# STATE OF NEW HAMPSHIRE <br> BEFORE THE NEW HAMPSHIRE PUBLIC UTILIITES COMMISSION 

Docket No. DG 23-086<br>Northern Utilities Inc.<br>Petition for Approval of Revenue Decoupling Adjustment Factor [RDAF]

Technical Statement of Faisal Deen Arif, Gas Director \&<br>Ashraful Alam, Utility Analyst<br>Department of Energy, Division of Regulatory Support

December 8, 2023
The New Hampshire Department of Energy ("DOE" or the "Department") submits this technical statement pursuant to the proceedings in the above referenced docket, Docket No. DG 23-086. This statement pertains to the overall claim of $\$ 4,313,259$ (hereafter referred to as $\$ 4.3$ million) for the 2023-24 Revenue Decoupling Adjustment Factor (RDAF) by Northern Utilities, Inc. ("Northern" or "the Company"). This is the first year that the Company has submitted an RDAF claim.

The purpose of this statement is to provide the Public Utilities Commission ("PUC" or the "Commission") with additional information on the Department's ongoing effort in working with the Company to collect required information to be able to perform requisite analysis. In the instant docket, Northern seeks to collected $\$ 1,891,519$ (hereafter referred to as $\$ 1.9$ million) over November 1, 2023-October 31, 2024 (the current "Gas Season") pursuant to Section IX, Subsection 8.0 of its current Tariff 12. Per that specific Tariff stipulation, Northern is allowed to collect four and one-quarter percent (4.25\%) of approved distribution revenues as established in the Company's most recent base rate case in a twelve-month period. The $\$ 1.9$ million is a portion of the $\$ 4.3$ million Northern has identified in this docket as appropriate RDAF recovery.

In light of Northern's current submission, this technical statement provides a summary of relevant facts and the Department's current position on the Company's RDAF ask from Northern's first decoupling year (DY1) period.

This technical statement includes the following sections:

1. Background
2. Summary of Docket Activity
3. The Overall Analytical Framework
4. Relevant Facts - Including DOE Tables 1-3
5. DOE Observations
6. DOE's Current Position

## 1. Background

Northern made the initial submission on September 15, 2023 in the Company's "Petition for Approval of Revenue Decoupling Adjustment Factor." In light of the size, and the significance of the overall claim (i.e., $\$ 4.3$ million), the Department worked with the Company to seek additional time to review the overall claim. See DOE Assented-To Motion (Oct 10, 2023).

The Commission granted the motion. See Procedural Order Re: Company, OCA, and DOE Motions and Cancelling October 23 Hearing (Oct. 13, 2023); Procedural Order Re: Deadline for DOE Position Statement (Oct. 18, 2023). The Commission also approved the Company to collect $\$ 1.9$ million over the 2023/24 Gas Season on an interim basis, pending further review and hearing, and suspended the non-peak RDAF tariff. See Order Nisi No. 26,896 dated October 31, 2023.

This process established the course for additional review. All parties (i.e., the Department; Northern, and the Office of the Consumer Advocate, OCA) met or texted with regard to developing a proposed procedural schedule. See DOE's Partially Assented-To Proposed Procedural Schedule (November 9, 2023); Procedural Order Re: Proposed Amended Procedural Schedule (November 21, 2023).

## 2. Summary of Docket Activities

To-date the Department has issued four sets of Data Requests ("DRs") to the Company. The first on October 2, 2023, and the second on November 8, 2023. The company provided responses to the first two DR sets on October 12, 2023 and November 20, 2023 respectively. See Attachment A and B (Northern's Responses to DOE Set 1 and Set 2, respectively). A technical session was held on November 30, 2023 following which the Department issued Technical Session DR Set 1 requests on December 4, 2023. See Attachment C. Responses to the TS DRs are due December 11, 2023. The Department also issued another information request on December 6, 2023. See Attachment D. The responses to these most recent requests are requested on or around December 18, 2023.

As such, at the time of writing this technical statement, the Department did not have all data responses. However, pursuant to the approved procedural schedule, the current statement is submitted now. The Department requests an opportunity to update this statement if Northern's data responses change the Department's current position. Notwithstanding pending information requests, the current statement makes use of available information and strives to provide analysis on the Northern's current claim.

## 3. The Overall Analytical Framework

Northen's existing RDAF represents a Revenue Per Customer ("RPC") structure, where the Company is entitled to a certain amount for each identified customer. These RPC values for each rate class were developed in Northern's last rate case, Docket No. DG 21-104 using the 2020 Test Year ("TY") billing determinants ${ }^{1}$.

The development of any decoupling revenue target(s), inherently, reflects an average energy consumption behavior by the customers in a given rate class over a given unit of time. In the context of Northern being a regulated gas utility, this would imply that the current RPC per rate class was developed in DG 21-104 by calculating a revenue target for each rate class that was reflective of an average therm consumption ${ }^{2}$ per month by all customers in that rate class.

An RPC decoupling structure, therefore, implies that, for any rate class, if the average therm consumption and the number of customers remain the same over time, the decoupling ask for that rate class would be zero. Put differently, the decoupling ask by Northern would be positive (i.e., the Company is to have a positive decoupling revenue claim, i.e., a claim to recover money, as is the case in the current docket) if:
i) The number of customers go up over time; or
ii) The average therm consumption falls (and consequently the Company is unable to sell as much therms as was anticipated in the TY); or
iii) Both.

This idea formed the basis of the Department's current analytical framework. Additionally, the Department notes that the methodology for counting customers is of primary concern in an RPC setting, which further emphasizes the requirement to ensure, among others, that:
iv) The same data normalization process be adhered to between the Rate Case TY data normalization process and the data from any subsequent RDAF period(s) ${ }^{3}$; and
v) The RPC methodology is supported by putting in place accounting practices that would generate requisite data for an appropriate revenue decoupling calculation ${ }^{4}$.

In its identification of relevant facts to the current case and its analysis, the Department attempted to focus on these aspects, which are elaborated in the following sections.

[^0]
## 4. Relevant Facts ${ }^{5}$

In light of the available information, the Department makes the following observations:
4.1 Northern's overall RDAF ask in DY1 (i.e., August 1, 2022 to October 31, 2023) is $\$ 4,313,259$ (or, $\$ 4.3$ million).

Table 1: Northern's Overall RDAF Ask

|  | RDAF <br> (Aug 2022-Jul 2023) | $\%$ |
| :--- | :---: | :---: |
| Peak | $\$ 3,792,266$ | $87.9 \%$ |
| Off-Peak | $\$ 520,993$ | $12.1 \%$ |
| DY1 Total | $\$ 4,313,259$ | $\mathbf{1 0 0 . 0 \%}$ |

Table 1 provides a distribution of Northern's overall RDAF ask in terms of Peak (spanning November 1 through April 30) and Off-Peak (covering May 1 through October 31) period, which shows $88 \%$ of the Company's overall ask is from the peak period activities.
4.2 In Northern's view, Northern's Tariff 12 stipulates an allowed annual RDAF collection of up to $4.25 \%$ of its approved distribution revenues. See Section IX, Sub-section 8.0. This is referred to as the "Capped RDAF Ask."

Table 2.1: Northern's Capped RDAF Ask

|  | Capped RDAF Ask <br> (Aug 2022 - Jul <br> 2023) | $\%$ |
| :--- | :---: | :---: |
| Peak | $\$ 1,274,295$ | $87.9 \%$ |
| Off-Peak | $\$ 617,224$ | $12.1 \%$ |
| DY1 Total | $\$ 1,891,519$ | $100.0 \%$ |

Table 2.2: Northern's Capped RDAF Ask by Rate Classes and by Periods

|  | Peak |  | Off-Peak |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Distribution <br> Revenue | $\mathbf{4 . 2 5 \%}$ Cap | Distribution <br> Revenue | $\mathbf{4 . 2 5 \%}$ <br> Cap |
| R-5 and R-10 | $16,383,768$ | 696,310 | $6,629,009$ | 281,733 |
| R-6 | 368,576 | 15,664 | 276,970 | 11,771 |
| G-40, G-41, G-42 | $9,679,739$ | 411,389 | $5,099,882$ | 216,745 |
| G-50, G-51, G-52 | $3,551,329$ | 150,931 | $2,517,048$ | 106,975 |
| Total | $\$ 29,983,413$ | $\mathbf{\$ 1 , 2 7 4 , 2 9 5}$ | $\$ 14,522,910$ | $\mathbf{\$ 6 1 7 , 2 2 4}$ |

[^1]Table 2.2 shows Northern's claimed distribution revenues as well as its capped RDAF asks by peak and off-peak periods along with its distribution across the various rate classes. Overall, through submissions in the instant docket DG 23-086, Northern seeks to collect $\$ 1.9$ million of which $88 \%$ (or $\$ 1.3$ million) is to be reconciled in the current, on-going peak period (November 1,2023 till April 30, 2024), and the remaining $12 \%$ (or $\$ 0.6$ million) is to be collected through the upcoming off-peak period (May 1, 2024 through October 31, 2024).

Table 2.3: Northern's Capped RDAF Ask and its Distribution by Rate Classes

|  | Peak |  | Off-Peak |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{\$}$ | $\mathbf{\%}$ | $\mathbf{\$}$ | $\boldsymbol{\%}$ |
| R-5 and R-10 | 696,310 | $54.6 \%$ | 281,733 | $45.6 \%$ |
| R-6 | 15,664 | $1.2 \%$ | 11,771 | $1.9 \%$ |
| G-40, G-41, G-42 | 411,389 | $32.3 \%$ | 216,745 | $35.1 \%$ |
| G-50, G-51, G-52 | 150,931 | $11.8 \%$ | 106,975 | $17.3 \%$ |
| Total | $\mathbf{\$ 1 , 2 7 4 , 2 9 5}$ | $100.0 \%$ | $\mathbf{\$ 6 1 7 , 2 2 4}$ | $100.0 \%$ |

Table 2.3 shows the distribution of Northern's capped RDAD ask from DY1 across the rate classes. As evident, for both peak and off-peak periods, half of the Company's ask befalls the residential sector, in particular to the R-5 and R-10 classes (i.e., the residential heating customers). Data also show that over $30 \%$ of RDAF ask are due to the C\&I customers with High Winter use.
4.3 Northern's Tariff 12 defines any given decoupling year (DY) from August through following July (i.e., the "Measurement Period", See Northern Tariff 12, Section IX, Sub-section 4.0 (9)). The current claim, being the first RDAF ask by the Company, however spans August 1, 2022 through October 31, 2023 (i.e., a total of 15 months). The future Measurement Periods are to be aligned with six-month tranches beginning November 1 (for Peak periods) and May 1 (for Off-Peak periods) of each year.
4.4 Tariff 12 also defines "Adjustment Period" of six-month tranches, beginning November 1, 2023 (for Peak periods) and May 1, 2024 (for Off-Peak periods), in which the Company is to reconcile its RDAF collections. See Northern Tariff 12, Section IX, Sub-section 4.0 (4).
4.5 While the Tariff refers to "equivalent bills" (See Northern Tariff 12, Section IX, Sub-section 4.0 (4)), the tariff does not define the concept or supply a formula. The Department notes that "equivalent bills" is an important concept that plays significant practical roles in determining customer counts. In the context of Northern's current Revenue Per Customer ("RPC") decoupling structure, the customer count is used to identify total allowed revenue for each class. The sum over all classes then generates the overall RDAF ask for the Company.
4.6 Based on Northern's submission, it appears that the Company counts customers by dividing the "Actual Customer Charge Revenue" by the Fixed Customer Charge for each rate class, and for each month. The "Actual Customer Charge Revenue" includes estimated components.

Table 3: Customer Count and Growth

|  | $\begin{aligned} & \hline \text { TY Customer } \\ & \text { Count } \\ & \text { (in DG 21-104) } \end{aligned}$ | RDAF DY1 <br> Customer Count (in DG 23-086) | Change | \% Change |
| :---: | :---: | :---: | :---: | :---: |
| R-5 \& R-10: Residential Heating | 26,815 | 27,896 | 1,081 | 4.03\% |
| R-5: Residential Heating | 26,171 |  |  |  |
| R-10: Residential LowIncome Heating | 644 |  |  |  |
| R6: Residential Non-Heating | 1,277 | 1,259 | (18) | -1.41\% |
| Subtotal: Residential | 28,091 | 29,155 | 1,063 | 3.78\% |
|  |  |  |  |  |
| 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\% |
| Subtotal: C\&I | 7,101 | 7,068 | (33) | -0.46\% |
| Total | 35,192 | 36,222 | 1,030 | 2.93\% |

4.7 As evident in Table 3, the Department notes that, relative to Northern's last rate case (DG 21-104), in the first decoupling year ("DY1") Northern reports a $2.93 \%$ customer growth (or approximately 1,030 new customers on average). While 1,063 new customers are added to the residential sector, the C\&I sector seemed to have lost approximately 33 customers.

In the residential sector, rate class R-5 (i.e., the regular residential heating customers) and R10 (i.e., the low-income residential heating customers) together register a growth of 4.03\% while the R-6 class (i.e., the non-heating residential customers) show a decline by $1.41 \%$. In the C\&I sector, customer growth is reported for only G-51 and G-52 rate classes; whereas G$40, \mathrm{G}-41, \mathrm{G}-42$ and G-50 rate classes have reportedly lost customers.
4.8 Customer Growth: 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.
4.9 Usage Per Customer (UPC): The Department notes that, per Northern's assertion, there has been significant decline in actual usage of therms in the residential sector while the C\&I sector exhibits an increase in overall therm usage. See Northern's response to DOE 1-9 Attachment 1.

## 5. DOE Observations

### 5.1 Customer Count Methodology

Given that the customer count is an important variable in an RPC decoupling structure, based on the review of current case, the Department notes that such a count could potentially be performed in four different ways (whether or not practical to do so in the manner listed):

- Physical bill counts (i.e., counting the number of bills issued in a given calendar month);
- Physical meter counts (i.e., counting the number of meters being read in a given calendar month);
- Equivalent Bill (EB) count, which is the ratio of days a customer is served in a given calendar month to the total number of days in that month ${ }^{6}$; or
- 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.

The Department notes that each of these four methods has its benefits and drawbacks. As such, to avoid any potential bias in counting, it is important to choose the appropriate method that avoids incongruity and/or methodological inconsistencies between the RDAF design and the Company's accounting practices.

### 5.2 Data Normalization Process

The Department notes that, when Northern sets up the class revenue targets, the Test Year ("TY") data generally go through a series of normalization process. These include, among others, weather normalization, calendarization, and other adjustments ${ }^{7}$. As such, for an unbiased calculation and verification of RDAF claims, similarly normalized data should be

[^2]produced in the subsequent RDAF periods. In the absence of such data, the verification could suffer from biases that the RDAF structure may not have anticipated in its original conception ${ }^{8}$.

### 5.3 Utility Accounting Practices

Through its review of RDAF data, the Department notes that, what is labeled and treated as "actual" monthly revenue for any given month generally includes estimates in significant portion. See Northern's original filing: Attachment SED-1 RDAF, Excel Tab titled "Base Revenue Res" and "Base Revenue Gen Service". This phenomenon occurs due to the timing misalignment between the billing cycle months (that generally overlap between two consecutive months) with that of the calendar months (which is required by the current monthly RDAF reconciliation process) ${ }^{9}$. The following Figure 1 provides a representation of this phenomenon.

Figure 1: Billing Cycles versus Calendar Months


Northern states it accounts for this through a month-over-month unbilled corner adjustment process, where an accrual accounting is put in place. That is, the total unbilled revenue, say for January, is subtracted from the accrued total unbilled revenue of February to account for the unbilled revenue activities in February. In other words, the adjustment to the unbilled corner is done on the net between the consecutive months. Yet, in contrast, the current monthly revenue decoupling structure appears to require an overall replacement of the "estimated" revenues for any given month with the "actual" revenues that comes through the doors in the following month. See Northern Tariff 12, Section IX, Sub-section 5.0, $2^{\text {nd }}$ Paragraph. In the

[^3]absence of doing so, the reported monthly decoupling ask could be biased, which could further be accentuated by the carrying charges.

## 6. DOE's Current Position

Based on the foregoing discussion and based on the available information at the time of writing this statement, the Department's current position and recommendation is that the Commission review and continue its conditional approval of Northern's capped RDAF claim of $\$ 1.9$ million from DY1 period, subject to:

- the pending discoveries from Northen; and
- future updated filing to be submitted by the Department upon review of those pending information.

Northern Utilities, Inc. DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 1
Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-1 (RDAF):

Reference: DG 23-086 RDAF Filing, Attachment SED-1 RDAF; and Prefiled Testimony of S. Elena Demeris (Testimony), Lines 1-2, pg. 5 of 7. Please provide all live Excel worksheets for Attachment for SED-1.

## Response:

Please see DOE 1-1 Attachment 1 for the requested information. These materials were also provided via email on October 4, 2023.

