\$4,047)	(\$602,564)	30
22 Estimate	May-24	(\$602,564)	\$0	\$113,067	(\$715,631)	(\$659,098)	8.25%	(\$4,606)	(\$720,237)	31
23 Estimate	Jun-24	(\$720,237)	\$0	\$48,325	(\$768,562)	(\$744,399)	8.25%	(\$5,034)	(\$773,596)	30
24 Estimate	Jul-24	(\$773,596)	\$0	\$23,327	(\$796,923)	(\$785,259)	8.25%	(\$5,487)	(\$802,410)	31
25 Estimate	Aug-24	(\$802,410)	\$0	\$23,103	(\$825,513)	(\$813,962)	8.25%	(\$5,688)	(\$831,201)	31
26 Estimate	Sep-24	(\$831,201)	\$0	\$22,937	(\$854,138)	(\$842,669)	8.25%	(\$5,698)	(\$859,836)	30
27 Estimate	Oct-24	(\$859,836)	\$0	\$51,042	(\$910,879)	(\$885,357)	8.25%	(\$6,187)	(\$917,065)	31
28 Total			(\$548,296)	\$281,802				(\$90,853)		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**Residential Heating - R-6**  
**Peak Period - November to April**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	31
2 Actual	Sep-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	30
3 Actual	Oct-22	\$0	\$0	\$0	\$0	\$0	5.50%	\$0	\$0	31
4 Actual	Nov-22	\$0	\$4,476	\$0	\$4,476	\$2,238	5.50%	\$10	\$4,486	30
5 Actual	Dec-22	\$4,486	(\$11,714)	\$0	(\$7,228)	(\$1,371)	5.50%	(\$6)	(\$7,234)	31
6 Actual	Jan-23	(\$7,234)	\$895	\$0	(\$6,339)	(\$6,787)	7.00%	(\$40)	(\$6,379)	31
7 Actual	Feb-23	(\$6,379)	\$168	\$0	(\$6,211)	(\$6,295)	7.00%	(\$34)	(\$6,245)	28
8 Actual	Mar-23	(\$6,245)	(\$1,431)	\$0	(\$7,676)	(\$6,960)	7.00%	(\$41)	(\$7,717)	31
9 Actual	Apr-23	(\$7,717)	(\$943)	\$0	(\$8,660)	(\$8,189)	7.75%	(\$52)	(\$8,713)	30
10 Actual	May-23	(\$8,713)	\$0	\$0	(\$8,713)	(\$8,713)	7.75%	(\$57)	(\$8,770)	31
11 Actual	Jun-23	(\$8,770)	\$0	\$0	(\$8,770)	(\$8,770)	7.75%	(\$56)	(\$8,826)	30
12 Actual	Jul-23	(\$8,826)	\$0	\$0	(\$8,826)	(\$8,826)	8.25%	(\$62)	(\$8,888)	31
13 Estimate	Aug-23	(\$8,888)	\$0	\$0	(\$8,888)	(\$8,888)	8.25%	(\$62)	(\$8,950)	31
14 Estimate	Sep-23	(\$8,950)	\$0	\$0	(\$8,950)	(\$8,950)	8.25%	(\$61)	(\$9,011)	30
15 Estimate	Oct-23	(\$9,011)	\$0	\$0	(\$9,011)	(\$9,011)	8.25%	(\$63)	(\$9,074)	31
16 Estimate	Nov-23	(\$9,074)	\$0	\$954	(\$10,028)	(\$9,551)	8.25%	(\$65)	(\$10,093)	30
17 Estimate	Dec-23	(\$10,093)	\$0	\$1,467	(\$11,560)	(\$10,826)	8.25%	(\$76)	(\$11,636)	31
18 Estimate	Jan-24	(\$11,636)	\$0	\$1,802	(\$13,438)	(\$12,537)	8.25%	(\$88)	(\$13,526)	31
19 Estimate	Feb-24	(\$13,526)	\$0	\$1,822	(\$15,347)	(\$14,437)	8.25%	(\$94)	(\$15,442)	29
20 Estimate	Mar-24	(\$15,442)	\$0	\$1,488	(\$16,930)	(\$16,186)	8.25%	(\$113)	(\$17,043)	31
21 Estimate	Apr-24	(\$17,043)	\$0	\$1,185	(\$18,228)	(\$17,636)	8.25%	(\$119)	(\$18,348)	30
22 Estimate	May-24	(\$18,348)	\$0	\$0	(\$18,348)	(\$18,348)	8.25%	(\$128)	(\$18,476)	31
23 Estimate	Jun-24	(\$18,476)	\$0	\$0	(\$18,476)	(\$18,476)	8.25%	(\$125)	(\$18,601)	30
24 Estimate	Jul-24	(\$18,601)	\$0	\$0	(\$18,601)	(\$18,601)	8.25%	(\$130)	(\$18,731)	31
25 Estimate	Aug-24	(\$18,731)	\$0	\$0	(\$18,731)	(\$18,731)	8.25%	(\$131)	(\$18,862)	31
26 Estimate	Sep-24	(\$18,862)	\$0	\$0	(\$18,862)	(\$18,862)	8.25%	(\$128)	(\$18,989)	30
27 Estimate	Oct-24	(\$18,989)	<u>\$0</u>	<u>\$0</u>	(\$18,989)	(\$18,989)	8.25%	<u>(\$133)</u>	(\$19,122)	31
28 Total			(\$8,549)	\$8,719				(\$1,854)		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**Residential Heating - R-6**  
**Off Peak Period - May to October**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$ (2,728)	\$0	(\$2,728)	(\$1,364)	4.00%	(\$5)	(\$2,733)	31
2 Actual	Sep-22	(\$2,733)	\$ (1,717)	\$0	(\$4,450)	(\$3,591)	4.00%	(\$12)	(\$4,461)	30
3 Actual	Oct-22	(\$4,461)	\$ 376	\$0	(\$4,085)	(\$4,273)	5.50%	(\$20)	(\$4,105)	31
4 Actual	Nov-22	(\$4,105)	\$0	\$0	(\$4,105)	(\$4,105)	5.50%	(\$19)	(\$4,124)	30
5 Actual	Dec-22	(\$4,124)	\$0	\$0	(\$4,124)	(\$4,124)	5.50%	(\$19)	(\$4,143)	31
6 Actual	Jan-23	(\$4,143)	\$0	\$0	(\$4,143)	(\$4,143)	7.00%	(\$25)	(\$4,168)	31
7 Actual	Feb-23	(\$4,168)	\$0	\$0	(\$4,168)	(\$4,168)	7.00%	(\$22)	(\$4,190)	28
8 Actual	Mar-23	(\$4,190)	\$0	\$0	(\$4,190)	(\$4,190)	7.00%	(\$25)	(\$4,215)	31
9 Actual	Apr-23	(\$4,215)	\$0	\$0	(\$4,215)	(\$4,215)	7.75%	(\$27)	(\$4,242)	30
10 Actual	May-23	(\$4,242)	\$ (504)	\$0	(\$4,746)	(\$4,494)	7.75%	(\$30)	(\$4,775)	31
11 Actual	Jun-23	(\$4,775)	\$ (2,315)	\$0	(\$7,090)	(\$5,933)	7.75%	(\$38)	(\$7,128)	30
12 Actual	Jul-23	(\$7,128)	\$ 207	\$0	(\$6,921)	(\$7,025)	8.25%	(\$49)	(\$6,970)	31
13 Estimate	Aug-23	(\$6,970)	<u>\$0</u>	\$0	(\$6,970)	(\$6,970)	8.25%	(\$49)	(\$7,019)	31
14 Estimate	Sep-23	(\$7,019)	<u>\$0</u>	\$0	(\$7,019)	(\$7,019)	8.25%	(\$48)	(\$7,067)	30
15 Estimate	Oct-23	(\$7,067)	<u>\$0</u>	\$0	(\$7,067)	(\$7,067)	8.25%	(\$50)	(\$7,116)	31
16 Estimate	Nov-23	(\$7,116)	<u>\$0</u>	\$0	(\$7,116)	(\$7,116)	8.25%	(\$48)	(\$7,165)	30
17 Estimate	Dec-23	(\$7,165)	<u>\$0</u>	\$0	(\$7,165)	(\$7,165)	8.25%	(\$50)	(\$7,215)	31
18 Estimate	Jan-24	(\$7,215)	<u>\$0</u>	\$0	(\$7,215)	(\$7,215)	8.25%	(\$50)	(\$7,265)	31
19 Estimate	Feb-24	(\$7,265)	<u>\$0</u>	\$0	(\$7,265)	(\$7,265)	8.25%	(\$47)	(\$7,313)	29
20 Estimate	Mar-24	(\$7,265)	<u>\$0</u>	\$0	(\$7,265)	(\$7,265)	8.25%	(\$51)	(\$7,316)	31
21 Estimate	Apr-24	(\$7,316)	<u>\$0</u>	\$0	(\$7,316)	(\$7,316)	8.25%	(\$49)	(\$7,365)	30
22 Estimate	May-24	(\$7,365)	<u>\$0</u>	\$1,498	(\$8,864)	(\$8,115)	8.25%	(\$57)	(\$8,920)	31
23 Estimate	Jun-24	(\$8,920)	<u>\$0</u>	\$1,214	(\$10,134)	(\$9,527)	8.25%	(\$64)	(\$10,199)	30
24 Estimate	Jul-24	(\$10,199)	<u>\$0</u>	\$1,079	(\$11,278)	(\$10,738)	8.25%	(\$75)	(\$11,353)	31
25 Estimate	Aug-24	(\$11,353)	<u>\$0</u>	\$1,077	(\$12,430)	(\$11,892)	8.25%	(\$83)	(\$12,513)	31
26 Estimate	Sep-24	(\$12,513)	<u>\$0</u>	\$1,064	(\$13,577)	(\$13,045)	8.25%	(\$88)	(\$13,665)	30
27 Estimate	Oct-24	(\$13,665)	<u>\$0</u>	<u>\$1,135</u>	(\$14,801)	(\$14,233)	8.25%	<u>(\$99)</u>	(\$14,900)	31
28 Total			(\$6,681)	\$7,068				(\$1,199)		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**C&I High Load Factor - G-50, G-51, G-52**  
**Peak Period - November to April**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	31
2 Actual	Sep-22	\$0	\$0	\$0	\$0	\$0	4.00%	\$0	\$0	30
3 Actual	Oct-22	\$0	\$0	\$0	\$0	\$0	5.50%	\$0	\$0	31
4 Actual	Nov-22	\$0	\$56,436	\$0	\$56,436	\$28,218	5.50%	\$128	\$56,564	30
5 Actual	Dec-22	\$56,564	(\$22,488)	\$0	\$34,075	\$45,320	5.50%	\$212	\$34,287	31
6 Actual	Jan-23	\$34,287	\$53,107	\$0	\$87,395	\$60,841	7.00%	\$362	\$87,756	31
7 Actual	Feb-23	\$87,756	(\$14,633)	\$0	\$73,123	\$80,440	7.00%	\$432	\$73,555	28
8 Actual	Mar-23	\$73,555	\$65,809	\$0	\$139,364	\$106,459	7.00%	\$633	\$139,997	31
9 Actual	Apr-23	\$139,997	\$12,349	\$0	\$152,345	\$146,171	7.75%	\$931	\$153,277	30
10 Actual	May-23	\$153,277	\$0	\$0	\$153,277	\$153,277	7.75%	\$1,009	\$154,285	31
11 Actual	Jun-23	\$154,285	\$0	\$0	\$154,285	\$154,285	7.75%	\$983	\$155,268	30
12 Actual	Jul-23	\$155,268	\$0	\$0	\$155,268	\$155,268	8.25%	\$1,088	\$156,356	31
13 Estimate	Aug-23	\$156,356	\$0	\$0	\$156,356	\$156,356	8.25%	\$1,096	\$157,452	31
14 Estimate	Sep-23	\$157,452	\$0	\$0	\$157,452	\$157,452	8.25%	\$1,068	\$158,519	30
15 Estimate	Oct-23	\$158,519	\$0	\$0	\$158,519	\$158,519	8.25%	\$1,111	\$159,630	31
16 Estimate	Nov-23	\$159,630	\$0	(\$22,741)	\$182,371	\$171,001	8.25%	\$1,160	\$183,531	30
17 Estimate	Dec-23	\$183,531	\$0	(\$24,852)	\$208,383	\$195,957	8.25%	\$1,373	\$209,756	31
18 Estimate	Jan-24	\$209,756	\$0	(\$27,757)	\$237,512	\$223,634	8.25%	\$1,567	\$239,079	31
19 Estimate	Feb-24	\$239,079	\$0	(\$26,563)	\$265,642	\$252,361	8.25%	\$1,654	\$267,297	29
20 Estimate	Mar-24	\$267,297	\$0	(\$25,784)	\$293,081	\$280,189	8.25%	\$1,963	\$295,044	31
21 Estimate	Apr-24	\$295,044	\$0	(\$23,841)	\$318,886	\$306,965	8.25%	\$2,081	\$320,967	30
22 Estimate	May-24	\$320,967	\$0	\$0	\$320,967	\$320,967	8.25%	\$2,249	\$323,216	31
23 Estimate	Jun-24	\$323,216	\$0	\$0	\$323,216	\$323,216	8.25%	\$2,192	\$325,408	30
24 Estimate	Jul-24	\$325,408	\$0	\$0	\$325,408	\$325,408	8.25%	\$2,280	\$327,688	31
25 Estimate	Aug-24	\$327,688	\$0	\$0	\$327,688	\$327,688	8.25%	\$2,296	\$329,984	31
26 Estimate	Sep-24	\$329,984	\$0	\$0	\$329,984	\$329,984	8.25%	\$2,238	\$332,221	30
27 Estimate	Oct-24	\$332,221	<u>\$0</u>	<u>\$0</u>	\$332,221	\$332,221	8.25%	<u>\$2,328</u>	\$334,549	31
28 Total			\$150,580	(\$151,538)				\$32,431		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**C&I High Load Factor - G-50, G-51, G-52**  
**Off Peak Period - May to October**