Person Responsible: S E Demeris

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

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

|  | 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, ᄃ(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 | Peak RDAF Rate (\$/therm) | \$0.0434 | \$0.0588 | (\$0.0112) | \$0.0169 | -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 | $\begin{aligned} & \text { C\&I Low Load Factor } \\ & \text { G-40, G-41, G-42 } \end{aligned}$ |  |
| 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, 工(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 | Off Peak RDAF Rate (\$/therm) | \$0.1071 | \$0.0933 | (\$0.0035) | \$0.0008 | -1*(L. 8 / L. 9) |

Docket DG 23-086
NH DOE Tech Statement / Arif
Attachment A

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 <br> Revenue <br> Variance <br> (MRV) | Monthly <br> Revenue <br> (RDAF) <br> (credit)/charge | Ending Balance before Interest $(B+C+D)$ | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Computed Interest | Ending Balance inc. Interest $(\mathrm{E}+\mathrm{H})$ | \# 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\% | (\$29,726) | (\$4,283,714) | 31 |
| 27 Total |  |  | (\$3,246,301) | \$696,671 |  |  |  | $(\$ 522,358)$ |  |  |

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

Northern Utilities, Inc
New Hampshire Division DG 23-XXX RDAF Filing Attachment SED-1 RDA


Docket DG 23-086
NH DOE Tech Statement / Arif
Attachment A

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 Attachment SED-1 RDAF

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|  | (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (1) | (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 | Compute <br> d Interest | Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 | $(\$ 18,989)$ | \$0 | \$0 | $(\$ 18,989)$ | $(\$ 18,989)$ | 8.25\% | (\$133) | $(\$ 19,122)$ | 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 Attachment SED-1 RDAF

|  | (A) | (B) |  | (C) | (D) | (E) | (F) | (G) | (H) | (1) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance |  | Monthly <br> Revenue <br> Variance <br> (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 ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 | $(\$ 6,970)$ |  | \$0 | \$0 | $(\$ 6,970)$ | $(\$ 6,970)$ | 8.25\% | (\$49) | $(\$ 7,019)$ | 31 |
| 14 Estimate | Sep-23 | $(\$ 7,019)$ |  | \$0 | \$0 | $(\$ 7,019)$ | $(\$ 7,019)$ | 8.25\% | (\$48) | $(\$ 7,067)$ | 30 |
| 15 Estimate | Oct-23 | $(\$ 7,067)$ |  | \$0 | \$0 | $(\$ 7,067)$ | $(\$ 7,067)$ | 8.25\% | (\$50) | $(\$ 7,116)$ | 31 |
| 16 Estimate | Nov-23 | $(\$ 7,116)$ |  | \$0 | \$0 | $(\$ 7,116)$ | $(\$ 7,116)$ | 8.25\% | (\$48) | $(\$ 7,165)$ | 30 |
| 17 Estimate | Dec-23 | $(\$ 7,165)$ |  | \$0 | \$0 | $(\$ 7,165)$ | $(\$ 7,165)$ | 8.25\% | (\$50) | $(\$ 7,215)$ | 31 |
| 18 Estimate | Jan-24 | $(\$ 7,215)$ |  | \$0 | \$0 | $(\$ 7,215)$ | $(\$ 7,215)$ | 8.25\% | (\$50) | $(\$ 7,265)$ | 31 |
| 19 Estimate | Feb-24 | $(\$ 7,265)$ |  | \$0 | \$0 | $(\$ 7,265)$ | $(\$ 7,265)$ | 8.25\% | (\$47) | $(\$ 7,313)$ | 29 |
| 20 Estimate | Mar-24 | $(\$ 7,265)$ |  | \$0 | \$0 | $(\$ 7,265)$ | $(\$ 7,265)$ | 8.25\% | (\$51) | $(\$ 7,316)$ | 31 |
| 21 Estimate | Apr-24 | $(\$ 7,316)$ |  | \$0 | \$0 | $(\$ 7,316)$ | $(\$ 7,316)$ | 8.25\% | (\$49) | $(\$ 7,365)$ | 30 |
| 22 Estimate | May-24 | $(\$ 7,365)$ |  | \$0 | \$1,498 | $(\$ 8,864)$ | $(\$ 8,115)$ | 8.25\% | (\$57) | $(\$ 8,920)$ | 31 |
| 23 Estimate | Jun-24 | $(\$ 8,920)$ |  | \$0 | \$1,214 | $(\$ 10,134)$ | $(\$ 9,527)$ | 8.25\% | (\$64) | $(\$ 10,199)$ | 30 |
| 24 Estimate | Jul-24 | $(\$ 10,199)$ |  | \$0 | \$1,079 | (\$11,278) | $(\$ 10,738)$ | 8.25\% | (\$75) | $(\$ 11,353)$ | 31 |
| 25 Estimate | Aug-24 | $(\$ 11,353)$ |  | \$0 | \$1,077 | $(\$ 12,430)$ | $(\$ 11,892)$ | 8.25\% | (\$83) | $(\$ 12,513)$ | 31 |
| 26 Estimate | Sep-24 | $(\$ 12,513)$ |  | \$0 | \$1,064 | $(\$ 13,577)$ | $(\$ 13,045)$ | 8.25\% | (\$88) | $(\$ 13,665)$ | 30 |
| 27 Estimate | Oct-24 | $(\$ 13,665)$ |  | \$0 | \$1,135 | $(\$ 14,801)$ | $(\$ 14,233)$ | 8.25\% | (\$99) | (\$14,900) | 31 |
| 28 Total |  |  |  | $(\$ 6,681)$ | \$7,068 |  |  |  | $(\$ 1,199)$ |  |  |

Docket DG 23-086
NH DOE Tech Statement / Arif Attachment A

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 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 <br> Revenue (RDAF) <br> (credit)/charge | Ending Balance before Interest ( $B+C+D$ ) | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Computed Interest | Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 | \$0 | \$0 | \$332,221 | \$332,221 | 8.25\% | \$2,328 | \$334,549 | 31 |
| 28 Total |  |  | \$150,580 | $(\$ 151,538)$ |  |  |  | \$32,431 |  |  |

Docket DG 23-086
NH DOE Tech Statement / Arif
Attachment A

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 DG 23-XXX RDAF Filing Attachment SED-1 RDAF

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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 Attachment SED-1 RDAF

|  | (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance | Monthly <br> Revenue Variance (MRV) | Monthly Revenue (RDAF) (credit)/charge | Ending Balance before Interest ( $B+C+D$ ) | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Compute d Interest | Ending Balance inc. Interest $(\mathrm{E}+\mathrm{H})$ | \# 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\% | (\$7,782) | (\$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 Attachment SED-1 RDAF

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|  | (A) | (B) |  | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance |  | Monthly <br> Revenue <br> Variance <br> (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 $(\mathrm{E}+\mathrm{H})$ | \# 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 | $(\$ 7,569)$ |  | \$0 | \$820 | $(\$ 8,389)$ | $(\$ 7,979)$ | 8.25\% | (\$56) | $(\$ 8,445)$ | 31 |
| 28 Total |  |  |  | $(\$ 3,606)$ | \$4,139 |  |  |  | (\$726) |  |  |

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

| Actual Distribution Revenues | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  | R5-R10 |  |  |  | G41 |  | G51 |  |  |  |  |  |  |
| November |  | 63,599 |  | 2,772,857 |  | 1,049,347 |  |  |  | 112,869 |  | 697,960 |  | 157,276 |  | 253,813 |  | 327,145 |  | 5,434,867 |
| December |  | 57,379 |  | 2,311,208 |  | 451,892 |  | 87,888 |  | 614,651 |  | 138,898 |  | 172,246 |  | 336,947 |  | 4,171,107 |
| January |  | 71,957 |  | 3,510,773 |  | 878,418 |  | 102,967 |  | 851,489 |  | 161,630 |  | 176,395 |  | 364,883 |  | 6,118,511 |
| February |  | 66,627 |  | 3,080,713 |  | 852,499 |  | 94,966 |  | 749,967 |  | 146,732 |  | 172,431 |  | 341,805 |  | 5,505,741 |
| March |  | 58,334 |  | 3,019,889 |  | 783,304 |  | 107,963 |  | 749,363 |  | 162,362 |  | 168,459 |  | 360,958 |  | 5,410,631 |
| April (includes prorated May) |  | 50,682 |  | 1,688,328 |  | 586,793 |  | 93,525 |  | 412,359 |  | 128,871 |  | 58,354 |  | 323,643 |  | 3,342,555 |
| Total - Peak | \$ | 368,576 | \$ | 16,383,768 | \$ | 4,602,252 | \$ | 600,178 | \$ | 4,075,789 | \$ | 895,769 | \$ | 1,001,698 | \$ | 2,055,382 | \$ | 29,983,413 |


| Actual Customer Counts | Residential |  | Commercial and Industrial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |
| November | 1,278 | 27,755 | 5,224 | 822 | 690 | 279 | 30 | 34 |
| December | 1,251 | 27,903 | 5,285 | 817 | 690 | 280 | 30 | 33 |
| January | 1,227 | 28,030 | 5,337 | 809 | 695 | 278 | 29 | 36 |
| February | 1,245 | 28,033 | 5,341 | 805 | 698 | 277 | 29 | 36 |
| March | 1,196 | 28,138 | 5,356 | 811 | 701 | 278 | 29 | 36 |
| April (includes prorated May) | 1,202 | 28,091 | 5,358 | 811 | 702 | 278 | 29 | 36 |



| Revenue per Customer Difference Actual - Authorized | Residential |  | Commercial and Industrial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |
| November | 3.50 | 7.95 | 66.72 | 21.32 | 170.23 | 59.10 | 3,033.20 | 659.39 |
| December | (9.36) | (49.39) | (83.48) | (16.85) | (268.80) | (73.46) | $(1,155.82)$ | 358.99 |
| January | 0.73 | (23.08) | (18.24) | 0.24 | (53.32) | (7.96) | $(1,718.81)$ | 1,531.24 |
| February | 0.13 | (24.34) | (10.88) | (5.50) | (86.41) | (31.53) | $(1,181.21)$ | (40.79) |
| March | (1.20) | (9.40) | (8.49) | 14.56 | 56.24 | 40.57 | (720.06) | 1,186.80 |
| April (includes prorated May) | (0.78) | (17.62) | (12.28) | 8.73 | (96.78) | (6.80) | $(2,969.77)$ | 198.87 |


| Revenue Difference | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Revenue Per Customer Difference * Actual \# Customers) |  | R6 |  | R5-R10 |  |  |  | G41 |  | G51 |  |  |  |  |
| November |  | 4,476 |  | 220,550 |  | 348,527 |  |  |  | 17,528 |  | 117,461 |  | 16,489 |  | 90,996 |  | 22,419 |
| December |  | $(11,714)$ |  | $(1,378,058)$ |  | $(441,166)$ |  | $(13,766)$ |  | $(185,475)$ |  | $(20,569)$ |  | $(34,675)$ |  | 11,847 |
| January |  | 895 |  | $(646,873)$ |  | $(97,337)$ |  | 195 |  | $(37,054)$ |  | $(2,212)$ |  | $(49,845)$ |  | 55,124 |
| February |  | 168 |  | $(682,231)$ |  | $(58,084)$ |  | $(4,430)$ |  | $(60,312)$ |  | $(8,735)$ |  | $(34,255)$ |  | $(1,468)$ |
| March |  | $(1,431)$ |  | $(264,632)$ |  | $(45,459)$ |  | 11,807 |  | 39,423 |  | 11,277 |  | $(20,882)$ |  | 42,725 |
| April (includes prorated May) |  | (943) |  | $(495,058)$ |  | $(65,794)$ |  | 7,080 |  | $(67,942)$ |  | $(1,890)$ |  | $(86,123)$ |  | 7,159 |
| Total | \$ | $(8,549)$ | \$ | $(3,246,301)$ | \$ | $(359,312)$ |  | 18,413 | \$ | $(193,899)$ | \$ | $(5,640)$ | \$ | $(134,784)$ | \$ | 137,806 |

Calculation of the Cap by Customer Group

$$
\begin{aligned}
& \text { Residential Heatin - R5, R1 } \\
& \text { Residial }
\end{aligned}
$$

C\&I High Load Factor - G-50, G-51, G-52
C\&l Low Load Factor - G-40, G-41, G-43

| Actual Distribution Revenue |
| :---: |
| $\$ 16,383,768$ |
| $\$$ |
| $\$ 868,576$ |
| $\$$ |

$4.25 \%$ cap
$3,557,329$
$9,679,739$
$\$ 15,664$
$\$ 150,931$
$\$ 150,931$
$\$ 411,389$

Northern Utilities, Inc.
Calculation of the Monthly Revenue Variance \& Cap - Off-Peak Period
Northern Utilities, Inc New Hampshire Division DG 23 -XXX RDAF Filing Attachment SED-1 RDAF

| Actual/Estimated Distribution Revenues | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Actual Aug -Oct 2022, May - Jul 2023; Est Aug-Oct 2023) |  | R6 |  | R5-R10 |  |  |  | G41 |  | G51 |  |  |  |  |  |  |
| 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 | \$ | ,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 |


|  |  | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual/Estimate Monthly Revenue Per Customer |  | R6 | R5-R10 |  |  |  | G41 | G51 |  |  |  |  |  |
|  | 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 |
| Est | August | \$ | 34.89 | \$ | 32.93 | \$ | 84.49 | \$ | 112.15 | \$ | 323.02 | \$ | 423.55 | \$ | 2,702.37 | \$ | 5,601.06 |
| Est | September | \$ | 36.22 | \$ | 40.57 | \$ | 91.04 | \$ | 111.28 | \$ | 386.26 | \$ | 427.60 | \$ | 2,983.76 | \$ | 6,043.11 |
| Est | 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 |
|  |  | Residential |  |  |  |  |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |
|  | Authorized Monthly Revenue Per Customer (DG 21-104) |  | R6 |  | -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 <br> Actual - Authorized | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 |  | R5-R10 |  |  |  |  | 41 |  | 51 |  |  |  |  |
| 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 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |



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

Actual Base Revenues

Northern Utilities, Inc. New Hampshire Division DG 23-XXX RDAF Filing Attachment SED-1 RDAF Page 12 of 14

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

|  | Actual Billed <br> Base <br> Revenues | Net Unbilled Revenues | Total Actual Base Revenues | Actual Customer Charge Revenue | Customer Charge | Actual <br> Number of Customers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov-22 | \$731,958 | \$2,040,900 | \$2,772,857 | \$616,169 | \$22.20 | 27,755 |
| 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


Residential Non Heat, R-6 - Peak


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

|  |  | Actual Billed Base <br> Revenues |  |  | Actual | Customer Charge | Actual Number of Customers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Net Unbilled | Total Actual Base | Customer Charge |  |  |
|  |  | Revenues | Revenues | Revenue |  |  |
|  | Aug-22 |  | \$20,271 | \$21,945 | \$42,215 | \$29,298 | \$22.20 | 1,320 |
|  | 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 |  |  |  |

## Notes:

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


[^4]Northern Utilities, Inc
Revenue Decoupling Adjustment Factor Revenue

Northern Utilities, Inc New Hampshire Division DG 23-XXX RDAF Filing Attachment SED-1 RDAF

| Residential Heating, R-5, R-10 - Peak <br> 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 | $\underline{1,984,190}$ | $\$ 0.0434$ | $\$ 86,114$ |
| Total Peak | $16,052,326$ |  | $\$ 696,671$ |

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

| Therms | RDAF $\$ /$ therm |  | RDAF Revenue |
| :--- | ---: | ---: | ---: |
| ate | $1,055,717$ | $\$ 0.1071$ | $\$ 113,067$ |
| ate | 451,217 | $\$ 0.1071$ | $\$ 48,325$ |
| ate | 217,804 | $\$ 0.1071$ | $\$ 23,327$ |
| ate | 215,717 | $\$ 0.1071$ | $\$ 23,103$ |
| ate | 214,166 | $\$ 0.1071$ | $\$ 22,937$ |
| ate | $\underline{476,583}$ | $\$ 0.1071$ | $\underline{\$ 51,042}$ |
|  | $2,631,203$ |  | $\$ 281,802$ |

## Residential Non Heat, R-6 - Pea

| Therms | RDAF $\$ /$ therm |  | RDAF Revenue |
| :--- | ---: | ---: | ---: |
| te | 16,230 | $\$ 0.0588$ | $\$ 954$ |
| te | 24,950 | $\$ 0.0588$ | $\$ 1,467$ |
| te | 30,654 | $\$ 0.0588$ | $\$ 1,802$ |
| te | 30,979 | $\$ 0.0588$ | $\$ 1,822$ |
| te | 25,307 | $\$ 0.0588$ | $\$ 1,488$ |
| te | $\underline{20,159}$ | $\$ 0.0588$ | $\underline{\$ 1,185}$ |
|  | 148,279 |  | $\$ 8,719$ |

Residential Non-Heat, R-6 - Off-Peak
RDAF \$/therm

| 16,058 | $\$ 0.09$ |
| :--- | :--- |
| 13,013 | $\$ 0.09$ |
| 11,565 | $\$ 0.09$ |
| 11,547 | $\$ 0.09$ |
| 11,401 | $\$ 0.09$ |
| $\frac{12,170}{75,754}$ | $\$ 0.09$ |

May-24 Estimate Jun-24 Estimate Jul-24 Estimate Aug-24 Estimate Sep-24 Estimate Oct-24 Estimate Total Off-Peak

## Therms

| 16,058 |
| :--- |
| 13,01 |
| 11,56 |
| 11,54 |
| 11,40 |
| 12,17 |
| 75,754 |

C\&I High Load Factor, G-50. G-51, G-52 - Peak Therms

RDAF \$/therm RDAF Revenu

|  | $2,030,460$ | $(\$ 0.0112)$ | $(\$ 22,741)$ |
| :--- | ---: | ---: | ---: |
| Nov-23 Estimate | $2,218,933$ | $(\$ 0.0112)$ | $(\$ 24,852)$ |
| Dec-23 Estimate | $2,478,261$ | $(\$ 0.0112)$ | $(\$ 27,757)$ |
| Jan-24 Estimate | $2,371,705$ | $(\$ 0.0112)$ | $(\$ 26,563)$ |
| Feb-24 Estimate | 2,37 |  |  |
| Mar-24 Estimate | $2,302,162$ | $(\$ 0.0112)$ | $(\$ 25,784)$ |
| Apr-24 Estimate | $2,128,696$ | $(\$ 0.0112)$ | $(\$ 23,841)$ |
| Total Peak | $13,530,217$ |  | $(\$ 151,538)$ |

C\&I High Load Factor, G-50. G-51, G-52 - Off-Peak Therms RDAF \$/therr RDAF Revenue

|  | 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 | $1,958,169$ | $(\$ 0.0035)$ | $(\$ 6,854)$ |
| Total Off-Peak | $11,462,614$ |  | $(\$ 40,119)$ |

C\&I Low Load Factor, G-40. G-41. G-42 - Peak Therms RDAF \$/therr 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 | $\underline{2,945,402}$ | $\$ 0.0169$ | $\underline{\$ 49,777}$ |
| Total Peak | $24,340,176$ |  | $\$ 411,349$ |

C\&I Low Load Factor, G-40. G-41. G-42 - Off-Peak Therms RDAF \$/therr RDAF Revenue May-24 Estimate May-24 Estimate | Jun-24 Estimate | $1,619,935$ | $\$ 0.0008$ |
| :--- | ---: | ---: |
| 83,644 | $\$ 0.0008$ |  | $\begin{array}{llll}\text { Jul-24 Estimate } & 534,012 & \$ 0.0008 & \$ 0.0008\end{array}$

Aug-24 Estimate 533,772 \$0.0008 \$427
Sep-24 Estimate 677,266 \$0.0008 \$542
$\begin{array}{lrrr}\text { Oct-24 Estimate } & 1,024,675 & \$ 0.0008 & \$ 820 \\ \text { otal Off-Peak } & 5,173,303 & & \$ 4,139\end{array}$
Total Off-Peak

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-2 (RDAF):

Reference: DG 23-086 RDAF Filing, Attachment SED-2 RDAF; and Prefiled Testimony of S. Elena Demeris (Testimony), Lines 2-3, pg. 6 of 7. Please provide all live Excel worksheets for SED-2.

## Response:

Please see DOE 1-2 Attachment 1 for the requested information. This material was also provided on October 4, 2023 vie email.

Person Responsible: S E Demeris


| Effective August 1, 2022-July 31, 2023 Customers in Authorized Rate Design | Residential |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 |  | R5-R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |  |
| August | \$ | 1,277 | \$ | 26,815 | \$ | 5,234 | \$ | 831 | \$ | 704 | \$ | 267 | \$ | 31 | \$ | 33 |
| September |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| October |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| November |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| December |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| January |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| February |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| March |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| April |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| May |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| June |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| July |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |


| Effective August 1, 2022-July 31, 2023 | Residential |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly Revenue Per Customer |  | R6 |  | R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |
| August | \$ | 34.05 | \$ | 32.44 | \$ | 84.08 | \$ | 108.68 | \$ | 318.36 | \$ | 411.52 | \$ | 2,641.02 | \$ | 5,431.42 |
| September |  | 35.29 |  | 39.74 |  | 90.03 |  | 107.90 |  | 378.59 |  | 415.33 |  | 2,909.65 |  | 5,855.83 |
| October |  | 38.41 |  | 57.58 |  | 104.34 |  | 107.88 |  | 548.15 |  | 441.19 |  | 3,928.30 |  | 5,989.80 |
| November |  | 44.60 |  | 88.76 |  | 129.16 |  | 111.81 |  | 811.53 |  | 486.61 |  | 5,236.34 |  | 8,640.65 |
| December |  | 52.95 |  | 127.17 |  | 160.77 |  | 119.26 |  | 1,114.46 |  | 547.34 |  | 6,637.61 |  | 9,492.05 |
| January |  | 55.45 |  | 142.55 |  | 173.34 |  | 121.57 |  | 1,227.59 |  | 565.90 |  | 7,499.33 |  | 8,297.66 |
| February |  | 51.22 |  | 129.10 |  | 162.14 |  | 118.42 |  | 1,115.65 |  | 539.60 |  | 6,856.63 |  | 9,189.26 |
| March |  | 48.05 |  | 112.40 |  | 147.84 |  | 114.09 |  | 974.70 |  | 522.96 |  | 6,286.51 |  | 8,523.10 |
| April |  | 41.51 |  | 75.18 |  | 117.94 |  | 103.50 |  | 662.01 |  | 454.56 |  | 4,811.93 |  | 8,476.58 |
| May |  | 38.84 |  | 53.52 |  | 100.76 |  | 104.32 |  | 493.35 |  | 443.91 |  | 3,529.42 |  | 5,379.12 |
| June |  | 35.35 |  | 38.13 |  | 88.58 |  | 105.48 |  | 365.60 |  | 420.38 |  | 2,815.68 |  | 5,308.73 |
| July |  | 33.79 |  | 31.46 |  | 83.32 |  | 106.86 |  | 310.17 |  | 409.31 |  | 2,623.05 |  | 5,232.57 |
| Total | \$ | 509.50 | \$ | 928.03 | \$ | 1,442.27 | \$ | 1,329.77 | \$ | 8,320.15 | \$ | 5,658.62 | \$ | 55,775.47 | \$ | 85,816.77 |

Northern Utilities, Inc. - New Hampshire Division Decoupling
Target Revenue Per Customer (September 1, 2022 - July 31, 2023)

Northern Utilities, Inc. ew Hampshire Division DG 23-XXX RDAF Filing ttachment SED-2 RDAF Attachment SED-2 RDAF

| Effective September 1, 2022-July 31, 2023 <br> Target Distribution Revenues | Residential |  |  | G40 |  | Commercial and Industrial |  |  |  |  |  | G42 |  | G52 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 | R5-R10 |  |  |  | G50 |  | G41 |  | G51 |  |  |  |  |  |  |
| August (at August 1, 2022 Rates) | \$ | 43,469 | 869,904 | \$ | 440,087 | \$ | 90,360 | \$ | 224,198 | \$ | 109,671 | \$ | 81,872 | \$ | 179,237 | \$ | 2,038,797 |
| September |  | 46,303 | 1,088,212 |  | 476,581 |  | 92,761 |  | 272,107 |  | 114,176 |  | 92,574 |  | 199,807 |  | 2,382,521 |
| October |  | 50,573 | 1,589,617 |  | 559,090 |  | 92,744 |  | 397,580 |  | 121,543 |  | 125,703 |  | 204,424 |  | 3,141,274 |
| November |  | 59,063 | 2,465,848 |  | 702,206 |  | 96,439 |  | 592,474 |  | 134,480 |  | 168,244 |  | 295,764 |  | 4,514,517 |
| December |  | 70,512 | 3,545,385 |  | 884,496 |  | 103,454 |  | 816,630 |  | 151,778 |  | 213,818 |  | 325,101 |  | 6,111,174 |
| January |  | 73,940 | 3,977,396 |  | 956,985 |  | 105,625 |  | 900,348 |  | 157,065 |  | 241,843 |  | 283,945 |  | 6,697,147 |
| February |  | 68,151 | 3,599,421 |  | 892,398 |  | 102,664 |  | 817,515 |  | 149,574 |  | 220,941 |  | 314,667 |  | 6,165,330 |
| March |  | 63,797 | 3,130,064 |  | 809,936 |  | 98,583 |  | 713,215 |  | 144,835 |  | 202,399 |  | 291,713 |  | 5,454,543 |
| April |  | 54,833 | 2,084,192 |  | 637,525 |  | 88,627 |  | 481,829 |  | 125,352 |  | 154,442 |  | 290,111 |  | 3,916,910 |
| May |  | 51,166 | 1,475,440 |  | 538,468 |  | 89,401 |  | 357,024 |  | 122,317 |  | 112,731 |  | 183,381 |  | 2,929,929 |
| June |  | 46,376 | 1,042,988 |  | 468,212 |  | 90,489 |  | 262,492 |  | 115,614 |  | 89,518 |  | 180,956 |  | 2,296,645 |
| July |  | 44,233 | 855,490 |  | 437,868 |  | 91,788 |  | 221,474 |  | 112,462 |  | 83,253 |  | 178,332 |  | 2,024,900 |
| 11ME July | \$ | 672,416 | 25,723,957 | \$ | ,803,851 | \$ | 1,142,936 |  | ,056,886 | \$ | ,558,867 | \$ | 1787,337 | \$ | 927,437 |  | 47,673,687 |


| Effective September 1, 2022-July 31, 2023 Customers in Authorized Rate Design | Residential |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 |  | R5-R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |  |
| September | \$ | 1,277 | \$ | 26,815 | \$ | 5,234 | \$ | 831 | \$ | 704 | \$ | 267 | \$ | 31 | \$ | 33 |
| October |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| November |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| December |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| January |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| February |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| March |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| April |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| May |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| June |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| July |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |


| Effective September 1, 2022-July 31, 2023 Monthly Revenue Per Customer | Residential |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 |  | R5-R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |  |
| 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 |
| November |  | 46.26 |  | 91.96 |  | 134.15 |  | 115.99 |  | 841.30 |  | 504.61 |  | 5,427.24 |  | 8,962.53 |
| December |  | 55.23 |  | 132.22 |  | 168.98 |  | 124.42 |  | 1,159.60 |  | 569.52 |  | 6,897.34 |  | 9,851.53 |
| January |  | 57.91 |  | 148.33 |  | 182.83 |  | 127.04 |  | 1,278.48 |  | 589.36 |  | 7,801.39 |  | 8,604.40 |
| February |  | 53.38 |  | 134.23 |  | 170.49 |  | 123.47 |  | 1,160.86 |  | 561.25 |  | 7,127.11 |  | 9,535.37 |
| March |  | 49.97 |  | 116.73 |  | 154.74 |  | 118.57 |  | 1,012.75 |  | 543.47 |  | 6,529.00 |  | 8,839.80 |
| April |  | 42.95 |  | 77.73 |  | 121.80 |  | 106.59 |  | 684.19 |  | 470.36 |  | 4,981.99 |  | 8,791.23 |
| May |  | 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 |
| Total | \$ | 492.63 | \$ | 926.88 | \$ | 1,406.82 | \$ | 1,265.93 | \$ | 8,282.32 | \$ | 5,437.88 | \$ | 55,015.01 | \$ | 83,278.80 |

Docket DG 23-086
NH DOE Tech Statement / Arif DG $22-020$
AttachmerrteAlle GSL-8


| Effective August 1, 2023-July 31, 2024 Customers in Authorized Rate Design | Residential |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 |  | R5-R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |  |
| August | \$ | 1,277 | \$ | 26,815 | \$ | 5,234 | \$ | 831 | \$ | 704 | \$ | 267 | \$ | 31 | \$ | 33 |
| September |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| October |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| November |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| December |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| January |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| February |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| March |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| April |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| May |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| June |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |
| July |  | 1,277 |  | 26,815 |  | 5,234 |  | 831 |  | 704 |  | 267 |  | 31 |  | 33 |


| Effective August 1, 2023-July 31, 2024 Monthly Revenue Per Customer | Residential |  |  |  | G40 |  | Commercial and Industrial |  |  |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  | -R10 |  |  |  | G50 |  | G41 |  | G51 |  |  |  |  |
| 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 |
| November |  | 46.18 |  | 91.91 |  | 134.11 |  | 115.66 |  | 840.81 |  | 503.48 |  | 5,421.01 |  | 8,943.66 |
| December |  | 55.12 |  | 132.14 |  | 168.91 |  | 124.02 |  | 1,158.85 |  | 568.13 |  | 6,888.87 |  | 9,830.46 |
| January |  | 57.79 |  | 148.24 |  | 182.75 |  | 126.61 |  | 1,277.63 |  | 587.88 |  | 7,791.54 |  | 8,586.42 |
| February |  | 53.28 |  | 134.15 |  | 170.42 |  | 123.08 |  | 1,160.11 |  | 559.89 |  | 7,118.29 |  | 9,515.08 |
| March |  | 49.88 |  | 116.66 |  | 154.68 |  | 118.22 |  | 1,012.12 |  | 542.18 |  | 6,521.09 |  | 8,821.23 |
| April |  | 42.88 |  | 77.69 |  | 121.76 |  | 106.35 |  | 683.82 |  | 469.37 |  | 4,976.44 |  | 8,772.78 |
| May |  | 40.02 |  | 55.00 |  | 102.85 |  | 107.27 |  | 506.74 |  | 458.03 |  | 3,632.98 |  | 5,546.58 |
| June |  | 36.28 |  | 38.88 |  | 89.44 |  | 108.57 |  | 372.62 |  | 432.98 |  | 2,885.33 |  | 5,473.26 |
| July |  | 34.60 |  | 31.90 |  | 83.65 |  | 110.12 |  | 314.42 |  | 421.20 |  | 2,683.54 |  | 5,393.94 |
| Total | \$ | 526.68 | \$ | 959.32 | \$ | 1,490.90 | \$ | 1,374.60 | \$ | 8,600.68 | \$ | 5,849.41 | \$ | 57,656.03 | \$ | 88,710.22 |

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-3 (RDAF):

Reference: Testimony, Line 2, pg. 5 of 7. Please provide a narrative description of "Customer Class" and "Customer Group". Please explain the difference between the two, if any.

## Response:

Northern has nine customer classes, three residential and six general service, serving a range of service characterizations such as load factor, heating and non-heating and usage levels. These rate classes are fully discussed in the Company's tariff, Section VI, Rate Schedules, Pages 63-84.

For certain ratemaking purposes, such as the RDAF and Cost of Gas, the classes are combined into groups, based on specific service characterizations. The groups utilized for the RDAF are: Residential Heating, R-5, R-10; Residential Non-Heat, R-6; General Service Low Load Factor, G-40, G-41, G-42; and General Service High Load Factor, G50, G-51, G-52; in accordance with the Company's tariff, Section IX, Revenue Decoupling Adjustment Clause, Pages 163-168.

Person Responsible: S E Demeris

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-4 (RDAF):

Reference: DG 23-086 RDAF Filing. Please provide information on the number of billing cycles in a typical month by each customer class.

| Table 1-4: No. of billing cycles in a typical month |  |  |  |
| :--- | :--- | :--- | :--- |
| Customer class | Class <br> Identifier | No. of billing cycles in <br> a typical month <br> : Peak <br> (November to April) | No. of billing cycles in <br> a typical month <br> : Off-Peak <br> (May to October) |
| Residential - Heating | R-5 |  |  |
| Residential -Heating | R-10 |  |  |
| Residential - Non-Heating | R-6 |  |  |
| C\&I Low Load Factor | G-40 |  |  |
| C\&I Low Load Factor | G-41 |  |  |
| C\&I Low Load Factor | G-42 |  |  |
| C\&I High Load Factor | G-50 |  |  |
| C\&I High Load Factor | G-51 |  |  |
| C\&I High Load Factor | G-52 |  |  |

## Response:

| Table 1-4: No. of Billing Cycles in a Typical Month |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Customer Class | Class <br> Identifier | No. of billing cycles in a <br> typical month: Peak <br> (November to April) | No. of billing cycles in a <br> typical month: Off-Peak <br> (May to October) |
| Residential Heating | R-5 | 15 | 15 |
| LI Residential Heating | R-10 | 15 | 15 |
| Residential Non-Heating | R-6 | 15 | 15 |
| C\&I Low Load Factor | G-40 | 15 | 15 |
| C\&I Low Load Factor | G-41 | 16 | 16 |
| C\&I Low Load Factor | G-42 | 8 | 8 |
| C\&I High Load Factor | G-50 | 16 | 16 |
| C\&I High Load Factor | G-51 | 16 | 16 |
| C\&I High Load Factor | G-52 | 5 | 5 |

Person Responsible: S E Demeris

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23

Date of Response: 10/12/23

## DOE 1-5 (RDAF):

Reference: DG 23-086 RDAF Filing, Attachment SED-1 RDAF, pg. 12-13; and response to DOE 1-4 (above). In the context of the billing cycles:
a. Please define "Actual Billed Base Revenue" and "Net Unbilled Revenues".
b. Please provide a narrative description of how Northern calculates the "Actual Billed Base Revenue" and "Net Unbilled Revenues" from month-to-month basis.

## Response:

a. "Actual Billed Base Revenue" represents actual billings to customers. Base revenue is comprised of Customer Charge and Distribution Revenue.
"Net Unbilled Revenues" represents estimated customer usage within the current month that has not yet officially billed due to the various billing cycles that generate actual customer billings. Estimates are recorded each month by customer class and then reversed in the following month. Each month of "Net Unbilled Revenues" includes an estimate for the current month and the reversal of the estimate for the prior month.
b. "Actual Billed Base Revenue" is recorded each month based on actual customer billings through meter readings and rates authorized by the NHPUC.
"Net Unbilled Revenue" In accordance with Utility Revenue Recognition standards, revenue is recorded when service is rendered or energy is delivered to customers. However, the determination of energy sales to individual customers is based on the reading of their meters, which occurs on a systematic basis throughout the month. At the end of each calendar month, amounts of energy delivered to customers since the date of the last meter reading are estimated and the corresponding unbilled revenues are calculated. These unbilled revenues are estimated each month based on estimated customer usage by class and applicable customer rates, taking into account current and historical weather data, assumptions pertaining to metering patterns, billing cycle statistics, and other estimates and assumptions, and are then reversed in the following month when billed to customers.