Northern Utilities, Inc.  
New Hampshire Division  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$ 18,233	\$0	\$18,233	\$9,116	4.00%	\$31	\$18,263	31
2 Actual	Sep-22	\$18,263	\$ (10,159)	\$0	\$8,105	\$13,184	4.00%	\$43	\$8,148	30
3 Actual	Oct-22	\$8,148	\$ 10,297	\$0	\$18,444	\$13,296	5.50%	\$62	\$18,507	31
4 Actual	Nov-22	\$18,507	\$0	\$0	\$18,507	\$18,507	5.50%	\$84	\$18,590	30
5 Actual	Dec-22	\$18,590	\$0	\$0	\$18,590	\$18,590	5.50%	\$87	\$18,677	31
6 Actual	Jan-23	\$18,677	\$0	\$0	\$18,677	\$18,677	7.00%	\$111	\$18,788	31
7 Actual	Feb-23	\$18,788	\$0	\$0	\$18,788	\$18,788	7.00%	\$101	\$18,889	28
8 Actual	Mar-23	\$18,889	\$0	\$0	\$18,889	\$18,889	7.00%	\$112	\$19,001	31
9 Actual	Apr-23	\$19,001	\$0	\$0	\$19,001	\$19,001	7.75%	\$121	\$19,122	30
10 Actual	May-23	\$19,122	\$ 26,775	\$0	\$45,897	\$32,510	7.75%	\$214	\$46,111	31
11 Actual	Jun-23	\$46,111	\$ (5,406)	\$0	\$40,705	\$43,408	7.75%	\$277	\$40,981	30
12 Actual	Jul-23	\$40,981	\$ (2,149)	\$0	\$38,832	\$39,907	8.25%	\$280	\$39,112	31
13 Estimate	Aug-23	\$39,112	\$0	\$0	\$39,112	\$39,112	8.25%	\$274	\$39,386	31
14 Estimate	Sep-23	\$39,386	\$0	\$0	\$39,386	\$39,386	8.25%	\$267	\$39,653	30
15 Estimate	Oct-23	\$39,653	\$0	\$0	\$39,653	\$39,653	8.25%	\$278	\$39,931	31
16 Estimate	Nov-23	\$39,931	\$0	\$0	\$39,931	\$39,931	8.25%	\$271	\$40,201	30
17 Estimate	Dec-23	\$40,201	\$0	\$0	\$40,201	\$40,201	8.25%	\$282	\$40,483	31
18 Estimate	Jan-24	\$40,483	\$0	\$0	\$40,483	\$40,483	8.25%	\$283	\$40,766	31
19 Estimate	Feb-24	\$40,766	\$0	\$0	\$40,766	\$40,766	8.25%	\$266	\$41,033	29
20 Estimate	Mar-24	\$40,766	\$0	\$0	\$40,766	\$40,766	8.25%	\$285	\$41,051	31
21 Estimate	Apr-24	\$41,051	\$0	\$0	\$41,051	\$41,051	8.25%	\$278	\$41,329	30
22 Estimate	May-24	\$41,329	\$0	(\$7,024)	\$34,304	\$37,816	8.25%	\$264	\$34,569	31
23 Estimate	Jun-24	\$34,569	\$0	(\$6,389)	\$28,180	\$31,374	8.25%	\$212	\$28,392	30
24 Estimate	Jul-24	\$28,392	\$0	(\$6,614)	\$21,779	\$25,085	8.25%	\$175	\$21,954	31
25 Estimate	Aug-24	\$21,954	\$0	(\$6,605)	\$15,349	\$18,651	8.25%	\$130	\$15,479	31
26 Estimate	Sep-24	\$15,479	\$0	(\$6,634)	\$8,845	\$12,162	8.25%	\$82	\$8,927	30
27 Estimate	Oct-24	\$8,927	<u>\$0</u>	<u>(\$6,854)</u>	\$2,074	\$5,500	8.25%	<u>\$38</u>	\$2,112	31
28 Total			\$37,589	(\$40,119)				\$4,908		

**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**C&I Low Load Factor - G-40, G-41, G-42**  
**Peak Period - November to April**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0		\$0	\$0	\$0	4.00%	\$0	\$0	31
2 Actual	Sep-22	\$0		\$0	\$0	\$0	4.00%	\$0	\$0	30
3 Actual	Oct-22	\$0		\$0	\$0	\$0	5.50%	\$0	\$0	31
4 Actual	Nov-22	\$0	\$556,984	\$0	\$556,984	\$278,492	5.50%	\$1,259	\$558,243	30
5 Actual	Dec-22	\$558,243	(\$661,315)	\$0	(\$103,072)	\$227,586	5.50%	\$1,063	(\$102,009)	31
6 Actual	Jan-23	(\$102,009)	(\$184,237)	\$0	(\$286,246)	(\$194,127)	7.00%	(\$1,154)	(\$287,400)	31
7 Actual	Feb-23	(\$287,400)	(\$152,651)	\$0	(\$440,050)	(\$363,725)	7.00%	(\$1,953)	(\$442,003)	28
8 Actual	Mar-23	(\$442,003)	(\$26,918)	\$0	(\$468,921)	(\$455,462)	7.00%	(\$2,708)	(\$471,629)	31
9 Actual	Apr-23	(\$471,629)	(\$219,860)	\$0	(\$691,489)	(\$581,559)	7.75%	(\$3,704)	(\$695,193)	30
10 Actual	May-23	(\$695,193)		\$0	(\$695,193)	(\$695,193)	7.75%	(\$4,576)	(\$699,769)	31
11 Actual	Jun-23	(\$699,769)		\$0	(\$699,769)	(\$699,769)	7.75%	(\$4,457)	(\$704,227)	30
12 Actual	Jul-23	(\$704,227)		\$0	(\$704,227)	(\$704,227)	8.25%	(\$4,934)	(\$709,161)	31
13 Estimate	Aug-23	(\$709,161)		\$0	(\$709,161)	(\$709,161)	8.25%	(\$4,969)	(\$714,130)	31
14 Estimate	Sep-23	(\$714,130)		\$0	(\$714,130)	(\$714,130)	8.25%	(\$4,842)	(\$718,972)	30
15 Estimate	Oct-23	(\$718,972)		\$0	(\$718,972)	(\$718,972)	8.25%	(\$5,038)	(\$724,010)	31
16 Estimate	Nov-23	(\$724,010)		\$37,587	(\$761,597)	(\$742,803)	8.25%	(\$5,037)	(\$766,634)	30
17 Estimate	Dec-23	(\$766,634)		\$67,238	(\$833,871)	(\$800,253)	8.25%	(\$5,607)	(\$839,479)	31
18 Estimate	Jan-24	(\$839,479)		\$89,981	(\$929,459)	(\$884,469)	8.25%	(\$6,180)	(\$935,640)	31
19 Estimate	Feb-24	(\$935,640)		\$90,014	(\$1,025,654)	(\$980,647)	8.25%	(\$6,410)	(\$1,032,064)	29
19 Estimate	Mar-24	(\$935,640)		\$76,752	(\$1,012,392)	(\$974,016)	8.25%	(\$6,806)	(\$1,019,198)	31
20 Estimate	Apr-24	(\$1,019,198)		\$49,777	(\$1,068,975)	(\$1,044,087)	8.25%	(\$7,060)	(\$1,076,036)	30
21 Estimate	May-24	(\$1,076,036)		\$0	(\$1,076,036)	(\$1,076,036)	8.25%	(\$7,519)	(\$1,083,555)	31
22 Estimate	Jun-24	(\$1,083,555)		\$0	(\$1,083,555)	(\$1,083,555)	8.25%	(\$7,327)	(\$1,090,882)	30
23 Estimate	Jul-24	(\$1,090,882)		\$0	(\$1,090,882)	(\$1,090,882)	8.25%	(\$7,623)	(\$1,098,505)	31
24 Estimate	Aug-24	(\$1,098,505)		\$0	(\$1,098,505)	(\$1,098,505)	8.25%	(\$7,676)	(\$1,106,181)	31
25 Estimate	Sep-24	(\$1,106,181)		\$0	(\$1,106,181)	(\$1,106,181)	8.25%	(\$7,480)	(\$1,113,661)	30
26 Estimate	Oct-24	(\$1,113,661)		\$0	(\$1,113,661)	(\$1,113,661)	8.25%	<u>(\$7,782)</u>	(\$1,121,443)	31
27 Total			(\$687,996)	\$411,349				(\$118,523)		



**Northern Utilities, Inc.**  
**Revenue Decoupling Factor Reconciliation**  
**C&I Low Load Factor - G-40, G-41, G-42**  
**Off Peak Period - May to October**

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	Month	Beginning Balance	Monthly Revenue Variance (MRV)	Monthly Revenue (RDAF) (credit)/charge	Ending Balance before Interest (B + C + D)	Average Monthly Balance ((B + E)/2)	Interest Rate	Computed Interest	Ending Balance inc. Interest (E + H)	# Days in Month
1 Actual	Aug-22	\$0	\$ 62,744	\$0	\$62,744	\$31,372	4.00%	\$107	\$62,851	31
2 Actual	Sep-22	\$62,851	\$ (54,815)	\$0	\$8,036	\$35,443	4.00%	\$117	\$8,153	30
3 Actual	Oct-22	\$8,153	\$ (36,018)	\$0	(\$27,866)	(\$9,857)	5.50%	(\$46)	(\$27,912)	31
4 Actual	Nov-22	(\$27,912)	\$0	\$0	(\$27,912)	(\$27,912)	5.50%	(\$126)	(\$28,038)	30
5 Actual	Dec-22	(\$28,038)	\$0	\$0	(\$28,038)	(\$28,038)	5.50%	(\$131)	(\$28,169)	31
6 Actual	Jan-23	(\$28,169)	\$0	\$0	(\$28,169)	(\$28,169)	7.00%	(\$167)	(\$28,337)	31
7 Actual	Feb-23	(\$28,337)	\$0	\$0	(\$28,337)	(\$28,337)	7.00%	(\$152)	(\$28,489)	28
8 Actual	Mar-23	(\$28,489)	\$0	\$0	(\$28,489)	(\$28,489)	7.00%	(\$169)	(\$28,658)	31
9 Actual	Apr-23	(\$28,658)	\$0	\$0	(\$28,658)	(\$28,658)	7.75%	(\$183)	(\$28,841)	30
10 Actual	May-23	(\$28,841)	\$ 118,658	\$0	\$89,817	\$30,488	7.75%	\$201	\$90,018	31
11 Actual	Jun-23	\$90,018	\$ (81,110)	\$0	\$8,908	\$49,463	7.75%	\$315	\$9,223	30
12 Actual	Jul-23	\$9,223	\$ (13,064)	\$0	(\$3,842)	\$2,690	8.25%	\$19	(\$3,823)	31
13 Estimate	Aug-23	(\$3,823)	\$0	\$0	(\$3,823)	(\$3,823)	8.25%	(\$27)	(\$3,850)	31
14 Estimate	Sep-23	(\$3,850)	\$0	\$0	(\$3,850)	(\$3,850)	8.25%	(\$26)	(\$3,876)	30
15 Estimate	Oct-23	(\$3,876)	\$0	\$0	(\$3,876)	(\$3,876)	8.25%	(\$27)	(\$3,903)	31
16 Estimate	Nov-23	(\$3,903)	\$0	\$0	(\$3,903)	(\$3,903)	8.25%	(\$26)	(\$3,929)	30
17 Estimate	Dec-23	(\$3,929)	\$0	\$0	(\$3,929)	(\$3,929)	8.25%	(\$28)	(\$3,957)	31
18 Estimate	Jan-24	(\$3,957)	\$0	\$0	(\$3,957)	(\$3,957)	8.25%	(\$28)	(\$3,985)	31
19 Estimate	Feb-24	(\$3,985)	\$0	\$0	(\$3,985)	(\$3,985)	8.25%	(\$26)	(\$4,011)	29
20 Estimate	Mar-24	(\$3,985)	\$0	\$0	(\$3,985)	(\$3,985)	8.25%	(\$28)	(\$4,012)	31
21 Estimate	Apr-24	(\$4,012)	\$0	\$0	(\$4,012)	(\$4,012)	8.25%	(\$27)	(\$4,040)	30
22 Estimate	May-24	(\$4,040)	\$0	\$1,296	(\$5,335)	(\$4,688)	8.25%	(\$33)	(\$5,368)	31
23 Estimate	Jun-24	(\$5,368)	\$0	\$627	(\$5,995)	(\$5,682)	8.25%	(\$38)	(\$6,034)	30
24 Estimate	Jul-24	(\$6,034)	\$0	\$427	(\$6,461)	(\$6,247)	8.25%	(\$44)	(\$6,504)	31
25 Estimate	Aug-24	(\$6,504)	\$0	\$427	(\$6,931)	(\$6,718)	8.25%	(\$47)	(\$6,978)	31
26 Estimate	Sep-24	(\$6,978)	\$0	\$542	(\$7,520)	(\$7,249)	8.25%	(\$49)	(\$7,569)	30
27 Estimate	Oct-24	(\$7,569)	<u>\$0</u>	<u>\$820</u>	(\$8,389)	(\$7,979)	8.25%	<u>(\$56)</u>	(\$8,445)	31
28 Total			(\$3,606)	\$4,139				(\$726)		

Northern Utilities, Inc.  
Calculation of the Monthly Revenue Variance & Cap - Peak Period

Northern Utilities, Inc.  
New Hampshire Division  
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Actual Distribution Revenues	Residential			Commercial and Industrial				Total
	R6	R5-R10	G40	G50	G41	G51	G42	
November	63,599	2,772,857	1,049,347	112,869	697,960	157,276	253,813	5,434,867
December	57,379	2,311,208	451,892	87,888	614,651	138,898	172,246	4,171,107
January	71,957	3,510,773	878,418	102,967	851,489	161,630	176,395	6,118,511
February	66,627	3,080,713	852,499	94,966	749,967	146,732	172,431	5,505,741
March	58,334	3,019,889	783,304	107,963	749,363	162,362	168,459	5,410,631
April (includes prorated May)	50,682	1,688,328	586,793	93,525	412,359	128,871	58,354	3,342,555
Total - Peak	\$ 368,576	\$ 16,383,768	\$ 4,602,252	\$ 600,178	\$ 4,075,789	\$ 895,769	\$ 1,001,698	\$ 29,983,413