Person Responsible: S. E. Demeris and Emily Anderson

# Northern Utilities, Inc. DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-6 (RDAF):

Reference: DG 23-086 RDAF Filing, Attachment SED-1 RDAF, pg. 12-13; and response to DOE 1-4 above. In the context of the billing cycles:
a. Please define "Actual Number of Customers".
b. How does Northern calculate the "Actual Number of Customers." Does Northern use a monthly calendarization process? If yes, please provide a narrative description of the process. If not, please describe the alternate process used for the purpose.

## Response:

a. The "Actual Number of Customers" is the number of customers taking service under the applicable customer class, as defined in the Company's RDAC tariff, Section 1.04 (2).
b. The Actual Number of Customers is calculated by dividing the actual monthly Customer Charge revenue collected, as reported by the Company's billing system, by the customer charge in effect, for each customer class.

Person Responsible: S E Demeris

# Northern Utilities, Inc. DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-7 (RDAF):

Reference: DG 23-086 RDAF Filing, Attachment SED-2 RDAF, pg. 14; and Prefiled Testimony of S. Elena Demeris (Testimony), Lines 2, pg. 7 of 7.

For each rate class, and for each month in Peak and Off-Peak periods, please provide information on:
a. Projected therm sales and projected RDAF Revenue from Winter 2022-2023 and Summer 2023.
b. Actual therm sales from Winter 2022-2023 and Summer 2023.

## Response:

Please note that the reference in the request is incorrect, Attachment SED-1 RDAF, page 14, provides projected revenue by customer group.
a. Please see DOE 1-7 Attachment 1. This attachment expands Attachment SED-1 RDAF, Page 14 of 14 , to provide forecast revenue for all classes.
b. Please see DOE 1-7 Attachment 2. Please note that the Company has provided the available actual therm sales for the Summer 2023 period, May through September 2023.

Person Responsible: S E Demeris

Nothern Uuilies. , Inc.
New Hampshire Division




Attachment A

Northern Utilites, Inc.
Actual Therm Sales
Winter 2022-2023/ Summer 2023 through August

| 2022 | 2022 | 2023 | 2 |
| :---: | :---: | :---: | :---: |
| November | December | January | Feb |

February
2023
March

DG 23-086
DOE 1-7 Attachment 2

| 930,860 | $2,108,598$ | $2,939,472$ |
| ---: | ---: | ---: |
| 14,627 | 24,729 | 31,537 |
| 23,670 | 51,579 | 78,359 |
| 512,672 | $1,251,093$ | $1,825,243$ |
| 917,324 | $1,758,792$ | $2,343,032$ |
| 461,792 | 668,589 | 691,649 |
| 119,592 | 143,093 | 171,867 |
| 394,055 | 483,789 | 562,367 |
| $1,584,877$ | $1,628,047$ | $1,761,041$ |
|  |  |  |
| $4,959,469$ | $8,118,309$ | $10,404,567$ |

$2,964,841$
32,495
79,105
$1,978,560$
$2,358,558$
699,697
174,278
568,054
$1,630,789$

$10,486,377$

| $2,665,215$ | $1,665,679$ | $13,274,665$ |
| ---: | ---: | ---: |
| 25,296 | 19,316 | 148,000 |
| 107,191 | 73,165 | 413,069 |
| $1,616,752$ | 966,100 | $8,150,420$ |
| $2,160,545$ | $1,385,827$ | $10,924,078$ |
| 627,240 | 366,303 | $3,515,270$ |
| 166,239 | 135,438 | 910,507 |
| 539,713 | 433,555 | $2,981,533$ |
| $1,739,185$ | $1,516,094$ | $9,860,033$ |
|  |  |  |
| $9,647,376$ | $6,561,477$ | $50,177,575$ |


| 901,284 | 490,157 | 356,529 | 320,516 | 312,289 |
| ---: | ---: | ---: | ---: | ---: |
| 14,829 | 12,159 | 11,536 | 10,721 | 9,878 |
| 66,482 | 15,702 | 10,077 | 8,998 | 8,745 |
| 469,839 | 210,450 | 135,525 | 117,412 | 113,510 |
| 811,364 | 437,386 | 287,798 | 241,097 | 256,976 |
| 267,196 | 175,705 | 137,792 | 140,857 | 168,930 |
| 132,200 | 134,897 | 135,083 | 134,591 | 127,725 |
| 392,682 | 333,429 | 327,006 | 324,804 | 316,218 |
| $1,506,245$ | $1,312,405$ | $1,273,095$ | $1,519,293$ | $1,429,469$ |
|  |  |  |  |  |
| $4,562,121$ | $3,122,290$ | $2,674,441$ | $2,818,289$ | $2,743,740$ |

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23

## DOE 1-8 (RDAF):

Reference: DG 23-086 RDAF Filing and DG 23-085 COG Filing.
Please provide a table (Table 1-8(a)) identifying the Company's proposed Cost of Gas (COG) per therm for each rate class for the Peak and Off-Peak periods, the incremental RDAF cost for each rate class proposed to be recovered during the same period, and the resulting COG per therm absent the RDAF incremental cost.

Please also include a second table (Table 1-8(b)) showing, for each rate class and for each period the total RDAF sought, the RDAF proposed to be recovered during the 2023-2024 period and the deferred RDAF value for the same period.

| Table 1-8 (a): Proposed Rates with and with RDAF Recovery |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  | Class Identifier | Peak Period <br> (November 2023 to April 2024) |  |  | Off-Peak Period <br> (May 2024 to October 2024) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer class |  | Total RDAF Recovery (\$) | Proposed RDAF Recovery (\$) | Deferred RDAF Recovery (\$) | $\begin{aligned} & \text { Total } \\ & \text { RDAF } \end{aligned}$ | Proposed RDAF | Deferred RDAF Recovery (\$) |

## Northern Utilities, Inc. DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 1

## Date Request Received: 10/02/23

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|  |  |  |  | Recovery <br> $(\$)$ | Recovery <br> $(\$)$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Residential - <br> Heating | R-5 |  |  |  |  |  |  |
| Residential - <br> Heating | R-10 |  |  |  |  |  |  |
| Residential - Non- <br> Heating | R-6 |  |  |  |  |  |  |
| C\&I Low Load <br> Factor | G-40 |  |  |  |  |  |  |
| C\&I Low Load <br> Factor | G-41 |  |  |  |  |  |  |
| C\&I Low Load <br> Factor | G-42 |  |  |  |  |  |  |
| C\&I High Load <br> Factor | G-50 |  |  |  |  |  |  |
| C\&I High Load <br> Factor | G-51 |  |  |  |  |  |  |
| C\&I High Load <br> Factor | G-52 |  |  |  |  |  |  |

## Response:

Please see DOE 1-8 Attachment 1.
Please note that the RDAF is not included in the LDAC and is included as an adjustment to distribution rates on customer bills. During the preparation of this response the Company realized that the Tariff pages submitted in the COG Filing did not include the RDAF adjustment to Distribution rates. The Company submitted revised Tariff pages on October 8, 2023. Therefore, the columns labeled Proposed [COG + LDAC)- RDAF Recovery]/therm have been changed to Proposed [COG + LDAC) + RDAF Recovery]/therm. Subtracting the RDAF component from a value in which it is not included yields an erroneous result. Refer to DOE 1-8 Attachment 1, Page 1.

The Company has also provided table 1-8(a2) for a breakdown of Distribution and RDAF rates by customer class. Refer to DOE 1-8 Attachment 1, Page 2.

Finally, Table 1-8(b) has been included DOE 1-8 Attachment 1, Page 3.

Person Responsible: S E Demeris

NH DOE Tech Statement / Arif
Attachment A

Table 1-8(a): Proposed Rates with RDAF Recovery
DG 23-086 COG, LDAC and RDAF per therm

| Line No. | Customer Class | ClassIdentifier | Peak PeriodNovember 2023 - April 2024Proposed |  |  | Off-Peak Period May 2024 - October 2024 Proposed |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { COG + LDAC } \\ \text { per therm } \\ \hline \end{gathered}$ | RDAF per therm | $\begin{gathered} \text { COG + LDAC + RDAF } \\ \text { per therm } \\ \hline \end{gathered}$ | $\begin{gathered} \text { COG + LDAC } \\ \text { per therm } \\ \hline \end{gathered}$ | RDAF per therm | $\begin{gathered} \mathrm{COG}+\mathrm{LDAC}+\mathrm{RDAF} \\ \text { per therm } \\ \hline \end{gathered}$ |
| 1 | Residential Heating | R-5 | \$0.8165 | \$0.0434 | \$0.8599 | \$0.6000 | \$0.1071 | \$0.7071 |
| 2 | LI Residential Heating | R -10 | \$0.8165 | \$0.0434 | \$0.8599 | \$0.6000 | \$0.1071 | \$0.7071 |
| 3 | Residential Non-Heating | R-6 | \$0.8165 | \$0.0588 | \$0.8753 | \$0.6000 | \$0.0933 | \$0.6933 |
| 4 | C\&l Low Load Factor | G-40 | \$0.7764 | \$0.0169 | \$0.7933 | \$0.5984 | \$0.0008 | \$0.5992 |
| 5 | C\& Low Load Factor | G-41 | \$0.7764 | \$0.0169 | \$0.7933 | \$0.5984 | \$0.0008 | \$0.5992 |
| 6 | C\&l Low Load Factor | G-42 | \$0.7764 | \$0.0169 | \$0.7933 | \$0.5984 | \$0.0008 | \$0.5992 |
| 7 | C\&I High Load Factor | G-50 | \$0.6949 | (\$0.0112) | \$0.6837 | \$0.4805 | (\$0.0035) | \$0.4770 |
| 8 | C\&I High Load Factor | G-51 | \$0.6949 | (\$0.0112) | \$0.6837 | \$0.4805 | (\$0.0035) | \$0.4770 |
| 9 | C\&I High Load Factor | G-52 | \$0.6949 | (\$0.0112) | \$0.6837 | \$0.4805 | (\$0.0035) | \$0.4770 |

NH DOE Tech Statement / Arif
Attachment A

Table 1-8(a2): Proposed Rates with RDAF Recovery
DG 23-086 Distribution and RDAF per therm
tachment 1
Page 2 of 3


Table 1-8(b): Proposed Rates with RDAF Recovery Total, Proposed and Deferred RDAF Recovery \$'s

DG 23-086
DOE 1-8 Attachment 1
Page 3 of 3


# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23

Date of Response: 10/12/23

## DOE 1-9 (RDAF):

Reference: DG 23-086 RDAF Filing and DG 21-104 Filing.
Please identify the total RDAF for each rate class for the Peak Period and Off-Peak Period respectively. Are these values higher or lower than what the Company had anticipated when the RDAF was designed. If yes, please explain why. If not, please explain why the total RDAF is higher than anticipated. Please quantify separately (if possible) the percentage of the RDAF attributable to energy efficiency, the percentage attributable to warmer (for winter) or cooler (for summer) weather, the percentage attributable to the general economy, and any other reason(s).

## Response:

Please see the Company's response to DOE 1-8 Attachment 1 Pages 1-3 for the total RDAF rates, total, proposed and deferred RDAF recovery dollars for each rate class.

The RDAF was designed, with the input and agreement of settling parties, including the New Hampshire Department of Energy and Office of the Consumer Advocate, to recover or credit any revenue over-collection or shortfall compared to the allowed revenue negotiated in the Company's base rate case. When establishing rates the Company makes every effort to minimize over or under collections but these differences are impacted by factors including but not limited to, the impact of weather, changes in usage per customer, energy efficiency and other economic considerations.

The Company has estimated the impact of weather on the monthly revenue variance for both the peak and off-peak periods in DOE 1-9 Attachment 1, Page 1. The results provided on lines 9-11 show that the off-peak period of August 1, 2022 through October 31, 2022 and May 1, 2023 through July 31, 2023 was favorably impacted by weather. The impact of weather on the peak period of November 1, 2022 through April 30, 2023 is shown on lines 20-22 and shows that over half off the deferral is related to the impact of unfavorable (warmer) peak period weather.

The remaining monthly revenue variances in both the peak and off-peak periods are due to usage changes since the Company's last test year in 2020. The Company is not able to discreetly attribute and segment these impacts to specific factors, but can provide some potential explanation for these variances.

First, the Company actively promotes energy efficiency initiatives throughout its service territory. These initiatives result in thermal savings in 2021 of 155,786 therms and 197,615 therms for the residential and C\&I classes respectively. In 2022 the Company

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 1 

Date Request Received: 10/02/23
Date of Response: 10/12/23
realized savings of 212,109 therms and 275,082 therms for the residential and C\&I classes respectively.

Secondly, the peak-period under review in this proceeding took place when commodity rates were at historically high levels, which could have impacted customers average use during the winter period to limit their utility burden. In addition to high commodity rates, ratepayers were subject to broader inflationary pressures that may have impacted their usage compared to prior periods.

Finally, the impact of the global pandemic impacted many components of the Company's last rate case. Regardless of any of these impacts described above, including weather, the Company was approved a revenue decoupling mechanism that was designed to recover or credit any revenue over-collection or shortfall compared to the allowed revenue negotiated in the Company's base rate case.

Person Responsible: S E Demeris and D. Nawazelski

OFF PEAK - August 1, 2022-October 31, 2022 AND May 1, 2023-July 31, 2023


PEAK - November 1, 2022 THROUGH April 30, 2023


Northern Utilities, Inc.
DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 1
Date Request Received: 10/02/23
Date of Response: 10/12/23
DOE 1-10 (RDAF):
Reference: DG 23-086
Does the State of Maine have an RDAF or an equivalent mechanism? How do RDAF calculations impact the allocation the Company must make between NH and ME? Please explain how formulas were adjusted to address RDAF, if applicable.

## Response:

Northern's Maine division does not have an RDAF or other equivalent mechanism. The Company allocates gas supply costs between NH and ME based on actual usage between the two divisions. This allocation is not impacted by the RDAF.

Person Responsible: S E Demeris

Northern Utilities, Inc.
DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 1
Date Request Received: 10/02/23 Date of Response: 10/12/23

## DOE 1-11 (RDAF):

Reference: DG 23-086 Filing and DG 21-104 Filing.
Will RDAF result in less frequent rate case filings? Why or why not?

## Response:

The purpose of the RDAF is not to avoid rate case filings. The conditions that lead a utility to file a base rate case are primarily unrecovered fixed costs and inflationary pressures on operating expenses.

The purpose of an RDAF is to correct for the misalignment between utility costs and its rates. Specifically, utility distribution costs are largely fixed and change very little in the short run with changes in usage levels. However, distribution rates have a significant variable, or usage-based, component that changes revenues (and cost recovery) with changes in usage levels. The Company's revenue decoupling mechanism corrects for this misalignment by adjusting the Company's actual revenues to match its authorized revenues. In addition, the Company's revenue decoupling mechanism supports policy objectives and stabilizes utility cost recovery and customer bills.

Person Responsible: S E Demeris \& D. Nawazelski

## Northern Utilities, Inc.

DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 2
Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-1 (RDAF):

For any responses that requires calculations, including all Tables, please provide in live digital format (i.e., Excel) with supporting data. "Live" format, meaning that formula and inputs are displayed, and alternative inputs are possible.

## Response:

Please see individual responses for the required information.