Actual Customer Counts	Residential			Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42
November	1,278	27,755	5,224	822	690	279	34
December	1,251	27,903	5,285	817	690	280	33
January	1,227	28,030	5,337	809	695	278	36
February	1,245	28,033	5,341	805	698	277	36
March	1,196	28,138	5,356	811	701	278	36
April (includes prorated May)	1,202	28,091	5,358	811	702	278	36

Actual Monthly Revenue Per Customer	Residential			Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42
November	49.76	99.90	200.87	137.31	1,011.54	563.71	8,460.43
December	45.87	82.83	85.50	107.57	890.80	496.07	5,741.53
January	58.64	125.25	164.59	127.28	1,225.16	581.40	6,082.59
February	53.52	109.90	159.61	117.97	1,074.45	529.72	5,945.90
March	48.77	107.32	146.25	133.12	1,068.99	584.04	5,808.93
April (includes prorated May)	42.16	60.10	109.52	115.32	587.41	463.56	2,012.22
Total - Peak	\$ 298.73	\$ 585.31	\$ 866.34	\$ 738.58	\$ 5,858.35	\$ 3,218.50	\$ 34,051.60

Authorized Monthly Revenue Per Customer (DG 21-104)	Residential			Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42
November	46.26	91.96	134.15	115.99	841.30	504.61	5,427.24
December	55.23	132.22	168.98	124.42	1,159.60	569.52	6,897.34
January	57.91	148.33	182.83	127.04	1,278.48	589.36	7,801.39
February	53.38	134.23	170.49	123.47	1,160.86	561.25	7,127.11
March	49.97	116.73	154.74	118.57	1,012.75	543.47	6,529.00
April (includes prorated May)	42.95	77.73	121.80	106.59	684.19	470.36	4,981.99
Total	\$ 305.71	\$ 701.19	\$ 932.98	\$ 716.08	\$ 6,137.19	\$ 3,238.58	\$ 38,764.07

Revenue per Customer Difference Actual - Authorized	Residential			Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42
November	3.50	7.95	66.72	21.32	170.23	59.10	3,033.20
December	(9.36)	(49.39)	(83.48)	(16.85)	(268.80)	(73.46)	(1,155.82)
January	0.73	(23.08)	(18.24)	0.24	(53.32)	(7.96)	(1,718.81)
February	0.13	(24.34)	(10.88)	(5.50)	(86.41)	(31.53)	(1,181.21)
March	(1.20)	(9.40)	(8.49)	14.56	56.24	40.57	(720.06)
April (includes prorated May)	(0.78)	(17.62)	(12.28)	8.73	(96.78)	(6.80)	(2,969.77)

Revenue Difference (Revenue Per Customer Difference * Actual # Customers)	Residential			Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42
November	4,476	220,550	348,527	17,528	117,461	16,489	90,996
December	(11,714)	(1,378,058)	(441,166)	(13,766)	(185,475)	(20,569)	(34,675)
January	895	(646,873)	(97,337)	195	(37,054)	(2,212)	(49,845)
February	168	(682,231)	(58,084)	(4,430)	(60,312)	(8,735)	(34,255)
March	(1,431)	(264,632)	(45,459)	11,807	39,423	11,277	(20,882)
April (includes prorated May)	(943)	(495,058)	(65,794)	7,080	(67,942)	(1,890)	(86,123)
Total	\$ (8,549)	\$ (3,246,301)	\$ (359,312)	\$ 18,413	\$ (193,899)	\$ (5,640)	\$ (134,784)

**Calculation of the Cap by Customer Group**  
Residential Heating - R5, R10  
Residential Non-Heat - R6  
C&I High Load Factor - G-50, G-51, G-52  
C&I Low Load Factor - G-40, G-41, G-43

Actual Distribution Revenues	4.25% cap
\$ 16,383,768	\$696,310
\$ 368,576	\$15,664
\$ 3,551,329	\$150,931
\$ 9,679,739	\$411,389

Northern Utilities, Inc.  
Calculation of the Monthly Revenue Variance & Cap - Off-Peak Period

Northern Utilities, Inc.  
New Hampshire Division  
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Actual/Estimated Distribution Revenues (Actual Aug -Oct 2022, May - Jul 2023; Est Aug-Oct 2023)	Residential				Commercial and Industrial				Total
	R6	R5-R10	G40	G50	G41	G51	G42	G52	
August 2022	\$ 42,215	\$ 914,209	\$ 441,261	\$ 99,885	\$ 228,593	\$ 118,338	\$ 98,219	\$ 185,516	\$ 2,128,236
September	\$ 46,701	\$ 917,565	\$ 426,199	\$ 95,669	\$ 238,890	\$ 117,911	\$ 89,247	\$ 193,298	\$ 2,125,479
October (includes prorated Nov)	\$ 52,862	\$ 1,474,500	\$ 537,592	\$ 94,958	\$ 399,843	\$ 137,598	\$ 81,870	\$ 208,396	\$ 2,987,620
May- 2023	\$ 48,671	\$ 1,564,747	\$ 564,721	\$ 101,305	\$ 413,686	\$ 137,200	\$ 134,707	\$ 209,535	\$ 3,174,572
June	\$ 42,764	\$ 864,918	\$ 434,402	\$ 99,247	\$ 228,384	\$ 116,248	\$ 67,273	\$ 193,790	\$ 2,047,026
July	\$ 43,758	\$ 893,070	\$ 435,117	\$ 99,023	\$ 215,034	\$ 119,659	\$ 64,844	\$ 189,473	\$ 2,059,978
August	\$ 44,650	\$ 924,687	\$ 430,147	\$ 95,317	\$ 221,517	\$ 117,747	\$ 78,369	\$ 196,037	\$ 2,108,471
September	\$ 45,780	\$ 1,144,504	\$ 463,816	\$ 94,626	\$ 264,886	\$ 118,874	\$ 86,529	\$ 211,509	\$ 2,430,523
October	\$ 48,831	\$ 1,683,954	\$ 560,001	\$ 93,126	\$ 386,972	\$ 126,527	\$ 117,474	\$ 216,393	\$ 3,233,278
Total (Aug 22 - Jul 23)	\$ 276,970	\$ 6,629,009	\$ 2,839,292	\$ 590,086	\$ 1,724,430	\$ 746,955	\$ 536,160	\$ 1,180,007	\$ 14,522,910

Actual Customer Counts	Residential				Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42	G52
August 2022	1,320	27,563	4,906	837	671	267	30	34
September	1,335	27,516	5,047	856	673	270	30	34
October	1,325	27,600	5,089	836	691	278	30	34
May- 2023	1,227	28,154	5,197	819	699	278	29	37
June	1,241	27,971	5,207	834	702	279	29	37
July	1,257	27,997	5,167	839	693	279	29	37
August	1,280	28,084	5,091	850	686	278	29	35
September	1,264	28,211	5,095	850	686	278	29	35
October	1,235	28,419	5,244	837	686	278	29	35

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Actual/Estimate Monthly Revenue Per Customer	Residential				Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42	G52
August 2022	\$ 31.98	\$ 33.17	\$ 89.94	\$ 119.34	\$ 340.67	\$ 443.21	\$ 3,273.98	\$ 5,456.36
September	\$ 34.98	\$ 33.35	\$ 84.45	\$ 111.76	\$ 354.96	\$ 436.71	\$ 2,974.90	\$ 5,685.22
October	\$ 39.90	\$ 53.42	\$ 105.64	\$ 113.59	\$ 578.64	\$ 494.96	\$ 2,729.00	\$ 6,129.30
May- 2023	\$ 39.67	\$ 55.58	\$ 108.66	\$ 123.69	\$ 591.83	\$ 493.53	\$ 4,645.06	\$ 5,663.10
June	\$ 34.46	\$ 30.92	\$ 83.43	\$ 119.00	\$ 325.33	\$ 416.66	\$ 2,319.75	\$ 5,237.56
July	\$ 34.81	\$ 31.90	\$ 84.21	\$ 118.03	\$ 310.29	\$ 428.88	\$ 2,235.99	\$ 5,120.90
August	\$ 34.89	\$ 32.93	\$ 84.49	\$ 112.15	\$ 323.02	\$ 423.55	\$ 2,702.37	\$ 5,601.06
September	\$ 36.22	\$ 40.57	\$ 91.04	\$ 111.28	\$ 386.26	\$ 427.60	\$ 2,983.76	\$ 6,043.11
October	\$ 39.55	\$ 59.26	\$ 106.79	\$ 111.26	\$ 564.28	\$ 455.13	\$ 4,050.81	\$ 6,182.64
-	\$ 326.45	\$ 371.09	\$ 838.65	\$ 1,040.09	\$ 3,775.29	\$ 4,020.24	\$ 27,915.63	\$ 51,119.23

Authorized Monthly Revenue Per Customer (DG 21-104)	Residential				Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42	G52
August 2022	\$ 34.05	\$ 32.44	\$ 84.08	\$ 108.68	\$ 318.36	\$ 411.52	\$ 2,641.02	\$ 5,431.42
September	\$ 36.27	\$ 40.58	\$ 91.05	\$ 111.56	\$ 386.39	\$ 428.43	\$ 2,986.26	\$ 6,054.77
October	\$ 39.61	\$ 59.28	\$ 106.81	\$ 111.54	\$ 564.56	\$ 456.07	\$ 4,054.95	\$ 6,194.65
May- 2023	\$ 40.08	\$ 55.02	\$ 102.87	\$ 107.52	\$ 506.97	\$ 458.98	\$ 3,636.48	\$ 5,557.01
June	\$ 36.32	\$ 38.90	\$ 89.45	\$ 108.83	\$ 372.73	\$ 433.83	\$ 2,887.68	\$ 5,483.51
July	\$ 34.65	\$ 31.90	\$ 83.65	\$ 110.39	\$ 314.49	\$ 422.00	\$ 2,685.58	\$ 5,403.99
August	\$ 34.89	\$ 32.93	\$ 84.49	\$ 112.15	\$ 323.02	\$ 423.55	\$ 2,702.37	\$ 5,601.06
September	\$ 36.22	\$ 40.57	\$ 91.04	\$ 111.28	\$ 386.26	\$ 427.60	\$ 2,983.76	\$ 6,043.11
October	\$ 39.55	\$ 59.26	\$ 106.79	\$ 111.26	\$ 564.28	\$ 455.13	\$ 4,050.81	\$ 6,182.64

Revenue per Customer Difference Actual - Authorized	Residential				Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42	G52
August 2022	\$ (2.07)	\$ 0.73	\$ 5.87	\$ 10.66	\$ 22.32	\$ 31.69	\$ 632.96	\$ 24.93
September	\$ (1.29)	\$ (7.24)	\$ (6.60)	\$ 0.20	\$ (31.42)	\$ 8.28	\$ (11.36)	\$ (369.55)
October	\$ 0.28	\$ (5.86)	\$ (1.17)	\$ 2.04	\$ 14.09	\$ 38.89	\$ (1,325.94)	\$ (65.36)
May- 2023	\$ (0.41)	\$ 0.55	\$ 5.79	\$ 16.17	\$ 84.86	\$ 34.55	\$ 1,008.59	\$ 106.09
June	\$ (1.87)	\$ (7.97)	\$ (6.02)	\$ 10.17	\$ (47.40)	\$ (17.16)	\$ (567.93)	\$ (245.95)
July	\$ 0.16	\$ (0.00)	\$ 0.56	\$ 7.63	\$ (4.20)	\$ 6.89	\$ (449.59)	\$ (283.09)
August	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
September	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
October	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Revenue Difference (Revenue Per Customer Difference * Actual # Customers)	Residential				Commercial and Industrial			
	R6	R5-R10	G40	G50	G41	G51	G42	G52
August 2022	\$ (2,728.47)	\$ 20,031.60	\$ 28,780.19	\$ 8,923.60	\$ 14,975.22	\$ 8,461.23	\$ 18,988.78	\$ 847.70
September	\$ (1,716.59)	\$ (99,103.37)	\$ (33,325.23)	\$ 170.77	\$ (21,148.61)	\$ 2,235.02	\$ (340.85)	\$ (12,564.71)
October	\$ 376.03	\$ (161,665.13)	\$ (5,974.57)	\$ 1,708.21	\$ 9,734.39	\$ 10,810.51	\$ (39,778.30)	\$ (2,222.13)
May- 2023	\$ (503.77)	\$ 15,619.73	\$ 30,093.35	\$ 13,244.68	\$ 59,315.13	\$ 9,604.79	\$ 29,249.04	\$ 3,925.28
June	\$ (2,315.12)	\$ (223,042.31)	\$ (31,364.54)	\$ 8,482.53	\$ (33,275.60)	\$ (4,788.83)	\$ (16,469.84)	\$ (9,100.19)
July	\$ 207.16	\$ (136.19)	\$ 2,881.13	\$ 6,403.25	\$ (2,907.52)	\$ 1,922.19	\$ (13,038.04)	\$ (10,474.43)
August	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
September	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
October	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ (6,680.77)	\$ (548,295.67)	\$ (8,909.66)	\$ 38,933.04	\$ 26,693.01	\$ 28,244.91	\$ (21,389.20)	\$ (29,588.48)

#### Calculation of the Cap by Customer Group

Residential Heating - R5, R10

Residential Non-Heat - R6

C&I High Load Factor - G-50, G-51, G-52

C&I Low Load Factor - G-40, G-41, G-43

#### Actual Distribution Revenues

4.25% cap

\$ 6,629,009	\$281,733
\$ 276,970	\$11,771
\$ 2,517,048	\$106,975
\$ 5,099,882	\$216,745

Northern Utilities, Inc.  
Actual Base Revenue & Customer Counts - Residential Service

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
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**Actual Base Revenues**

**Actual Number of Customers**

**Residential Heating, R-5, R-10 - Peak**

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge Revenue	Customer Charge	Actual Number of Customers	
Nov-22	\$731,958	\$2,040,900	\$2,772,857	\$616,169	\$22.20	27,755	<b>27,992 Average Peak Actual No. of Customers (R-5, R-10)</b>
Dec-22	\$2,621,056	(\$309,848)	\$2,311,208	\$619,454	\$22.20	27,903	
Jan-23	\$3,418,561	\$92,212	\$3,510,773	\$622,258	\$22.20	28,030	
Feb-23	\$3,442,844	(\$362,131)	\$3,080,713	\$622,330	\$22.20	28,033	
Mar-23	\$3,193,579	(\$173,690)	\$3,019,889	\$624,666	\$22.20	28,138	
Apr-23	\$2,234,828	(\$161,697)	\$2,073,131	\$623,613	\$22.20	28,091	
May-23	\$740,944	(\$1,125,746)	(\$384,803)				
Total Peak	\$15,642,824	\$1,125,746	\$16,768,571				

**Residential Heating, R-5, R-10 - Off-Peak**

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge Revenue	Customer Charge	Actual Number of Customers	
Aug-22	\$447,368	\$466,841	\$914,209	\$611,899	\$22.20	27,563	<b>27,800 Average Off-peak Actual No. of Customers (R-5, R-10)</b>
Sep-22	\$919,663	(\$2,097)	\$917,565	\$610,861	\$22.20	27,516	
Oct-22	\$1,170,584	\$279,738	\$1,450,322	\$612,712	\$22.20	27,600	
Nov-22	\$768,660	(\$744,482)	\$24,178				
May-23	\$780,812	\$783,935	\$1,564,747	\$625,017	\$22.20	28,154	
Jun-23	\$1,089,692	(\$224,775)	\$864,918	\$620,950	\$22.20	27,971	
Jul-23	\$961,224	(\$68,153)	\$893,070	\$621,526	\$22.20	27,997	
Est Aug-23	\$924,687		\$924,687		\$22.20	28,084	
Est Sep-23	\$1,144,504		\$1,144,504		\$22.20	28,211	
Est Oct-23	\$1,683,954		\$1,683,954		\$22.20	28,419	
Total Off-Peak	\$6,584,873	\$491,007	\$7,075,879				<b>27,896 Peak &amp; Off-peak Average (R-5,R-10)</b>

**Residential Non Heat, R-6 - Peak**

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge Revenue	Customer Charge	Actual Number of Customers	
Nov-22	\$21,113	\$42,485	\$63,599	\$28,367	\$22.20	1,278	<b>1,233 Average Peak Actual No. of Customers (R-6)</b>
Dec-22	\$62,516	(\$5,137)	\$57,379	\$27,782	\$22.20	1,251	
Jan-23	\$71,559	\$398	\$71,957	\$27,239	\$22.20	1,227	
Feb-23	\$73,304	(\$6,678)	\$66,627	\$27,638	\$22.20	1,245	
Mar-23	\$62,089	(\$3,755)	\$58,334	\$26,540	\$22.20	1,196	
Apr-23	\$53,820	\$2,285	\$56,105	\$26,676	\$22.20	1,202	
May-23	\$24,175	(\$29,598)	(\$5,423)				
Total Peak	\$368,576	(\$0)	\$368,576				

**Residential Non-Heat, R-6 - Off-Peak**

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge Revenue	Customer Charge	Actual Number of Customers	
Aug-22	\$20,271	\$21,945	\$42,215	\$29,298	\$22.20	1,320	<b>1,284 Average Off-peak Actual No. of Customers (R-6)</b>
Sep-22	\$45,601	\$1,100	\$46,701	\$29,647	\$22.20	1,335	
Oct-22	\$48,097	\$7,545	\$55,642	\$29,422	\$22.20	1,325	
Nov-22	\$27,809	(\$30,589)	(\$2,780)				
May-23	\$23,903	\$24,767	\$48,671	\$27,239	\$22.20	1,227	
Jun-23	\$44,630	(\$1,866)	\$42,764	\$27,543	\$22.20	1,241	
Jul-23	\$44,121	(\$364)	\$43,758	\$27,909	\$22.20	1,257	
Est Aug-23	\$44,650		\$44,650		\$22.20	1,280	
Est Sep-23	\$45,780		\$45,780		\$22.20	1,264	
Est Oct-23	\$48,831		\$48,831		\$22.20	1,235	
Total Off-Peak	\$251,916	\$22,538	\$274,453				<b>1,259 Peak &amp; Off-peak Average (R-6)</b>

Notes:  
Customer counts in estimated months from Company forecast.  
Estimated revenue equals authorized revenue per customer times forecasted customer counts.