Person Responsible: S. E. Demeris

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

| 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, $\Sigma$ (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. $1+\mathrm{L} .2+\mathrm{L} .3+\mathrm{L} .4$ |
| 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 | Peak RDAF Rate (\$/therm) | \$0.0434 | \$0.0588 | (\$0.0112) | \$0.0169 | $-1^{*}($ L. $8 /$ L. 9) |
| Line \# Description |  | OFF-PEAK - MAY 1, 2024 THROUGH OCTOBER 31, 2024 |  |  |  | Reference |
|  |  | Residential HeatingR-5, R-10 | Class Groups |  | C\&I Low Load Factor G-40, G-41, G-42 |  |
|  |  | Residential Non Heating R-6 | C\&I High Load Factor G-50, G-51, G-52 |  |  |
| 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; <br> May 1, 2023 - October 31, 2023 (1) | (\$1,219,885) | $(\$ 16,714)$ | \$40,192 | (\$173,422) | 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, 工(L. 1 to L. 15) |
| 4 | Carrying Costs - (August 22 - October 2023) | (\$37,221) | (\$398) | \$2,621 | (\$950) | Pages 3, 5, 7, 9, Col. H |
| 5 | Revenue Decoupling Adjustment (RDA) for credit/(collection) | $(\$ 1,257,106)$ | $(\$ 17,112)$ | \$42,813 | (\$174,372) | L. $1+$ L. $2-\mathrm{L} .3+\mathrm{L} .4$ |
| 6 | RDA Cap (+/-) | \$281,733 | \$11,771 | \$106,975 | \$216,745 | Page 11 |
| 7 | RDA Deferral | $(\$ 975,373)$ | (\$5,341) | \$0 | \$0 | \|Line 5|-Line 6 |
| 8 | RDA eligible for credit/(collection) | (\$281,733) | (\$11,771) | \$42,813 | $(\$ 174,372)$ | 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 | Off Peak RDAF Rate (\$/therm) | \$0.1071 | \$0.1554 | (\$0.0037) | \$0.0337 | -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 23-086 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 ( $\mathrm{B}+\mathrm{C}+\mathrm{D}$ ) | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Computed Interest | Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 Actual | Aug-23 | (\$3,369,797) | \$0 | \$0 | (\$3,369,797) | (\$3,369,797) | 8.25\% | $(\$ 23,612)$ | (\$3,393,408) | 31 |
| 14 Actual | Sep-23 | (\$3,393,408) | \$0 | \$0 | (\$3,393,408) | (\$3,393,408) | 8.25\% | $(\$ 23,010)$ | (\$3,416,418) | 30 |
| 15 Actual | 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\% | (\$29,726) | (\$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 23-086 RDAF
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|  | (A) | (B) |  | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance |  | Monthly <br> Revenue <br> Variance <br> (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 $(\mathrm{E}+\mathrm{H})$ | \# 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 Actual | Aug-23 | (\$570,244) | \$ | 6,196 | \$0 | $(\$ 564,048)$ | $(\$ 567,146)$ | 8.25\% | $(\$ 3,974)$ | $(\$ 568,022)$ | 31 |
| 14 Actual | Sep-23 | $(\$ 568,022)$ | \$ | $(154,009)$ | \$0 | (\$722,031) | $(\$ 645,027)$ | 8.25\% | $(\$ 4,374)$ | $(\$ 726,405)$ | 30 |
| 15 Actual | Oct-23 | $(\$ 726,405)$ | \$ | $(523,776)$ | \$0 | (\$1,250,181) | $(\$ 988,293)$ | 8.25\% | $(\$ 6,925)$ | (\$1,257,106) | 31 |
| 16 Estimate | Nov-23 | (\$1,257,106) |  | \$0 | \$0 | (\$1,257,106) | (\$1,257,106) | 8.25\% | $(\$ 8,524)$ | (\$1,265,630) | 30 |
| 17 Estimate | Dec-23 | (\$1,265,630) |  | \$0 | \$0 | (\$1,265,630) | (\$1,265,630) | 8.25\% | $(\$ 8,868)$ | (\$1,274,498) | 31 |
| 18 Estimate | Jan-24 | (\$1,274,498) |  | \$0 | \$0 | (\$1,274,498) | (\$1,274,498) | 8.25\% | $(\$ 8,906)$ | (\$1,283,404) | 31 |
| 19 Estimate | Feb-24 | (\$1,283,404) |  | \$0 | \$0 | (\$1,283,404) | (\$1,283,404) | 8.25\% | $(\$ 8,389)$ | (\$1,291,794) | 29 |
| 20 Estimate | Mar-24 | (\$1,283,404) |  | \$0 | \$0 | (\$1,283,404) | (\$1,283,404) | 8.25\% | $(\$ 8,968)$ | (\$1,292,372) | 31 |
| 21 Estimate | Apr-24 | (\$1,292,372) |  | \$0 | \$0 | (\$1,292,372) | (\$1,292,372) | 8.25\% | $(\$ 8,739)$ | (\$1,301,112) | 30 |
| 22 Estimate | May-24 | (\$1,301,112) |  | \$0 | \$113,067 | (\$1,414,179) | (\$1,357,645) | 8.25\% | $(\$ 9,487)$ | (\$1,423,666) | 31 |
| 23 Estimate | Jun-24 | (\$1,423,666) |  | \$0 | \$48,325 | (\$1,471,991) | (\$1,447,828) | 8.25\% | $(\$ 9,791)$ | (\$1,481,782) | 30 |
| 24 Estimate | Jul-24 | (\$1,481,782) |  | \$0 | \$23,327 | (\$1,505,108) | (\$1,493,445) | 8.25\% | $(\$ 10,436)$ | (\$1,515,544) | 31 |
| 25 Estimate | Aug-24 | (\$1,515,544) |  | \$0 | \$23,103 | (\$1,538,647) | (\$1,527,096) | 8.25\% | (\$10,671) | (\$1,549,318) | 31 |
| 26 Estimate | Sep-24 | (\$1,549,318) |  | \$0 | \$22,937 | (\$1,572,255) | (\$1,560,787) | 8.25\% | $(\$ 10,555)$ | (\$1,582,810) | 30 |
| 27 Estimate | Oct-24 | (\$1,582,810) |  | \$0 | \$51,042 | (\$1,633,852) | (\$1,608,331) | 8.25\% | (\$11,239) | (\$1,645,091) | 31 |
| 28 Total |  |  | \$ | (1,219,885) | \$281,802 |  |  |  | (\$151,793) |  |  |

# Northern Utilities, Inc. <br> Revenue Decoupling Factor Reconciliation <br> Residential Heating - R-6 

Peak Period - November to April

Northern Utilities, Inc
New Hampshire Division
DG 23-086 RDAF
DOE 2-2 Attachment 1
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|  | (A) Month | (B) Beginning Balance | (C) <br> Monthly Revenue Variance (MRV) | (D) <br> Monthly <br> Revenue (RDAF) (credit)/charge | (E) <br> Ending Balance before Interest $(B+C+D)$ | (F) <br> Average Monthly Balance $((B+E) / 2)$ | (G) <br> Interest <br> Rate | (H) <br> Compute d Interest | (I) <br> Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | (J) <br> \# 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 Actual | Aug-23 | $(\$ 8,888)$ | \$0 | \$0 | $(\$ 8,888)$ | $(\$ 8,888)$ | 8.25\% | (\$62) | $(\$ 8,950)$ | 31 |
| 14 Actual | Sep-23 | $(\$ 8,950)$ | \$0 | \$0 | $(\$ 8,950)$ | $(\$ 8,950)$ | 8.25\% | (\$61) | $(\$ 9,011)$ | 30 |
| 15 Actual | 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 | $(\$ 18,989)$ | \$0 | \$0 | $(\$ 18,989)$ | $(\$ 18,989)$ | 8.25\% | (\$133) | $(\$ 19,122)$ | 31 |
| 28 Total |  |  | $(\$ 8,549)$ | \$8,719 |  |  |  | $(\$ 1,854)$ |  |  |

## Northern Utilities, Inc. <br> Revenue Decoupling Factor Reconciliation <br> Residential Heating - R-6

Off Peak Period - May to October

Northern Utilities, Inc.
New Hampshire Division
DG 23-086 RDAF
DOE 2-2 Attachment 1
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|  | (A) | (B) |  | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance |  | Monthly <br> Revenue <br> 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 Actual | Aug-23 | $(\$ 6,970)$ | \$ | (624) | \$0 | $(\$ 7,594)$ | $(\$ 7,282)$ | 8.25\% | (\$51) | $(\$ 7,645)$ | 31 |
| 14 Actual | Sep-23 | $(\$ 7,645)$ | \$ | $(1,514)$ | \$0 | $(\$ 9,159)$ | $(\$ 8,402)$ | 8.25\% | (\$57) | $(\$ 9,216)$ | 30 |
| 15 Actual | Oct-23 | $(\$ 9,216)$ | \$ | $(7,895)$ | \$0 | $(\$ 17,112)$ | $(\$ 13,164)$ | 8.25\% | (\$92) | $(\$ 17,204)$ | 31 |
| 16 Estimate | Nov-23 | $(\$ 17,204)$ |  | \$0 | \$0 | $(\$ 17,204)$ | $(\$ 17,204)$ | 8.25\% | (\$117) | $(\$ 17,321)$ | 30 |
| 17 Estimate | Dec-23 | $(\$ 17,321)$ |  | \$0 | \$0 | $(\$ 17,321)$ | $(\$ 17,321)$ | 8.25\% | (\$121) | $(\$ 17,442)$ | 31 |
| 18 Estimate | Jan-24 | $(\$ 17,442)$ |  | \$0 | \$0 | $(\$ 17,442)$ | $(\$ 17,442)$ | 8.25\% | (\$122) | $(\$ 17,564)$ | 31 |
| 19 Estimate | Feb-24 | $(\$ 17,564)$ |  | \$0 | \$0 | $(\$ 17,564)$ | $(\$ 17,564)$ | 8.25\% | (\$115) | $(\$ 17,679)$ | 29 |
| 20 Estimate | Mar-24 | $(\$ 17,564)$ |  | \$0 | \$0 | $(\$ 17,564)$ | $(\$ 17,564)$ | 8.25\% | (\$123) | $(\$ 17,687)$ | 31 |
| 21 Estimate | Apr-24 | $(\$ 17,687)$ |  | \$0 | \$0 | $(\$ 17,687)$ | $(\$ 17,687)$ | 8.25\% | (\$120) | $(\$ 17,806)$ | 30 |
| 22 Estimate | May-24 | $(\$ 17,806)$ |  | \$0 | \$2,495 | $(\$ 20,302)$ | $(\$ 19,054)$ | 8.25\% | (\$133) | $(\$ 20,435)$ | 31 |
| 23 Estimate | Jun-24 | $(\$ 20,435)$ |  | \$0 | \$2,022 | $(\$ 22,457)$ | $(\$ 21,446)$ | 8.25\% | (\$145) | $(\$ 22,602)$ | 30 |
| 24 Estimate | Jul-24 | $(\$ 22,602)$ |  | \$0 | \$1,797 | $(\$ 24,399)$ | $(\$ 23,501)$ | 8.25\% | (\$164) | $(\$ 24,564)$ | 31 |
| 25 Estimate | Aug-24 | $(\$ 24,564)$ |  | \$0 | \$1,794 | $(\$ 26,358)$ | $(\$ 25,461)$ | 8.25\% | (\$178) | $(\$ 26,536)$ | 31 |
| 26 Estimate | Sep-24 | $(\$ 26,536)$ |  | \$0 | \$1,772 | $(\$ 28,308)$ | $(\$ 27,422)$ | 8.25\% | (\$185) | $(\$ 28,493)$ | 30 |
| 27 Estimate | Oct-24 | $(\$ 28,493)$ |  | \$0 | \$1,891 | $(\$ 30,384)$ | $(\$ 29,439)$ | 8.25\% | (\$206) | $(\$ 30,590)$ | 31 |
| 28 Total |  |  |  | $(\$ 16,714)$ | \$11,772 |  |  |  | $(\$ 2,218)$ |  |  |

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 23-086 RDAF

|  | (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (1) | (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 ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 Actual | Aug-23 | \$156,356 | \$0 | \$0 | \$156,356 | \$156,356 | 8.25\% | \$1,096 | \$157,452 | 31 |
| 14 Actual | Sep-23 | \$157,452 | \$0 | \$0 | \$157,452 | \$157,452 | 8.25\% | \$1,068 | \$158,519 | 30 |
| 15 Actual | 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 | \$0 | \$0 | \$332,221 | \$332,221 | 8.25\% | \$2,328 | \$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
DG 23-086 RDAF
DOE 2-2 Attachment 1
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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 ( $\mathrm{B}+\mathrm{C}+\mathrm{D}$ ) | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Computed Interest | Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 Actual | Aug-23 | \$39,112 | \$ | 19,738 | \$0 | \$58,850 | \$48,981 | 8.25\% | \$343 | \$59,193 | 31 |
| 14 Actual | Sep-23 | \$59,193 | \$ | (451) | \$0 | \$58,742 | \$58,967 | 8.25\% | \$400 | \$59,142 | 30 |
| 15 Actual | Oct-23 | \$59,142 | \$ | $(16,684)$ | \$0 | \$42,457 | \$50,800 | 8.25\% | \$356 | \$42,813 | 31 |
| 16 Estimate | Nov-23 | \$42,813 |  | \$0 | \$0 | \$42,813 | \$42,813 | 8.25\% | \$290 | \$43,104 | 30 |
| 17 Estimate | Dec-23 | \$43,104 |  | \$0 | \$0 | \$43,104 | \$43,104 | 8.25\% | \$302 | \$43,406 | 31 |
| 18 Estimate | Jan-24 | \$43,406 |  | \$0 | \$0 | \$43,406 | \$43,406 | 8.25\% | \$303 | \$43,709 | 31 |
| 19 Estimate | Feb-24 | \$43,709 |  | \$0 | \$0 | \$43,709 | \$43,709 | 8.25\% | \$286 | \$43,995 | 29 |
| 20 Estimate | Mar-24 | \$43,709 |  | \$0 | \$0 | \$43,709 | \$43,709 | 8.25\% | \$305 | \$44,014 | 31 |
| 21 Estimate | Apr-24 | \$44,014 |  | \$0 | \$0 | \$44,014 | \$44,014 | 8.25\% | \$298 | \$44,312 | 30 |
| 22 Estimate | May-24 | \$44,312 |  | \$0 | $(\$ 7,425)$ | \$36,887 | \$40,599 | 8.25\% | \$284 | \$37,170 | 31 |
| 23 Estimate | Jun-24 | \$37,170 |  | \$0 | $(\$ 6,754)$ | \$30,417 | \$33,793 | 8.25\% | \$229 | \$30,645 | 30 |
| 24 Estimate | Jul-24 | \$30,645 |  | \$0 | $(\$ 6,991)$ | \$23,654 | \$27,149 | 8.25\% | \$190 | \$23,843 | 31 |
| 25 Estimate | Aug-24 | \$23,843 |  | \$0 | $(\$ 6,983)$ | \$16,861 | \$20,352 | 8.25\% | \$142 | \$17,003 | 31 |
| 26 Estimate | Sep-24 | \$17,003 |  | \$0 | $(\$ 7,013)$ | \$9,990 | \$13,496 | 8.25\% | \$91 | \$10,081 | 30 |
| 27 Estimate | Oct-24 | \$10,081 |  | \$0 | $(\$ 7,245)$ | \$2,836 | \$6,458 | 8.25\% | \$45 | \$2,881 | 31 |
| 28 Total |  |  |  | \$40,192 | $(\$ 42,412)$ |  |  |  | \$5,386 |  |  |

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 23-086 RDAF
DOE 2-2 Attachment 1
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|  | (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance | Monthly <br> Revenue Variance (MRV) | Monthly Revenue (RDAF) (credit)/charge | Ending Balance before Interest $(B+C+D)$ | Average Monthly Balance $((B+E) / 2)$ | Interest Rate | Compute d Interest | Ending Balance inc. Interest ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 Actual | Aug-23 | $(\$ 709,161)$ |  | \$0 | $(\$ 709,161)$ | $(\$ 709,161)$ | 8.25\% | $(\$ 4,969)$ | $(\$ 714,130)$ | 31 |
| 14 Actual | Sep-23 | $(\$ 714,130)$ |  | \$0 | $(\$ 714,130)$ | $(\$ 714,130)$ | 8.25\% | $(\$ 4,842)$ | $(\$ 718,972)$ | 30 |
| 15 Actual | 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\% | $(\$ 7,782)$ | (\$1,121,443) | 31 |
| 27 Total |  |  | $(\$ 687,996)$ | \$411,349 |  |  |  | $(\$ 118,523)$ |  |  |

## Northern Utilities, Inc <br> Revenue Decoupling Factor Reconciliation <br> C\&I Low Load Factor - G-40, G-41, G-42

Off Peak Period - May to October

Northern Utilities, Inc
New Hampshire Division
DG 23-086 RDAF
DOE 2-2 Attachment 1
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|  | (A) | (B) |  | (C) | (D) | (E) | (F) | (G) | (H) | (1) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month | Beginning Balance |  | Monthly <br> Revenue <br> Variance <br> (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 ( $\mathrm{E}+\mathrm{H}$ ) | \# 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 Actual | Aug-23 | $(\$ 3,823)$ | \$ | 4,530 | \$0 | \$707 | $(\$ 1,558)$ | 8.25\% | (\$11) | \$696 | 31 |
| 14 Actual | Sep-23 | \$696 | \$ | $(17,427)$ | \$0 | $(\$ 16,731)$ | $(\$ 8,018)$ | 8.25\% | (\$54) | $(\$ 16,785)$ | 30 |
| 15 Actual | Oct-23 | $(\$ 16,785)$ | \$ | $(156,919)$ | \$0 | $(\$ 173,705)$ | $(\$ 95,245)$ | 8.25\% | (\$667) | (\$174,372) | 31 |
| 16 Estimate | Nov-23 | (\$174,372) |  | \$0 | \$0 | (\$174,372) | (\$174,372) | 8.25\% | $(\$ 1,182)$ | (\$175,554) | 30 |
| 17 Estimate | Dec-23 | (\$175,554) |  | \$0 | \$0 | $(\$ 175,554)$ | (\$175,554) | 8.25\% | $(\$ 1,230)$ | $(\$ 176,784)$ | 31 |
| 18 Estimate | Jan-24 | $(\$ 176,784)$ |  | \$0 | \$0 | (\$176,784) | (\$176,784) | 8.25\% | $(\$ 1,235)$ | $(\$ 178,020)$ | 31 |
| 19 Estimate | Feb-24 | (\$178,020) |  | \$0 | \$0 | (\$178,020) | $(\$ 178,020)$ | 8.25\% | $(\$ 1,164)$ | $(\$ 179,183)$ | 29 |
| 20 Estimate | Mar-24 | $(\$ 178,020)$ |  | \$0 | \$0 | $(\$ 178,020)$ | $(\$ 178,020)$ | 8.25\% | $(\$ 1,244)$ | $(\$ 179,264)$ | 31 |
| 21 Estimate | Apr-24 | (\$179,264) |  | \$0 | \$0 | (\$179,264) | (\$179,264) | 8.25\% | $(\$ 1,212)$ | $(\$ 180,476)$ | 30 |
| 22 Estimate | May-24 | $(\$ 180,476)$ |  | \$0 | \$54,592 | $(\$ 235,068)$ | (\$207,772) | 8.25\% | $(\$ 1,452)$ | $(\$ 236,520)$ | 31 |
| 23 Estimate | Jun-24 | $(\$ 236,520)$ |  | \$0 | \$26,409 | $(\$ 262,928)$ | $(\$ 249,724)$ | 8.25\% | $(\$ 1,689)$ | (\$264,617) | 30 |
| 24 Estimate | Jul-24 | (\$264,617) |  | \$0 | \$17,996 | (\$282,613) | $(\$ 273,615)$ | 8.25\% | $(\$ 1,912)$ | (\$284,525) | 31 |
| 25 Estimate | Aug-24 | (\$284,525) |  | \$0 | \$17,988 | $(\$ 302,513)$ | $(\$ 293,519)$ | 8.25\% | $(\$ 2,051)$ | $(\$ 304,564)$ | 31 |
| 26 Estimate | Sep-24 | $(\$ 304,564)$ |  | \$0 | \$22,824 | $(\$ 327,388)$ | $(\$ 315,976)$ | 8.25\% | $(\$ 2,137)$ | $(\$ 329,525)$ | 30 |
| 27 Estimate | Oct-24 | (\$329,525) |  | \$0 | \$34,532 | (\$364,057) | $(\$ 346,791)$ | 8.25\% | $(\$ 2,423)$ | $(\$ 366,480)$ | 31 |
| 28 Total |  |  |  | $(\$ 173,422)$ | \$174,340 |  |  |  | $(\$ 19,881)$ |  |  |