Northern Utilities, Inc.  
Actual Base Revenue & Customer Counts - General Service

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
Attachment SED-1 RDAF  
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## C&amp;I High Load Factor, G-50 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$44,000	\$68,869	\$112,869	\$65,752	\$80.00	822
Dec-22	\$69,150	(\$11,242)	\$57,898	\$65,395	\$80.00	817
Jan-23	\$105,298	(\$2,331)	\$102,967	\$64,755	\$80.00	809
Feb-23	\$105,534	(\$10,567)	\$94,966	\$64,421	\$80.00	805
Mar-23	\$104,131	\$3,833	\$107,963	\$64,915	\$80.00	811
Apr-23	\$68,814	\$7,031	\$103,845	\$64,864	\$80.00	811
May-23	\$45,252	(\$55,572)	\$10,321	\$64,864	\$80.00	811
Total Peak	\$600,178	\$0	\$600,178			

**\$13 Average Peak Actual No. of Customers (G-50)**

## C&amp;I High Load Factor, G-50 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$47,747	\$52,137	\$99,885	\$96,523	\$80.00	837
Sep-22	\$98,188	(\$2,519)	\$95,669	\$86,464	\$80.00	836
Oct-22	\$84,613	\$10,555	\$105,168	\$86,845	\$80.00	836
Nov-22	\$49,983	(\$60,173)	(\$10,210)	\$80.00	\$80.00	837
Dec-22	\$51,476	\$49,829	\$101,305	\$85,541	\$80.00	819
Jan-23	\$98,521	\$7,26	\$105,787	\$86,699	\$80.00	834
Feb-23	\$99,005	\$18	\$99,023	\$87,139	\$80.00	839
Mar-23	\$95,317		\$95,317	\$80.00	\$80.00	850
Apr-23	\$84,626		\$84,626	\$80.00	\$80.00	850
May-23	\$93,126		\$93,126	\$80.00	\$80.00	837
Total Off-Peak	\$532,071	\$50,573	\$582,644			

**\$37 Average Off-peak Actual No. of Customers (G-50)**

## C&amp;I Low Load Factor, G-40 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$287,147	\$782,200	\$1,069,347	\$417,828	\$80.00	5,224
Dec-22	\$742,601	(\$290,709)	\$451,892	\$422,816	\$80.00	5,285
Jan-23	\$893,516	(\$15,099)	\$878,418	\$831,781	\$80.00	5,337
Feb-23	\$933,916	(\$80,516)	\$853,400	\$837,299	\$80.00	5,341
Mar-23	\$841,688	(\$58,384)	\$783,304	\$780,486	\$80.00	5,356
Apr-23	\$675,607	(\$1,268)	\$674,339	\$628,672	\$80.00	5,358
May-23	\$588,477	(\$330,223)	\$258,254	\$587,563	\$80.00	5,358
Total Peak	\$4,353,575	\$336,223	\$4,689,798			

**\$317 Average Peak Actual No. of Customers (G-40)**

## C&amp;I Low Load Factor, G-40 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$213,127	\$228,134	\$441,261	\$392,498	\$80.00	4,906
Sep-22	\$434,574	(\$8,475)	\$426,099	\$403,757	\$80.00	5,047
Oct-22	\$475,431	\$82,711	\$558,142	\$407,717	\$80.00	5,089
Nov-22	\$281,620	(\$302,370)	(\$20,750)	\$415,789	\$80.00	5,197
Dec-22	\$388,198	\$276,555	\$664,753	\$415,789	\$80.00	5,197
Jan-23	\$489,857	(\$35,455)	\$454,402	\$416,597	\$80.00	5,207
Feb-23	\$447,585	(\$12,488)	\$435,097	\$413,367	\$80.00	5,167
Mar-23	\$430,147		\$430,147	\$80.00	\$80.00	5,091
Apr-23	\$463,816		\$463,816	\$80.00	\$80.00	5,095
May-23	\$560,001		\$560,001	\$80.00	\$80.00	5,244
Total Off-Peak	\$2,659,572	\$228,033	\$2,887,605			

**\$162 Average Off-peak Actual No. of Customers (G-40)**

## C&amp;I High Load Factor, G-51 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$61,725	\$95,551	\$157,276	\$92,708	\$225.00	279
Dec-22	\$148,688	(\$9,800)	\$138,888	\$63,068	\$225.00	280
Jan-23	\$162,185	(\$556)	\$161,630	\$62,648	\$225.00	278
Feb-23	\$162,908	(\$16,176)	\$146,732	\$62,363	\$225.00	277
Mar-23	\$158,079	\$4,283	\$162,362	\$62,550	\$225.00	278
Apr-23	\$135,289	\$6,371	\$141,660	\$62,550	\$225.00	278
May-23	\$62,883	(\$78,673)	(\$15,790)	\$62,550	\$225.00	278
Total Peak	\$895,769	\$0	\$895,769			

**278 Average Peak Actual No. of Customers (G-51)**

## C&amp;I High Load Factor, G-51 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$57,803	\$60,535	\$118,338	\$60,050	\$225.00	267
Sep-22	\$118,542	(\$631)	\$117,911	\$60,638	\$225.00	270
Oct-22	\$126,773	\$20,722	\$147,495	\$62,648	\$225.00	278
Nov-22	\$70,730	(\$80,027)	(\$9,297)	\$62.00	\$225.00	278
Dec-22	\$66,172	\$68,028	\$134,200	\$62,550	\$225.00	278
Jan-23	\$121,785	(\$5,536)	\$116,248	\$62,768	\$225.00	279
Feb-23	\$120,565	(\$906)	\$119,659	\$62,060	\$225.00	279
Mar-23	\$117,747		\$117,747	\$62.00	\$225.00	278
Apr-23	\$118,874		\$118,874	\$225.00	\$225.00	278
May-23	\$126,527		\$126,527	\$225.00	\$225.00	278
Total Off-Peak	\$674,689	\$61,586	\$736,276			

**275 Average Off-peak Actual No. of Customers (G-51)**

## C&amp;I Low Load Factor, G-41 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$227,872	\$470,289	\$698,160	\$155,205	\$225.00	690
Dec-22	\$662,365	(\$47,734)	\$614,631	\$155,325	\$225.00	690
Jan-23	\$831,781	\$19,708	\$851,489	\$156,265	\$225.00	695
Feb-23	\$837,090	(\$87,123)	\$750,967	\$157,118	\$225.00	696
Mar-23	\$780,486	(\$31,134)	\$749,352	\$157,073	\$225.00	701
Apr-23	\$557,507	(\$35,362)	\$522,145	\$157,073	\$225.00	702
May-23	\$128,856	(\$268,423)	(\$139,567)	\$156,265	\$225.00	702
Total Peak	\$3,896,931	\$288,423	\$4,185,354			

**696 Average Peak Actual No. of Customers (G-41)**

## C&amp;I Low Load Factor, G-41 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$113,081	\$113,512	\$226,593	\$150,966	\$225.00	671
Sep-22	\$234,101	\$4,789	\$238,890	\$151,463	\$225.00	673
Oct-22	\$326,146	\$86,125	\$412,271	\$155,475	\$225.00	691
Nov-22	\$191,998	(\$207,426)	(\$15,428)	\$157.00	\$225.00	699
Dec-22	\$212,221	\$201,465	\$413,686	\$157,163	\$225.00	699
Jan-23	\$284,078	(\$55,884)	\$228,194	\$157,880	\$225.00	702
Feb-23	\$238,815	(\$23,781)	\$215,034	\$155,943	\$225.00	693
Mar-23	\$221,517		\$221,517	\$225.00	\$225.00	696
Apr-23	\$264,886		\$264,886	\$225.00	\$225.00	696
May-23	\$386,972		\$386,972	\$225.00	\$225.00	696
Total Off-Peak	\$1,608,489	\$121,990	\$1,730,479			

**688 Average Off-peak Actual No. of Customers (G-41)**

## C&amp;I High Load Factor, G-52 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$327,145	\$0	\$327,145	\$0	\$327,145	34
Dec-22	\$336,947	\$0	\$336,947	\$44,550	\$1,350.00	33
Jan-23	\$364,883	\$0	\$364,883	\$48,650	\$1,350.00	35
Feb-23	\$341,805	\$0	\$341,805	\$48,915	\$1,350.00	37
Mar-23	\$360,958	\$0	\$360,958	\$48,600	\$1,350.00	36
Apr-23	\$317,458	\$0	\$317,458	\$48,600	\$1,350.00	36
May-23	\$6,186	\$0	\$6,186	\$48,600	\$1,350.00	36
Total Peak	\$2,055,382	\$0	\$2,055,382			

**35 Average Peak Actual No. of Customers (G-52)**

## C&amp;I High Load Factor, G-52 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$185,516	\$0	\$185,516	\$45,880	\$1,350.00	34
Sep-22	\$193,298	\$0	\$193,298	\$45,900	\$1,350.00	34
Oct-22	\$205,901	\$0	\$205,901	\$45,900	\$1,350.00	34
Nov-22	\$2,495	\$0	\$2,495	\$0	\$1,350.00	37
Dec-22	\$209,535	\$0	\$209,535	\$49,365	\$1,350.00	37
Jan-23	\$193,780	\$0	\$193,780	\$49,650	\$1,350.00	37
Feb-23	\$189,473	\$0	\$189,473	\$49,950	\$1,350.00	37
Mar-23	\$196,037	\$0	\$196,037	\$1,350.00	\$1,350.00	35
Apr-23	\$211,509	\$0	\$211,509	\$1,350.00	\$1,350.00	35
May-23	\$216,393	\$0	\$216,393	\$1,350.00	\$1,350.00	35
Total Off-Peak	\$1,216,736	\$0	\$1,216,736			

**36 Average Off-peak Actual No. of Customers (G-52)**

## C&amp;I Low Load Factor, G-42 - Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Nov-22	\$124,530	\$125,263	\$249,793	\$40,800	\$1,350.00	30
Dec-22	\$186,587	(\$14,341)	\$172,246	\$40,500	\$1,350.00	30
Jan-23	\$190,275	(\$13,880)	\$176,395	\$39,150	\$1,350.00	29
Feb-23	\$192,034	(\$19,603)	\$172,431	\$39,150	\$1,350.00	29
Mar-23	\$176,202	(\$7,743)	\$168,459	\$39,150	\$1,350.00	29
Apr-23	\$119,547	(\$12,429)	\$107,118	\$39,510	\$1,350.00	29
May-23	\$2,254	(\$61,262)	(\$59,008)	\$0	\$1,350.00	29
Total Peak	\$989,175	\$61,287	\$1,050,462			

**29 Average Peak Actual No. of Customers (G-42)**

## C&amp;I Low Load Factor, G-42 - Off-Peak

	Actual Billed Base Revenues	Net Unbilled Revenues	Total Actual Base Revenues	Actual Customer Charge	Customer Charge	Actual Number of Customers
Aug-22	\$59,496	\$38,723	\$98,219	\$40,417	\$1,350.00	30
Sep-22	\$85,011	\$4,236	\$89,247	\$40,500	\$1,350.00	30
Oct-22	\$107,958	\$25,701	\$133,659	\$40,725	\$1,350.00	30
Nov-22	\$16,872	(\$58,660)	(\$41,788)	\$38,790	\$1,350.00	29
Dec-22	\$84,645	\$20,058	\$104,703	\$39,150	\$1,350.00	29
Jan-23	\$77,542	(\$10,269)	\$67,273	\$39,150	\$1,350.00	29
Feb-23	\$69,256	(\$4,413)	\$64,843	\$39,150	\$1,350.00	29
Mar-23	\$78,369		\$78,369	\$39,150	\$1,350.00	29
Apr-23	\$86,529		\$86,529	\$39,150	\$1,350.00	29
May-23	\$117,474		\$117,474	\$39,150	\$1,350.00	29
Total Off-Peak	\$513,818	\$35,377	\$549,195			

**38 Average Off-peak Actual No. of Customers (G-42)**

Notes:  
Customer counts in estimated months from Company forecast.  
Estimated revenue equals authorized revenue per customer times forecasted customer counts.

Northern Utilities, Inc.  
Revenue Decoupling Adjustment Factor Revenue

Northern Utilities, Inc.  
New Hampshire Division  
DG 23-XXX RDAF Filing  
Attachment SED-1 RDAF  
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**Residential Heating, R-5, R-10 - Peak**

	Therms	RDAF \$/therm	RDAF Revenue
Nov-23 Estimate	1,279,752	\$0.0434	\$55,541
Dec-23 Estimate	2,602,092	\$0.0434	\$112,931
Jan-24 Estimate	3,542,517	\$0.0434	\$153,745
Feb-24 Estimate	3,594,997	\$0.0434	\$156,023
Mar-24 Estimate	3,048,778	\$0.0434	\$132,317
Apr-24 Estimate	<u>1,984,190</u>	\$0.0434	<u>\$86,114</u>
Total Peak	16,052,326		\$696,671

**Residential Heating, R-5, R-10 - Off-Peak**

	Therms	RDAF \$/therm	RDAF Revenue
May-24 Estimate	1,055,717	\$0.1071	\$113,067
Jun-24 Estimate	451,217	\$0.1071	\$48,325
Jul-24 Estimate	217,804	\$0.1071	\$23,327
Aug-24 Estimate	215,717	\$0.1071	\$23,103
Sep-24 Estimate	214,166	\$0.1071	\$22,937
Oct-24 Estimate	<u>476,583</u>	\$0.1071	<u>\$51,042</u>
Total Off-Peak	2,631,203		\$281,802

**Residential Non Heat, R-6 - Peak**

	Therms	RDAF \$/therm	RDAF Revenue
Nov-23 Estimate	16,230	\$0.0588	\$954
Dec-23 Estimate	24,950	\$0.0588	\$1,467
Jan-24 Estimate	30,654	\$0.0588	\$1,802
Feb-24 Estimate	30,979	\$0.0588	\$1,822
Mar-24 Estimate	25,307	\$0.0588	\$1,488
Apr-24 Estimate	<u>20,159</u>	\$0.0588	<u>\$1,185</u>
Total Peak	148,279		\$8,719

**Residential Non-Heat, R-6 - Off-Peak**

	Therms	RDAF \$/therm	RDAF Revenue
May-24 Estimate	16,058	\$0.0933	\$1,498
Jun-24 Estimate	13,013	\$0.0933	\$1,214
Jul-24 Estimate	11,565	\$0.0933	\$1,079
Aug-24 Estimate	11,547	\$0.0933	\$1,077
Sep-24 Estimate	11,401	\$0.0933	\$1,064
Oct-24 Estimate	<u>12,170</u>	\$0.0933	<u>\$1,135</u>
Total Off-Peak	75,754		\$7,068

**C&I High Load Factor, G-50, G-51, G-52 - Peak**

	Therms	RDAF \$/therm	RDAF Revenue
Nov-23 Estimate	2,030,460	(\$0.0112)	(\$22,741)
Dec-23 Estimate	2,218,933	(\$0.0112)	(\$24,852)
Jan-24 Estimate	2,478,261	(\$0.0112)	(\$27,757)
Feb-24 Estimate	2,371,705	(\$0.0112)	(\$26,563)
Mar-24 Estimate	2,302,162	(\$0.0112)	(\$25,784)
Apr-24 Estimate	<u>2,128,696</u>	(\$0.0112)	<u>(\$23,841)</u>
Total Peak	13,530,217		(\$151,538)

**C&I High Load Factor, G-50, G-51, G-52 - Off-Peak**

	Therms	RDAF \$/therm	RDAF Revenue
May-24 Estimate	2,006,877	(\$0.0035)	(\$7,024)
Jun-24 Estimate	1,825,327	(\$0.0035)	(\$6,389)
Jul-24 Estimate	1,889,588	(\$0.0035)	(\$6,614)
Aug-24 Estimate	1,887,246	(\$0.0035)	(\$6,605)
Sep-24 Estimate	1,895,408	(\$0.0035)	(\$6,634)
Oct-24 Estimate	<u>1,958,169</u>	(\$0.0035)	<u>(\$6,854)</u>
Total Off-Peak	11,462,614		(\$40,119)

**C&I Low Load Factor, G-40, G-41, G-42 - Peak**

	Therms	RDAF \$/therm	RDAF Revenue
Nov-23 Estimate	2,224,063	\$0.0169	\$37,587
Dec-23 Estimate	3,978,572	\$0.0169	\$67,238
Jan-24 Estimate	5,324,290	\$0.0169	\$89,981
Feb-24 Estimate	5,326,289	\$0.0169	\$90,014
Mar-24 Estimate	4,541,561	\$0.0169	\$76,752
Apr-24 Estimate	<u>2,945,402</u>	\$0.0169	<u>\$49,777</u>
Total Peak	24,340,176		\$411,349

**C&I Low Load Factor, G-40, G-41, G-42 - Off-Peak**

	Therms	RDAF \$/therm	RDAF Revenue
May-24 Estimate	1,619,935	\$0.0008	\$1,296
Jun-24 Estimate	783,644	\$0.0008	\$627
Jul-24 Estimate	534,012	\$0.0008	\$427
Aug-24 Estimate	533,772	\$0.0008	\$427
Sep-24 Estimate	677,266	\$0.0008	\$542
Oct-24 Estimate	<u>1,024,675</u>	\$0.0008	<u>\$820</u>
Total Off-Peak	5,173,303		\$4,139

State of New Hampshire  
Public Utilities Commission  
Concord  
Report of Proposed Rate Changes (\$000)

DG 21-104  
Settlement Attachment 3  
Page 1 of 1

Northern Utilities, Inc. -- New Hampshire Division

Date Filed: September 17, 2021

Tariff No. 12

Effective Date: October 1, 2021

(A) <u>Class of Service</u>	(B) <u>Effect of Proposed Change</u>	(C) <u>Average Number of Customers</u>	(D) <u>Total Current Revenue</u>	(E) <u>Proposed Distribution Temporary Revenue Changes</u>	(F) <u>Total Revenue Under Proposed Rates</u>	(G) <u>Proposed Change Revenue</u>	(H) <u>Percent Change Revenue</u>
Residential Heating - R5	Increase	26,171	\$35,467	\$1,339	\$36,806	\$1,339	3.8%
Residential Low Income Heating - R10	Increase	644	\$845	\$32	\$876	\$32	3.7%
Residential Non-Heating - R6	Increase	1,277	\$664	\$16	\$680	\$16	2.4%
Subtotal Residential	Increase	28,091	\$36,976	\$1,387	\$38,363	\$1,387	3.8%
Commercial & Industrial Low Annual & High Winter Use G-40	Increase	5,234	\$14,808	\$245	\$15,053	\$245	1.7%
Commercial & Industrial Medium Annual & High Winter Use G-41	Increase	704	\$15,728	\$325	\$16,053	\$325	2.1%
Commercial & Industrial High Annual & High Winter Use G-42	Increase	31	\$5,681	\$133	\$5,813	\$133	2.3%
Commercial & Industrial Low Annual & Low Winter Use G-50	Increase	831	\$1,844	\$33	\$1,877	\$33	1.8%
Commercial & Industrial Medium Annual & Low Winter Use G-51	Increase	267	\$4,091	\$107	\$4,198	\$107	2.6%
Commercial & Industrial High Annual & Low Winter Use G-52	Increase	33	\$11,547	\$369	\$11,916	\$369	3.2%
Subtotal Commercial & Industrial	Increase	7,101	\$53,698	\$1,212	\$54,910	\$1,212	2.3%
Total	Increase	35,192	\$90,674	\$2,598	\$93,272	\$2,598	2.9%

(D) Revenue under previous permanent seasonal rates assuming all customers take Company supplied gas service.

(E) Distribution revenue change reflecting temporary rates.