Northern Utilities, Inc.
Calculation of the Monthly Revenue Variance \& Cap - Peak Period
Northern Utiftes,
New Hampshire Division
DG $23-086$ RDAF
DOE 2-2 Attachment 1
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| Actual Distribution Revenues | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  | R5-R10 |  |  |  | G41 |  | G51 |  |  |  |  |  |  |
| November |  | 63,599 |  | 2,772,857 |  | 1,049,347 |  |  |  | 112,869 |  | 697,960 |  | 157,276 |  | 253,813 |  | 327,145 |  | 5,434,867 |
| December |  | 57,379 |  | 2,311,208 |  | 451,892 |  | 87,888 |  | 614,651 |  | 138,898 |  | 172,246 |  | 336,947 |  | 4,171,107 |
| January |  | 71,957 |  | 3,510,773 |  | 878,418 |  | 102,967 |  | 851,489 |  | 161,630 |  | 176,395 |  | 364,883 |  | 6,118,511 |
| February |  | 66,627 |  | 3,080,713 |  | 852,499 |  | 94,966 |  | 749,967 |  | 146,732 |  | 172,431 |  | 341,805 |  | 5,505,741 |
| March |  | 58,334 |  | 3,019,889 |  | 783,304 |  | 107,963 |  | 749,363 |  | 162,362 |  | 168,459 |  | 360,958 |  | 5,410,631 |
| April (includes prorated May) |  | 50,682 |  | 1,688,328 |  | 586,793 |  | 93,525 |  | 412,359 |  | 128,871 |  | 58,354 |  | 323,643 |  | 3,342,555 |
| Total - Peak |  | 368,576 | \$ | 16,383,768 | \$ | 4,602,252 | \$ | 600,178 | \$ | 4,075,789 | \$ | 895,769 | \$ | 1,001,698 | \$ | 2,055,382 | \$ | 29,983,413 |


| Actual Customer Counts | Residential |  | Commercial and Industrial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |
| November | 1,278 | 27,755 | 5,224 | 822 | 690 | 279 | 30 | 34 |
| December | 1,251 | 27,903 | 5,285 | 817 | 690 | 280 | 30 | 33 |
| January | 1,227 | 28,030 | 5,337 | 809 | 695 | 278 | 29 | 36 |
| February | 1,245 | 28,033 | 5,341 | 805 | 698 | 277 | 29 | 36 |
| March | 1,196 | 28,138 | 5,356 | 811 | 701 | 278 | 29 | 36 |
| April (includes prorated May) | 1,202 | 28,091 | 5,358 | 811 | 702 | 278 | 29 | 36 |


| Actual Monthly Revenue Per Customer | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  |  |  |  |  | G41 |  | G51 |  |  |  |  |
| November |  | 49.76 |  | 99.90 |  | 200.87 |  |  |  | 137.31 |  | 1,011.54 |  | 563.71 |  | 8,460.43 |  | 9,621.92 |
| December |  | 45.87 |  | 82.83 |  | 85.50 |  | 107.57 |  | 890.80 |  | 496.07 |  | 5,741.53 |  | 10,210.53 |
| January |  | 58.64 |  | 125.25 |  | 164.59 |  | 127.28 |  | 1,225.16 |  | 581.40 |  | 6,082.59 |  | 10,135.64 |
| February |  | 53.52 |  | 109.90 |  | 159.61 |  | 117.97 |  | 1,074.45 |  | 529.72 |  | 5,945.90 |  | 9,494.58 |
| March |  | 48.77 |  | 107.32 |  | 146.25 |  | 133.12 |  | 1,068.99 |  | 584.04 |  | 5,808.93 |  | 10,026.60 |
| April (includes prorated May) |  | 42.16 |  | 60.10 |  | 109.52 |  | 115.32 |  | 587.41 |  | 463.56 |  | 2,012.22 |  | 8,990.10 |
| Total - Peak | \$ | 298.73 | \$ | 585.31 | \$ | 866.34 | \$ | 738.58 | \$ | 5,858.35 | \$ | 3,218.50 | \$ | 34,051.60 | \$ | 58,479.36 |


| Authorized Monthly Revenue Per Customer (DG 21-104) | Residential |  |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  | R5-R10 |  | G40 |  | G50 | G41 |  | G51 |  |  | G42 |  | G52 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| November |  | 46.26 |  | 91.96 |  | 134.15 |  | 115.99 |  | 841.30 |  | 504.61 |  | 5,427.24 |  | 8,962.53 |
| December |  | 55.23 |  | 132.22 |  | 168.98 |  | 124.42 |  | 1,159.60 |  | 569.52 |  | 6,897.34 |  | 9,851.53 |
| January |  | 57.91 |  | 148.33 |  | 182.83 |  | 127.04 |  | 1,278.48 |  | 589.36 |  | 7,801.39 |  | 8,604.40 |
| February |  | 53.38 |  | 134.23 |  | 170.49 |  | 123.47 |  | 1,160.86 |  | 561.25 |  | 7,127.11 |  | 9,535.37 |
| March |  | 49.97 |  | 116.73 |  | 154.74 |  | 118.57 |  | 1,012.75 |  | 543.47 |  | 6,529.00 |  | 8,839.80 |
| April (includes prorated May) |  | 42.95 |  | 77.73 |  | 121.80 |  | 106.59 |  | 684.19 |  | 470.36 |  | 4,981.99 |  | 8,791.23 |
| Total | \$ | 305.71 | \$ | 701.19 | \$ | 932.98 | \$ | 716.08 | \$ | 6,137.19 | \$ | 3,238.58 | \$ | 38,764.07 | \$ | 54,584.87 |


| Revenue per Customer Difference Actual - Authorized | Residential |  | Commercial and Industrial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |
| November | 3.50 | 7.95 | 66.72 | 21.32 | 170.23 | 59.10 | 3,033.20 | 659.39 |
| December | (9.36) | (49.39) | (83.48) | (16.85) | (268.80) | (73.46) | $(1,155.82)$ | 358.99 |
| January | 0.73 | (23.08) | (18.24) | 0.24 | (53.32) | (7.96) | $(1,718.81)$ | 1,531.24 |
| February | 0.13 | (24.34) | (10.88) | (5.50) | (86.41) | (31.53) | $(1,181.21)$ | (40.79) |
| March | (1.20) | (9.40) | (8.49) | 14.56 | 56.24 | 40.57 | (720.06) | 1,186.80 |
| April (includes prorated May) | (0.78) | (17.62) | (12.28) | 8.73 | (96.78) | (6.80) | $(2,969.77)$ | 198.87 |


| Revenue Difference | Residential |  |  |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Revenue Per Customer Difference * Actual \# Customers) |  | R6 |  | R5-R10 |  | G40 |  | G50 |  | G41 |  | G51 |  | G42 |  | G52 |
| November |  | 4,476 |  | 220,550 |  | 348,527 |  | 17,528 |  | 117,461 |  | 16,489 |  | 90,996 |  | 22,419 |
| December |  | $(11,714)$ |  | $(1,378,058)$ |  | $(441,166)$ |  | $(13,766)$ |  | $(185,475)$ |  | $(20,569)$ |  | $(34,675)$ |  | 11,847 |
| January |  | 895 |  | $(646,873)$ |  | $(97,337)$ |  | 195 |  | $(37,054)$ |  | $(2,212)$ |  | $(49,845)$ |  | 55,124 |
| February |  | 168 |  | $(682,231)$ |  | $(58,084)$ |  | $(4,430)$ |  | $(60,312)$ |  | $(8,735)$ |  | $(34,255)$ |  | $(1,468)$ |
| March |  | $(1,431)$ |  | $(264,632)$ |  | $(45,459)$ |  | 11,807 |  | 39,423 |  | 11,277 |  | $(20,882)$ |  | 42,725 |
| April (includes prorated May) |  | (943) |  | $(495,058)$ |  | $(65,794)$ |  | 7,080 |  | $(67,942)$ |  | $(1,890)$ |  | $(86,123)$ |  | 7,159 |
| Total | \$ | $(8,549)$ | \$ | $(3,246,301)$ | \$ | $(359,312)$ |  | 18,413 |  | $(193,899)$ | \$ | $(5,640)$ | \$ | $(134,784)$ | \$ | 137,806 |

Calculation of the Cap by Customer Group Residential Non-Heat - R6
Residential Non-Heat - R6
C\&I Ligh Load Factor - G-50, G-51, G-52


| Actual Distribution Revenues | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Actual Aug -Oct 2022, May - Oct 2023) |  | R6 |  | R5-R10 |  |  |  | G41 |  | G51 |  |  |  |  |  |  |
| 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 | \$ | 43,332 | \$ | 925,114 | \$ | 444,791 | \$ | 100,508 | \$ | 219,514 | \$ | 122,461 | \$ | 71,639 | \$ | 216,163 | \$ | 2,143,521 |
| September | \$ | 46,695 | \$ | 979,137 | \$ | 463,665 | \$ | 103,468 | \$ | 248,110 | \$ | 125,912 | \$ | 84,716 | \$ | 206,334 | \$ | 2,258,037 |
| October | \$ | 43,840 | \$ | 1,138,921 | \$ | 469,259 | \$ | 91,959 | \$ | 315,267 | \$ | 129,670 | \$ | 100,702 | \$ | 212,918 | \$ | 2,502,535 |
| 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 | 1,260 | 27,909 | 5,122 | 838 | 682 | 279 | 29 | 37 |
| September | 1,331 | 27,931 | 5,075 | 842 | 687 | 278 | 29 | 37 |
| October | 1,308 | 28,060 | 5,129 | 846 | 668 | 282 | 29 | 37 |


| Actual 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 |  | \$ | 34.39 | \$ | 33.15 | \$ | 86.84 | \$ | 119.94 | \$ | 321.87 | \$ | 438.93 | \$ | 2,470.31 | \$ | 5,842.23 |
| September |  | \$ | 35.08 | \$ | 35.06 | \$ | 91.36 | \$ | 122.88 |  | 361.15 | \$ | 452.92 | \$ | 2,921.26 | \$ | 5,576.59 |
| October |  | \$ | 33.52 | \$ | 40.59 | \$ | 91.49 | \$ | 108.70 | \$ | 471.96 | \$ | 459.82 | \$ | 3,472.48 | \$ | 5,754.53 |
|  | - | + | 318.79 | \$ | 347.13 | \$ | 826.02 | S | 1,056.93 | - | 3,656.71 | \$ | 4,065.62 | \$ | 27,042.73 | \$ | 50,465.78 |


| Authorized Monthly Revenue Per Customer (DG 21-104) | Residential |  |  |  | G40 |  | G50 |  | Commercial and Industrial |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R6 |  |  |  |  |  | G41 |  | G51 |  |  |  |  |
| 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 |  |  |  | G40 |  | Commercial and Industrial |  |  |  |  |  | G42 |  | G52 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6 |  |  |  |  |  | 50 |  | 41 |  | 51 |  |  |  |  |
| 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 | \$ | (0.50) | \$ | 0.22 | \$ | 2.35 | \$ | 7.79 | \$ | (1.15) | \$ | 15.38 | \$ | (232.06) | \$ | 241.17 |
| September | \$ | (1.14) | \$ | (5.51) | \$ | 0.32 | \$ | 11.61 | \$ | (25.11) | \$ | 25.32 | \$ | (62.50) | \$ | (466.52) |
| October | \$ | (6.04) | \$ | (18.67) | \$ | (15.30) | \$ | (2.56) | \$ | (92.33) | \$ | 4.69 | \$ | (578.33) | \$ | (428.11) |


| Revenue Difference | Residential |  |  | Commercial and Industrial |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Revenue Per Customer Difference *Actual \# Customers) | 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) | \$ | $(199,103.37)$ | \$ | (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 | (624.05) | \$ | 6,195.58 | \$ | 12,043.21 | \$ | 6,524.87 | \$ | (783.74) | 4,289.72 | \$ | $(6,729.64)$ | \$ | 8,923.42 |
| September | \$ (1,514.05) | \$ | (154,008.94) | \$ | 1,634.97 | \$ | 9,771.76 | \$ | $(17,249.48)$ | \$ 7,038.10 | \$ | $(1,812.64)$ | \$ | $(17,261.07)$ |
| October | \$ (7,895.48) | \$ | $(523,776.07)$ | \$ | $(78,472.59)$ | \$ | $(2,166.09)$ |  | $(61,674.89)$ | \$ 1,321.89 | \$ | $(16,771.64)$ | \$ | $(15,840.03)$ |
| Total | \#\#\#\#\#\#\#\# | \$ | $(1,219,885.09)$ | \$ | $(73,704.07)$ |  | 53,063.58 | \$ | $(53,015.09)$ | \$ 40,894.62 | \$ | $(46,703.12)$ | \$ | $(53,766.16)$ |
| Calculation of the Cap by Customer Group |  |  |  |  |  |  |  |  | Actual D | Distribution Re | ven | nues |  | 4.25\% cap |
| Residential Heating - R5, R10 |  |  |  |  |  |  |  |  |  | \$ 6,629,009 |  |  |  | \$281,733 |
| Residential Non-Heat - R6 |  |  |  |  |  |  |  |  |  | \$ 276,970 |  |  |  | \$11,771 |
| C\&I High Load Factor - G-50, G-51, G-52 |  |  |  |  |  |  |  |  |  | \$ 2,517,048 |  |  |  | \$106,975 |
| C\&l Low Load Factor - G-40, G-41, G-43 |  |  |  |  |  |  |  |  |  | \$ 5,099,882 |  |  |  | \$216,745 |

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

Actual Base Revenues
Actual Number of Customers


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

|  |  |  |  | Actual |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual Billed |  | Total Actual | Customer |  | Actual |
|  | Base | Net Unbilled | Base | Charge | Customer | Number of |
|  | Revenues | Revenues | Revenues | Revenue | Charge | Customers |
| Aug-22 | \$447,368 | \$466,841 | \$914,209 | \$611,899 | \$22.20 | 27,563 |
| 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 |
| Aug-23 | \$924,802 | \$313 | \$925,114 | \$619,588 | \$22.20 | 27,909 |
| Sep-23 | \$917,315 | \$61,823 | \$979,137 | \$620,076 | \$22.20 | 27,931 |
| Oct-23 | \$1,077,985 | \$60,936 | \$1,138,921 | \$622,936 | \$22.20 | 28,060 |
| Off-Pe | \$5,751,829 | \$614,078 | \$6,365,907 |  |  |  |

Residential Non Heat, R-6-Peak

|  | Actual Billed |  | Actual |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total Actual | Customer |  | Actual |
|  | Base | Net Unbilled | Base | Charge | Customer | Number of |
|  | Revenues | Revenues | Revenues | Revenue | Charge | Customers |
| Nov-22 | \$21,113 | \$42,485 | \$63,599 | \$28,367 | \$22.20 | 1,278 |
| 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


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


Customer counts in estimated months from Company forecast
Estimated revenusue equals authorized revenue per customer times forecasted customer count

Northern Utilities, Inc
Revenue Decoupling Adjustment Factor Revenue

## esidential Heating, R-5, R-10 - Peak

## Therms

| $1,279,752$ |
| ---: |
| $2,602,092$ |
| $3,542,517$ |
| $3,594,997$ |
| $3,048,778$ |
| $1,984,190$ |
| $16,052,326$ |

Residential Heating, R-5, R-10 - Off-Peak Therms RDAF \$/therm

| 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 | $\underline{476,583}$ | $\$ 0.1071$ | $\underline{\$ 51,042}$ |
| Total Off-Peak | $2,631,203$ |  | $\$ 281,802$ |

Otal Off-Peak

## Residential Non Heat, R-6 - Peak

## Therms <br> RDAF \$/therm

| RDAF $\$ /$ therm |  |
| ---: | ---: |
| 16,230 | $\$ 0.0588$ |
| 24,950 | $\$ 0.0588$ |
| 30,654 | $\$ 0.0588$ |
| 30,979 | $\$ 0.0588$ |
| 25,307 | $\$ 0.0588$ |
| 20,159 | $\$ 0.0588$ |
| 148,279 |  | $\$ 954$ \$1,467 \$1,802 \$1,822 \$1,822

\$1,488 $\begin{array}{crrr}\text { Apr-24 Estimate } & \underline{20,159} & \$ 0.0588 & \underline{\$ 1,185} \\ \text { Total Peak } & 148,279 & & \$ 8,719\end{array}$
RDAF Revenue
$\$ 55,541$
$\$ 112,931$
$\$ 153,745$
$\$ 156,023$
$\$ 132,317$
$\$ 86,114$
$\$ 696,671$
$\$ 0.1071$
$\$ 0.0434$
$\$ 0.0434$
$\$ 0.0434$
$\$ 0.0434$
$\$ 0.0434$
$\$ 0.0434$

k
rm
$\$ 0.1071$
$\$ 0.1071$
$\$ 0.1071$
$\$ 0.1071$
$\$ 0.1071$
$\$ 0.1071$

RDAF Revenue 113,067 \$48,325 \$23,327 \$22,937 \$51,042

| Therms | RDAF \$/th |
| :--- | ---: |
| Nov-23 Estimate | 16,230 |
| Dec-23 Estimate | 24,950 |
| Jan-24 Estimate | 30,654 |
| Feb-24 Estimate | 30,979 |
| Mar-24 Estimate | 25,307 |
| Apr-24 Estimate | $\underline{20,159}$ |
| Total Peak |  |
| Residential Non-Heat, R-6 - Off-Peak |  |


|  | Therms |  | RDAF $\$ /$ therm |
| :---: | :---: | :---: | :---: | RDAF Revenue

Northern Utilities, Inc. New Hampshire Division DG 23-086 RDAF
DOE 2-2 Attachment 1
Page 14 of 14

| C\&I High Load Factor, G-50. G-51, G-52 - Peak |  |  |  |  |
| :---: | ---: | ---: | ---: | :---: |
| Therms |  | RDAF \$/thern 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 | $2,128,696$ | $(\$ 0.0112)$ | $(\$ 23,841)$ |  |
| Total Peak | $13,530,217$ |  | $(\$ 151,538)$ |  |
|  |  |  |  |  |
| C\&I High Load Factor, G-50. G-51, G-52 - Off-Peak |  |  |  |  |
|  | Therms | RDAF \$/thern RDAF Revenue |  |  |
| May-24 Estimate | $2,006,877$ | $(\$ 0.0037)$ | $(\$ 7,425)$ |  |
| Jun-24 Estimate | $1,825,327$ | $(\$ 0.0037)$ | $(\$ 6,754)$ |  |
| Jul-24 Estimate | $1,889,588$ | $(\$ 0.0037)$ | $(\$ 6,991)$ |  |
| Aug-24 Estimate | $1,887,246$ | $(\$ 0.0037)$ | $(\$ 6,983)$ |  |
| Sep-24 Estimate | $1,895,408$ | $(\$ 0.0037)$ | $(\$ 7,013)$ |  |
| Oct-24 Estimate | $1,958,169$ | $(\$ 0.0037)$ | $(\$ 7,245)$ |  |
| Total Off-Peak | $11,462,614$ |  | $(\$ 42,412)$ |  |

C\&I Low Load Factor, G-40. G-41. G-42 - Peak Therms RDAF \$/thern 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 | $\underline{2,945,402}$ | $\$ 0.0169$ | $\$ 49,777$ |
| Total Peak | $24,340,176$ |  | $\$ 411,349$ |

C\&I Low Load Factor, G-40. G-41. G-42 - Off-Peak Therms RDAF \$/thern RDAF Revenue

| May-24 Estimate | $1,619,935$ | $\$ 0.0337$ | $\$ 54,592$ |
| ---: | ---: | ---: | ---: |
| Jun-24 Estimate | 783,644 | $\$ 0.0337$ | $\$ 26,409$ |
| Jul-24 Estimate | 534,012 | $\$ 0.0337$ | $\$ 17,996$ |
| Aug-24 Estimate | 533,772 | $\$ 0.0337$ | $\$ 17,988$ |
| Sep-24 Estimate | 677,266 | $\$ 0.0337$ | $\$ 22,824$ |
| Oct-24 Estimate | $1,024,675$ | $\$ 0.0337$ | $\$ 34,532$ |
| Total Off-Peak | $5,173,303$ |  | $\$ 174,340$ |

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 2 

Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-2 (RDAF):

Reference: Attachment SED-1 RDAF, pg. 10-13; and Attachment SED-1 RDAF.xlsx, tab "Base Revenue Res" \& "Base Revenue Gen Service".
a) Please provide updates for the estimated figures for the month of August 2023, September 2023 and October 2023 (if available) for all rate classes. If not available, please explain why and indicate when actual figures will be available.
b) In light of a), please re-file the Off-Peak calculation, if required, and provide a narrative description of the updated filing.

## Response:

a) See DOE 2-2 Attachment 1. The impact of these updates on proposed off-peak rates are shown in the following table:

| Class Grouping | R-5, R-10 <br> $\$ /$ therm | R-6 <br> $\$ /$ therm | G-50, G-51, G-52 <br> $\$ /$ therm | G-40, G-41, G42 <br> $\$ /$ therm |
| :--- | :--- | :--- | :--- | :--- |
| Original Filing | $\$ 0.1071$ | $\$ 0.0933$ | $(\$ 0.0035)$ | $\$ 0.0008$ |
| Updated with <br> Actual - <br> October 2023 | $\$ 0.1071$ | $\$ 0.1554$ | $(\$ 0.0037)$ | $\$ 0.0337$ |
| Difference | $\$ 0.0000$ | $\$ 0.0621$ | $(\$ 0.0002)$ | $\$ 0.0329$ |

b) The Company submitted its RDAF filing consistent with the effective Revenue Decoupling Adjustment Clause tariff, which states:

The Company will file for implementation of the RDAF 45 days before November 1. The filing will provide the proposed RDAF for the Peak period, for effect November 1, and subsequent Off-Peak period, for effect May 1. The RDA for the Peak period will reflect actual data for the entire six-month period while the RDA for the Off-Peak period will reflect actual data for the first three months of the period and estimated data for the remaining three months.

Northern Utilities, Inc., NHPUC No. 12 - Gas, First Revised Page 165 (emphasis added); see also DG 21-104, Northern Utilities, Inc., Settlement Agreement at 45. Refiling the Company's RDAF with actual data would be inconsistent with the

## Northern Utilities, Inc.

DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 2
Date Request Received: 11/08/23
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Company's Revenue Decoupling Adjustment Clause tariff and the Settlement Agreement that the parties negotiated and which was subsequently approved by the Commission.

Person Responsible: S E Demeris

# Northern Utilities, Inc. <br> <br> DG 23-086 <br> <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 2 

Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-3 (RDAF):

Reference: Northern's Response to DOE 1-4, where Northern identified the typical number of billing cycles in any given month; and Northern's Response to DOE 1-5b., where the calendarization process of "estimating" the "Net Unbilled Revenue" is described.

For the purpose of the following questions, assume that a customer's billing cycle runs from November $11^{\text {th }}$ to December $10^{\text {th }}$ (i.e., one meter reading occurs on November $10^{\text {th }}$ and the following reading is taken on December $10^{\text {th }}$ ).
a) The bills issued on November $11^{\text {th }}$ has consumption from November 1 to 10. Does that portion of the bill accounts for "Actual Billed Base Revenue" for the month of November? Please explain.
b) The bills issued on December $11^{\text {th }}$ has consumption from November 11 to 30. Does that portion of the bill accounts for "Net Unbilled Revenue" for the month of November? Please explain.
c) In light of a) and b), please explain the calendarization process for this specific example.
d) In light of a), b) and c), please explain the process of the "Net Unbilled Revenue" calculation for three consecutive months, October, November and December).

## Response:

a) Bills issued on November $11^{\text {th }}$ have consumption from October $11^{\text {th }}$ to November $10^{\text {th }}$. The entire 31 days of usage for these bills are recorded in "Actual Billed Base Revenue" for the month of November.
b) For the bills issued on December $11^{\text {th }}$ that have consumption from November $11^{\text {th }}$ to the $30^{\text {th }}$, the consumption for the last 20 days of the month is included in "Net Unbilled Revenue" for the month of November.
c) Using just the bills issued on November $11^{\text {th }}$, the revenue for the month of November is made up of three components: the billings from the November $11^{\text {th }}$, the unbilled portion of November $11^{\text {th }}$ to $30^{\text {th }}$ consumption, and the reversal of the unbilled portion of the October $11^{\text {th }}$ to $31^{\text {st }}$ consumption. The reversal of October consumption is necessary to reduce the first 20 days of billings for the November

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 2 

$11^{\text {th }}$ bills. The Company then includes the unbilled calculation for the last 20 days of November. The "Net Unbilled Revenue" is the difference between the unbilled calculations for October and November (reversal of October unbilled plus November unbilled.)
d) For the three months of October, November and December, the "Net Unbilled Revenue" is calculated by adding the current month's unbilled revenue and subtracting the prior month's unbilled revenue. Please see the tabel below to assist with the response. The unbilled calculation for September is subtracted from the October unbilled calculation to arrive at net unbilled revenue for October. The same process is used for November and December where the previous months unbilled is reversed and the current month's unbilled is added to arrive at net unbilled. The amounts used below are for illustrative purposes and are increasing as sales during the four quarter typically increase each month as well as the corresponding unbilled revenue.

|  | September |  | October |  | November |  | December |  |
| :--- | :---: | ---: | :---: | ---: | :---: | ---: | ---: | ---: |
| Prior Month Unbilled Reversal | $\$$ | $(40)$ | $\$$ | $(50)$ | $\$$ | $(60)$ | $\$$ | $(70)$ |
| Current Month Unbilled | $\$$ | 50 | $\$$ | 60 | $\$$ | 70 | $\$$ | 80 |
| Net Unbilled Revenue | $\$$ | 10 | $\$$ | 10 | $\$$ | 10 | $\$$ | 10 |

Person Responsible: Keith Hanson and S E Demeris

## Northern Utilities, Inc.

DG 23-086

## Revenue Decoupling Adjustment Factor (RDAF) 2023-24

 NH Department of Energy Data Requests - Set 2Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-4 (RDAF):

Reference: Attachment SED-1 RDAF, pg. 10-13; and Attachment SED-1 RDAF.xlsx, tab "Base Revenue Res" \& "Base Revenue Gen Service".
a) What is a typical Peak period? How many months are included?
b) For the identified Peak period: why does April 2023 calculation include prorated May 2023 figures?
c) What is a typical Off-Peak period? How many months are included?
d) For the identified Off-peak period: why does October 2022 calculation include prorated November 2022 figures?

## Response:

a) The peak period is defined in the Company's Tariff Section VII. Delivery Service Terms and Conditions, page 94, as the consecutive November to April months.
b) Due to the billing cycle, April usage at peak rates may be included in May bills. This usage is added back to April for accuracy.
c) The off-peak period is defined in the Company's Tariff Section VII. Delivery Service Terms and Conditions, page 93, as the consecutive May to October months.
d) Due to the billing cycle, October usage at off-peak rates may be included in November bills. This usage is added back to October for accuracy.

Person Responsible: S E Demeris

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 2 

Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-5 (RDAF):

Reference: Attachment SED-1 RDAF, pg. 10-13; and Attachment SED-1 RDAF.xlsx, tab "Base Revenue Res" \& "Base Revenue Gen Service".
a) What is the basis of (i.e., how does Northern calculate) Northern's "Actual Number of Customer" (i.e., the customer count) for the three off-peak months of August 2023, September 2023, and October 2023 ?
b) In light of a), please re-file the Off-Peak customer count calculation, if required, and provide a narrative description of the updated filing.

## Response:

a) When calculating the "Actual Number of Customers" the average for the given month is taken based on active meters. However, at the time the filing was made August, September and October data was not available. Estimated customer counts were taken from the Company sales forecast. Forecasted customer counts are derived using a multiple linear regression with historical customer data and independent economic or demographic variables (when applicable) gathered from Moody's Analytics.
b) See DOE 2-2 Attachment 1 for the requested information. The Company's response to DOE 2-2 includes actual customer counts derived from actual billed customer charge revenue divided by the customer charge rate in effect. As the Company explained in its response to DOE 2-2, re-filing the Company's Off-Peak customer count calculation would not be consistent with the RDAC Tariff or the Settlement Agreement approved by the Commission in DG 21-104.

Person Responsible: S E Demeris

## Northern Utilities, Inc.

Revenue Decoupling Adjustment Factor (RDAF) 2023-24 NH Department of Energy Data Requests - Set 2

Date Request Received: 11/08/23

Date of Response: 11/20/23

## DOE 2-6 (RDAF):

Reference: Northern's Response to DOE 1-5a; Attachment SED 1 RDAF Page 12 of 14 In Northern's Response to DOE 1-5a, Northern states that "[The] 'Net Unbilled Revenues' represents estimated customer usage within the current month that has not yet officially billed due to the various billing cycles that generate actual customer billings. Estimates are recorded each month by customer class and then reversed in the following month. Each month of 'Net Unbilled Revenues' includes an estimate for the current month and the reversal of the estimate for the prior month." (Emphasis added).
a) Does Northern reverse full estimated unbilled revenue in the following month(s)? For example, the "Net Unbilled Revenue" for November 2022 was identified as $\$ 2,040,900$ for rate class R-5, R-10 - Peak (See Attachment SED-1 RDAF, Page 12 of 14). Was the full $\$ 2,040,900$ reversed and updated with the actual unbilled base revenue in December 2022?
b) If yes, please provide the following information for all rate classes and please provide documentation showing the accounting adjustments made:

| Table 1 (Peak Period): Net Unbilled Revenue by Rate Class - Estimated vs Actual |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Month | Net Unbilled Revenue <br> (Estimated in the month of) | Net Unbilled Revenue <br> (Actual: calculated in the <br> following month(s)) | Difference | Net Unbilled Revenue <br> Reversal entry amount <br> (calculated in the <br> following month(s)) |  |
|  | (A) | (B) | (C) $=$ (A) - (B) |  |  |


| Table 2 (Off-Peak Period): Net Unbilled Revenue by Rate Class - Estimated vs Actual |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | Net Unbilled Revenue (Estimated in the month of) | Net Unbilled Revenue (Actual: calculated in the following month(s)) | Difference | Net Unbilled Revenue Reversal entry amount (calculated in the |
|  | (A) | (B) | $(C)=(A)-(B)$ | following month(s)) |
| May-23 |  |  |  |  |
| June-23 |  |  |  |  |
| July-23 |  |  |  |  |
| Aug-23 |  |  |  |  |
| Sept-23 |  |  |  |  |

## Northern Utilities, Inc.

DG 23-086
Revenue Decoupling Adjustment Factor (RDAF) 2023-24
NH Department of Energy Data Requests - Set 2
Date Request Received: 11/08/23
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## Oct-23

c) If no, please provide the above calculations (complete the tables) and explain why Northern does not follow the outlined process.? Please illustrate your explanation with an example.

## Response:

a. Yes, Northern does reverse full estimated unbilled revenue in the following month.
b. Please see Attachment 1 for all rate classes. Northern does not track unbilled between peak and off peak, thus only one table was provided for the period November 2022 - October 2023. Additionally, the formula in the Difference column was changed to $(C)=(B)-(A)$ to reflect net unbilled revenue for the month. And please note that the Difference column is the only column that reflects net unbilled revenue, as the other columns present the current month or the prior month's unbilled revenue.

Please see Attachment 2a and Attachment 2b for documentation showing the accounting adjustments made in the GL in 2022 and 2023.
c. No response needed as the response to item (b) was yes.