Totals may differ slightly from other schedules due to rate rounding.

(F) Column D + Column E

(G) Column F - Column D

(H) Column G / Column D

Signed by: *Robert B. Hevert*  
Title: Sr. Vice President

NEW HAMPSHIRE DEPARTMENT OF ENERGY

DG 23-086 (RDAF)

Northern Utilities Inc.' Set One Data Requests to NH Department of Energy

Date Request Received: 12/13/23

Request No. NU 1-2

Date of Response: 12/20/23

Witnesses: Faisal Deen Arif, Gas Director  
Ashraful Alam, Utility Analyst

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**Request:**

**NU 1-2:** Please refer to DOE Technical Statement at 7, Section 4.8.

- a. Please explain and confirm, with supporting illustrative calculations, how “Given the 2.93% overall customer growth and the current RPC structure, the Department notes that, all else being equal, this would create revenue shortfall for the Company and would generate a decoupling ask”

**Response:**

- a. The quoted text from the DOE’s Technical Statement dated December 8, 2023, highlights the importance and the impact of customer growth within the context of the ***Revenue Per Customer (RPC)*** decoupling structure.

As requested by Northern, here’s a simplified, hypothetical, illustrative example (The example assumes a flat RPC and does not include the “cap” / deferral structure as this docket does):

Assume:

- The revenue requirement for *Company A* was determined to be \$20 at the company’s last rate case (in year zero; i.e., Y0)
- The billing determinants showed that there were 10 customers (in Y0)

Then, an RPC decoupling structure would yield:  $\$20/10 \text{ customer} = \$2/\text{customer}$  as the RPC. That is, going forward, Company A would need \$2 from each customer, irrespective of the number of customers it would have in the future (i.e., in Y1, Y2,....)

**No Customer Growth Scenario**

Assume again that in the following year (i.e., Y1):

- The company reported 10 customers (i.e., no growth in customers); and
- The company’s actual revenue was reported to be \$20



Then the RPC decoupling structure would imply that *Company A* has a decoupling revenue ask of:

$$D_1 = \text{All. Rev.}_1 - \text{Act. Rev.}_1 = (\$2 \times 10 \text{ cust.}) - \$20 = \$20 - \$20 = \$0$$

where,  $D_1$ : decoupling revenue ask in Y1

All. Rev.<sub>1</sub>: Allowed Revenue in Y1 = RPC time the number of reported customers in Y1 (in the example, \$20)

Act. Rev.<sub>1</sub>: Reported Actual Revenue in Y1 (in the example, \$20)

### Customer Growth Scenario

Assume again that in Y2:

- The company reported 12 customers (i.e., two more customers were added to Company A's service); and
- The company's actual revenue was reported to be \$20

That is, given the additional two (new) customers and with the same \$2/customer RPC, *Company A's* decoupling revenue ask would now be:

$$D_2 = \text{All. Rev.}_2 - \text{Act. Rev.}_2 = (\$2 \times 12 \text{ cust.}) - \$20 = \$24 - \$20 = \$4$$

where,  $D_2$ : decoupling revenue ask in Y2

All. Rev.<sub>2</sub>: Allowed Revenue in Y2 = RPC time the number of reported customers in Y2 (in the example now, \$24)

Act. Rev.<sub>2</sub>: Reported Actual Revenue in Y2 (in the example, \$20)

That is, with the same RPC of \$2/customer and the same amount of actual (reported) revenue of \$20, but with customer growth (i.e., two more customers in Y2), now a decoupling revenue ask of \$4 would ensue.

NEW HAMPSHIRE DEPARTMENT OF ENERGY

DG 23-086 (RDAF)

Northern Utilities Inc.' Set One Data Requests to NH Department of Energy

Date Request Received: 12/13/23

Request No. NU 1-3

Date of Response: 12/20/23

Witnesses: Faisal Deen Arif, Gas Director  
Ashraful Alam, Utility Analyst

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**Request:**

**NU 1-3:** Please refer to DOE Technical Statement at 3.

- a. Please explain and confirm, with supporting illustrative calculations, how the decoupling ask by the Company would be positive if (1) the number of customers go up over time.

**Response:**

a, Please refer to DOE's response to NU 1-2 for a simplified, hypothetical, illustrative example. (The example assumes a flat RPC and does not include a "cap"/deferral structure as this docket does):

As responded in NU 1-2, a **Revenue Per Customer (RPC)** decoupling structure implies that the Company is allowed to put a decoupling revenue ask for each customer<sup>3</sup>, irrespective of the level of service the marginal customer (i.e., the last added customer) might be subscribing to and/or receiving from the Company<sup>4</sup>. As such, more customers would imply more allowed revenue for the Company. Even with the same level of reported actual revenue but with customer growth, the decoupling ask by the Company would then be positive.

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<sup>3</sup> As was calculated during the original set-up of the decoupling structure (in DG 21-104, Northern's most recent rate case).

<sup>4</sup> That is, the Company would be entitled to the full \$2.00 for the marginal customer irrespective of the nature and extent of service (and the cost thereof) being provided to the newly added customer(s).

NEW HAMPSHIRE DEPARTMENT OF ENERGY

DG 23-086 (RDAF)

Northern Utilities Inc.' Set One Data Requests to NH Department of Energy

Date Request Received: 12/13/23

Request No. NU 1-4

Date of Response: 12/20/23

Witnesses: Faisal Deen Arif, Gas Director  
Ashraful Alam, Utility Analyst

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**Request:**

**NU 1-4:** Please refer to DOE Technical Statement at 6, Section 4.6.

- a. Please provide the location in the Company's filing stating that the Actual Customer Charge Revenue includes estimated components.

**Response:**

- a. In relation to the above statement and for understanding DOE's analysis and statement, please refer to the following citations:
  - i) In Company's original filing, Northern does not state that the Actual Customer Charge Revenue includes estimated components. See Attachment SED-1 RDAF (Tabs: Base Revenue Res & Base Revenue Gen Service) that marks *Actual Customer Charge Revenue* for various rate class groups and identify this revenue component as "Actual" (as opposed to "Estimated").
  - ii) However, during the discovery process Northern:
    - States that the Company has only one set of billing cycles to collect<sup>5</sup> the "Monthly Customer Charge Revenue". See Northern's response to DOE 1-4 (on various billing cycles) and DOE 2-8 (on Actual Customer Charge Revenue).
    - Further states that:

"Northern's monthly unbilled revenue includes estimates for distribution revenue and cost of gas... Northern's billing system cannot identify the actual revenue associated with prior estimates as the billing system only reads once per month at the end of the corresponding bill cycle. The billing system is not setup to read a customer's account more than once per month.

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<sup>5</sup> Within a billing cycle and for a given customer, a typical bill includes may billing components (such as Customer Charge, LDAC revenue, Cost of Gas revenue etc.) These billing components make up a typical bill.

As noted above, Northern does not have the ability to split the monthly billed revenue thus the Company is unable to compare the unbilled revenue from the prior month to billed revenue in the current month.”

See Northern’s response to DOE TS 1-6 and DOE 3-1.

iii) Northern also describes:

- The billing process, where a typical bill includes “Actual Billed Base Revenue” and “Unbilled Revenue”. See Northern response to DOE 2-3.
- That the “Actual Billed Base Revenue” represents actual billings to customers, and it includes Customer Charge and Distribution Revenue. See Northern’s response to DOE 1-5 (illustrating various billing components) and Northern Tariff 12, Section IX, Sub-Section 4.0 (1).

iv) Taken Northern’s responses in entirety, for RDAF matters, DOE understands that what Northern reports to be the Actual Customer Charge Revenue, in effect also includes estimated components.

NEW HAMPSHIRE DEPARTMENT OF ENERGY

DG 23-086 (RDAF)

Northern Utilities Inc.' Set One Data Requests to NH Department of Energy

Date Request Received: 12/13/23  
Request No. NU 1-5

Date of Response: 12/20/23  
Witnesses: Faisal Deen Arif, Gas Director  
Ashraful Alam, Utility Analyst

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**Request:**

**NU 1-5:** Please refer to DOE Technical Statement at 7, Section 5.1.

- a. Please confirm whether the cite to RDAF Tariff Section 5.3 is accurate.
- b. If answer to part a above is "confirmed", please provide a more specific cite, including language regarding the referenced RDAF Tariff Section 5.3
- c. Please provide location in the filing or tariff that supports the statement, "Counting customers by dividing "actual base revenue" (which seems to include estimated components, see Section 5.3) from fixed customer charges collected over a period of time (generally a billing or a calendar month) by applicable customer charge (or rate) for each rate class, and for the same unit of time – this is the method Northern appears to use for its decoupling purposes."

**Response:**

- a. No. DOE wishes to correct the identified tariff section cited. The citation should reflect Northern Tariff 12, Section IX, First Revised [Tariff] Page 163, Sub-Section 4.0 *Definitions*, Definition No. 1.
- b. Not applicable (in light of the response to "a", above).
- c. The reference to the statement was quoted from DOE's analysis in its Technical Statement dated December 8, 2023. The quotation refers to DOE's analytical statement supported by the information provided by Northern through the discovery process and by Northern's Tariff 12. These locations include the following:
  - All references provided in DOE's response to NU 1-4 (which is also submitted as a part of DOE's current overall response to Northern's Data Request, Set 1).
  - See Northern's response to DOE 1-6, and DOE 2-9; and

- Northern's Tariff 12, Section IX, Sub-Section 4.0 (1), and Section IX, Sub-Section 5.0 (i) second paragraph (referencing "actual data" in calculation of RDA/RDAF for all of the Peak period and half of Off-Peak period).