Person Responsible: Keith Hanson and S E Demeris

Docket DG 23-086
NH DOE Tech Statement / Arif
Attachment B

Northern Utilities, Inc.
DG 23-086
DOE 2-6 Attachment 1

| Table 1 (Peak/Off Peak Period): Net Unbilled Revenue by Rate Class - Estimated vs Actual |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Rate Class | Unbilled Revenue <br> (Estimated in the month of) | Unbilled Revenue (calculated in the following month(s)) | Difference | Unbilled Revenue Reversal entry amount (calculated in the |
|  |  | (A) | (B) | $(C)=(B)-(A)$ | following month(s)) |
| 22-Nov | R6 | 42,485 | 37,348 | $(5,137)$ | $(42,485)$ |
|  | R5, R10 | 2,040,900 | 1,731,052 | $(309,848)$ | $(2,040,900)$ |
|  | G40 | 782,200 | 491,491 | $(290,709)$ | $(782,200)$ |
|  | G41 | 470,289 | 422,555 | $(47,734)$ | $(470,289)$ |
|  | G42 | 129,283 | 114,942 | $(14,341)$ | $(129,283)$ |
|  | G50 | 68,869 | 57,607 | $(11,262)$ | $(68,869)$ |
|  | G51 | 95,551 | 85,751 | $(9,800)$ | $(95,551)$ |
|  | G52 | 0 | - | - | - |
|  | Special Contract | 0 | - | - | - |
| 22-Dec | R6 | 37,348 | 37,746 | 398 | $(37,348)$ |
|  | R5, R10 | 1,731,052 | 1,823,264 | 92,212 | $(1,731,052)$ |
|  | G40 | 491,491 | 476,392 | $(15,099)$ | $(491,491)$ |
|  | G41 | 422,555 | 442,262 | 19,708 | $(422,555)$ |
|  | G42 | 114,942 | 101,062 | $(13,880)$ | $(114,942)$ |
|  | G50 | 57,607 | 55,275 | $(2,331)$ | $(57,607)$ |
|  | G51 | 85,751 | 85,195 | (556) | $(85,751)$ |
|  | G52 | 0 | - | - | - |
|  | Special Contract | 0 | - | - | - |
| 23-Jan | R6 | 37,746 | 31,069 | $(6,678)$ | $(37,746)$ |
|  | R5, R10 | 1,823,264 | 1,461,133 | $(362,131)$ | $(1,823,264)$ |
|  | G40 | 476,392 | 395,875 | $(80,516)$ | $(476,392)$ |
|  | G41 | 442,262 | 355,140 | $(87,123)$ | $(442,262)$ |
|  | G42 | 101,062 | 81,459 | $(19,603)$ | $(101,062)$ |
|  | G50 | 55,275 | 44,708 | $(10,567)$ | $(55,275)$ |
|  | G51 | 85,195 | 69,019 | $(16,176)$ | $(85,195)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Feb | R6 | 31,069 | 27,314 | $(3,755)$ | $(31,069)$ |
|  | R5, R10 | 1,461,133 | 1,287,443 | $(173,690)$ | $(1,461,133)$ |
|  | G40 | 395,875 | 337,491 | $(58,384)$ | $(395,875)$ |
|  | G41 | 355,140 | 324,005 | $(31,134)$ | $(355,140)$ |
|  | G42 | 81,459 | 73,717 | $(7,743)$ | $(81,459)$ |
|  | G50 | 44,708 | 48,541 | 3,833 | $(44,708)$ |
|  | G51 | 69,019 | 73,302 | 4,283 | $(69,019)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Mar | R6 | 27,314 | 29,598 | 2,285 | $(27,314)$ |
|  | R5, R10 | 1,287,443 | 1,125,746 | $(161,697)$ | $(1,287,443)$ |
|  | G40 | 337,491 | 336,223 | $(1,268)$ | $(337,491)$ |
|  | G41 | 324,005 | 288,423 | $(35,582)$ | $(324,005)$ |
|  | G42 | 73,717 | 61,287 | $(12,429)$ | $(73,717)$ |
|  | G50 | 48,541 | 55,572 | 7,031 | $(48,541)$ |
|  | G51 | 73,302 | 79,673 | 6,371 | $(73,302)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Apr | R6 | 29,598 | 24,767 | $(4,831)$ | $(29,598)$ |
|  | R5, R10 | 1,125,746 | 783,935 | $(341,811)$ | $(1,125,746)$ |
|  | G40 | 336,223 | 276,555 | $(59,668)$ | $(336,223)$ |
|  | G41 | 288,423 | 201,465 | $(86,958)$ | $(288,423)$ |
|  | G42 | 61,287 | 50,058 | $(11,229)$ | $(61,287)$ |

Docket DG 23-086
NH DOE Tech Statement / Arif
Attachment B

Northern Utilities, Inc.
DG 23-086
DOE 2-6 Attachment 1

| Table 1 (Peak/Off Peak Period): Net Unbilled Revenue by Rate Class - Estimated vs Actual |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Rate Class | Unbilled Revenue <br> (Estimated in the month of) | Unbilled Revenue (calculated in the following month(s)) | Difference | Unbilled Revenue Reversal entry amount (calculated in the |
|  |  | (A) | (B) | $(C)=(B)-(A)$ | following month(s)) |
|  | G50 | 55,572 | 49,829 | $(5,743)$ | $(55,572)$ |
|  | G51 | 79,673 | 68,028 | $(11,644)$ | $(79,673)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-May | R6 | 24,767 | 22,901 | $(1,866)$ | $(24,767)$ |
|  | R5, R10 | 783,935 | 559,160 | $(224,775)$ | $(783,935)$ |
|  | G40 | 276,555 | 241,101 | $(35,455)$ | $(276,555)$ |
|  | G41 | 201,465 | 145,771 | $(55,694)$ | $(201,465)$ |
|  | G42 | 50,058 | 39,790 | $(10,269)$ | $(50,058)$ |
|  | G50 | 49,829 | 50,555 | 726 | $(49,829)$ |
|  | G51 | 68,028 | 62,492 | $(5,536)$ | $(68,028)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Jun | R6 | 22,901 | 22,538 | (364) | $(22,901)$ |
|  | R5, R10 | 559,160 | 491,007 | $(68,153)$ | $(559,160)$ |
|  | G40 | 241,101 | 228,633 | $(12,468)$ | $(241,101)$ |
|  | G41 | 145,771 | 121,990 | $(23,781)$ | $(145,771)$ |
|  | G42 | 39,790 | 35,377 | $(4,413)$ | $(39,790)$ |
|  | G50 | 50,555 | 50,573 | 18 | $(50,555)$ |
|  | G51 | 62,492 | 61,586 | (906) | $(62,492)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Jul | R6 | 22,538 | 22,853 | 315 | $(22,538)$ |
|  | R5, R10 | 491,007 | 491,320 | 313 | $(491,007)$ |
|  | G40 | 228,633 | 233,643 | 5,010 | $(228,633)$ |
|  | G41 | 121,990 | 118,484 | $(3,506)$ | $(121,990)$ |
|  | G42 | 35,377 | 37,129 | 1,752 | $(35,377)$ |
|  | G50 | 50,573 | 52,417 | 1,844 | $(50,573)$ |
|  | G51 | 61,586 | 63,854 | 2,268 | $(61,586)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Aug | R6 | 22,853 | 26,162 | 3,309 | $(22,853)$ |
|  | R5, R10 | 491,320 | 553,142 | 61,822 | $(491,320)$ |
|  | G40 | 233,643 | 262,306 | 28,664 | $(233,643)$ |
|  | G41 | 118,484 | 137,902 | 19,418 | $(118,484)$ |
|  | G42 | 37,129 | 45,835 | 8,706 | $(37,129)$ |
|  | G50 | 52,417 | 58,639 | 6,222 | $(52,417)$ |
|  | G51 | 63,854 | 71,385 | 7,530 | $(63,854)$ |
|  | G52 | - | - | - | - |
|  | Special Contract | - | - | - | - |
| 23-Sep | R6 | 26,162 | 25,405 | (757) | $(26,162)$ |
|  | R5, R10 | 553,142 | 614,078 | 60,936 | $(553,142)$ |
|  | G40 | 262,306 | 265,497 | 3,191 | $(262,306)$ |
|  | G41 | 137,902 | 164,462 | 26,561 | $(137,902)$ |
|  | G42 | 45,835 | 53,181 | 7,346 | $(45,835)$ |
|  | G50 | 58,639 | 54,655 | $(3,985)$ | $(58,639)$ |
|  | G51 | 71,385 | 72,966 | 1,581 | $(71,385)$ |
|  | G52 |  | - | - | - |
|  | Special Contract |  | - | - | - |
| 23-Oct | R6 | 25,405 | - | $(25,405)$ | $(25,405)$ |

Northern Utilities, Inc.
DG 23-086
DOE 2-6 Attachment 1

Table 1 (Peak/Off Peak Period): Net Unbilled Revenue by Rate Class - Estimated vs Actual

| Month | Rate Class | Unbilled Revenue <br> (Estimated in the month of) | Unbilled Revenue <br> (calculated in the following <br> month(s)) | Unbilled Revenue <br> Reversal entry amount <br> (calculated in the <br> following month(s)) |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | (A) | (B) | $(\mathrm{C})=(\mathrm{B})-(\mathrm{A})$ |

## DG 23-086 DOE 2-6 Attachment 2a

Page 1 of 4

Docket DG 23-086
NH DOE Tech StatemRFfcessiffg Set: UNITIL Attachmenter ${ }^{\text {Code: hanson }}$




| Journal Id |  | et Debits | Net Credits | Net Rrcket DG 23-086 $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| NUGA914-986527 <br> UNBILLED REV - DECOUPLED - G51 | $\begin{aligned} & \text { 01-Dec-2022 Page } 4 \text { of } 4 \\ & y \text { - } 986526 \text { Reversal Entry- } 986527 \end{aligned}$ | 95,550.97 | 0.00 | NH DOE lech Statement / Arif Attachment B |
| NUGA914-992874 <br> UNBILLED REV - DECOUPLED - G51 | 31-Dec-2022 <br> ACCRUED REVENUE UNBILLED | 0.00 | -95,550.97 |  |
| NUGA914-992888 <br> UNBILLED REV - DECOUPLED - G51 | $\begin{aligned} & \text { 31-Dec-2022 } \\ & \text { Reversal by Unpost of } 992874 \text { : ACCRUED REVENUE UNBILLED } \end{aligned}$ | 95,550.97 | 0.00 |  |
| NUGA914-992992 <br> UNBILLED REV - DECOUPLED - G51 | 31-Dec-2022 <br> ACCRUED REVENUE UNBILLED | 0.00 | -85,751.05 |  |
| Total for Journal Code: NUGA914 |  | 462,830.47 | -467,954.93 | -5,124.46 |
|  | Total for Account: $\quad \underline{-80,626.59}$ | 462,830.47 | -467,954.93 | $\underline{-5,124.46} \quad \underline{-85,751.05}$ |

Sort Order: Journal Code



Date
31-Mar-2023

Page 3 of 7

01-Apr-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 1009962 Reversal Entry- 1009963
NUGA914-1015412
 30-Apr-2023
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED
NUGA914-1015413 01-May-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 1015412 Reversal Entry- 1015413
NUGA914-1021441
31-May-2023
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED
NUGA914-1021442
01-Jun-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 1021441 Reversal Entry- 1021442
NUGA914-1027032

| V - DECOUPLED - G40 | Current Entry- 1021441 Reversal |
| :---: | :---: |
| $30-J u n-2023$ |  |

UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED
$\begin{array}{cc}\text { NUGA914-1027033 } & \text { 01-Jul-2023 } \\ \text { UNBILLED REV - DECOUPLED - G40 } & \text { Current Entry- 1027032 Reversal Entry- } 1027033\end{array}$
JUGA914-1033307 31-Jul-2023 31-Jul-2023
EVENUE UNBILLED
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBI
NUGA914-1033309
 - 1033307 Re 31-Aug-2023
31-Aug-2023
UGA914-1039476
UNBILLED REV - DECOUPLED - G40 ACCRUED 01-Sep-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 1039476 Reversal Entry- 1039477
NUGA914-1046799 30-Sep-2023
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED
NUGA914-1046800
01-Oct-2023

- 1046799 Reversal Entry- 1046800

UNBILLED REV - DECOUPLED - G40 Current Entry- 1046799 Reve
31-Oct-2023
$\begin{array}{lc}31-O c t-2023 \\ \text { NUGA914-1053397 } & \\ \text { UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED }\end{array}$
NUGA914-992876 01-Jan-2023 01-Jan-2023 01-Jan-2023
UNBLLED REV - DECOUPLED - G40 Current Entr
UNBILLED REV - DECOUPLED - G40 Reversal by Unpost of 992876: Current Entry-992874 Reversal Entry- 992876
NUGA914-992995
01-Jan-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 992992 Reversal Entry- 992995
NUGA914-998659 31-Jan-2023
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILLED
UNBILLED REV - DECOUPLED - G40 ACCRUED REVENUE UNBILI
01-Feb-2023
UNBILLED REV - DECOUPLED - G40 Current Entry- 998659 Reversal Entry- 998660

| Total for Journal Code: NUGA914 |  |
| :--- | :--- |

0-40-10-60-495-00-04 UNBILLED GAS REVENUE - G41 - NH

NUGA914-1004297
GAS REVENUE - G41-NH
28-Feb-2023
Total for Account

EVENUE UNBILLED
GA914-1004298 01-Mar-2023
UNBILLED REV - DECOUPLED - G41 Current Entry- 1004297 Reversal Entry- 1004298
NUGA914-1009962 31-Mar-2023
UNBILLED REV - DECOUPLED - G41 ACCRUED REVENUE UNBILLED
NUGA914-1009963
UNBILLED REV - DECOUPLED - G41 Current Entry- 1009962 Reversal Entry- 1009963
NUGA914-1015412 30-Apr-2023
30-Apr-2023
REVENUE UNBILLED
UNBILLED REV - DECOUPLED - G41
ACCRUED REVENUE UNBILL
01-May-2023
$\begin{array}{lc}\text { NUGA914-1015413 } \\ \text { UNBILLED REV - DECOUPLED - G41 } & \text { Current Entry- 1015412 Reversal Entry- } 1015413\end{array}$
NUGA914-1021441 31-May-2023
UNBILLED REV - DECOUPLED - G41 ACCRUED REVENUE UNBILLED

Net Debits
0.00

337,491.40

336,223.11
0.00

276,555.48
0.00

241,100.55
0.00

228,632.80
0.00

233,642.52
0.00

262,306.20
0.00

782,199.56
0.00

491,490.73

476,391.94
4061,90974
40.000
$-276,555.48$
$-233,642.52$
$-262,306.20$
-265,497.21
$-782,199.56$

Net Credits
-337,491.40
$-336,223.11$

| $4,061,909.74$ | $-3,835,916.22$ | $225,993.52$ |  |
| ---: | ---: | ---: | ---: |
| $\underline{4,061,909.74}$ | $\underline{-3,835,916.22}$ | $\underline{225,993.52}$ | $\underline{225,993.52}$ |
| $3,028,284.47$ | $-2,770,192.25$ | $258,092.22$ | $258,092.22$ |
| 0.00 | $-355,139.71$ |  |  |



| Journal Id |  | Net Debits | Net Credits | Net RRcket DG 23-086 |
| :---: | :---: | :---: | :---: | :---: |
| NUGA914-1039476 <br> UNBILLED REV - DECOUPLED - G42 | 31-Aug-2023 Page 5 of 7 <br> ACCRUED REVENUE UNBILLED  | 0.00 | -37,128.88 | Attachment B |
| NUGA914-1039477 <br> UNBILLED REV - DECOUPLED - G42 | 01-Sep-2023 <br> Current Entry-1039476 Reversal Entry-1039477 | 37,128.88 | 0.00 |  |
| NUGA914-1046799 <br> UNBILLED REV - DECOUPLED - G42 | 30-Sep-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -45,834.74 |  |
| NUGA914-1046800 <br> UNBILLED REV - DECOUPLED - G42 | Current Entry- 1046799 Reversal Entry- 1046800 | 45,834.74 | 0.00 |  |
| NUGA914-1053397 <br> UNBILLED REV - DECOUPLED - G42 | 31-Oct-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -53,180.56 |  |
| NUGA914-992876 <br> UNBILLED REV - DECOUPLED - G42 | 01-Jan-2023 Current Entry- 992874 Reversal Entry- 992876 | 129,283.16 | 0.00 |  |
| NUGA914-992889 <br> UNBILLED REV - DECOUPLED - G42 | 01-Jan-2023 <br> Reversal by Unpost of 992876: Current Entry-992874 Reversal Entry- 992876 | 0.00 | -129,283.16 |  |
| NUGA914-992995 <br> UNBILLED REV - DECOUPLED - G42 | 01-Jan-2023 <br> Current Entry-992992 Reversal Entry- 992995 | 114,942.33 | 0.00 |  |
| NUGA914-998659 <br> UNBILLED REV - DECOUPLED - G42 | 31-Jan-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -101,062.17 |  |
| NUGA914-998660 <br> UNBILLED REV - DECOUPLED - G42 | 01-Feb-2023 <br> Current Entry- 998659 Reversal Entry- 998660 | 101,062.17 | 0.00 |  |
| Total for Journal Code: NUGA914 |  | 769,939.40 | -708,177.63 | 61,761.77 |
|  | Total for Account: $\quad \underline{0.00}$ | 769,939.40 | $\underline{-708,177.63}$ | 61,761.77 $\quad \underline{61,761.77}$ |
| 30-40-10-60-495-00-06 UNBILLED GAS REVENUE | - $\mathrm{F} 50-\mathrm{NH}$ | 592,585.24 | -589,633.53 | 2,951.71 $2,951.71$ |
| NUGA914-1004297 <br> UNBILLED REV - DECOUPLED - G50 | 28-Feb-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -44,707.91 |  |
| NUGA914-1004298 <br> UNBILLED REV - DECOUPLED - G50 | 01-Mar-2023 <br> Current Entry- 1004297 Reversal Entry- 1004298 | 44,707.91 | 0.00 |  |
| NUGA914-1009962 <br> UNBILLED REV - DECOUPLED - G50 | $\begin{gathered} \text { 31-Mar-2023 } \\ \text { ACCRUED REVENUE UNBILLED } \end{gathered}$ | 0.00 | -48,540.75 |  |
| NUGA914-1009963 <br> UNBILLED REV - DECOUPLED - G50 | 01-Apr-2023 <br> Current Entry-1009962 Reversal Entry-1009963 | 48,540.75 | 0.00 |  |
| NUGA914-1015412 <br> UNBILLED REV - DECOUPLED - G50 | 30-Apr-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -55,572.19 |  |
| NUGA914-1015413 <br> UNBILLED REV - DECOUPLED - G50 | 01-May-2023 <br> Current Entry- 1015412 Reversal Entry- 1015413 | 55,572.19 | 0.00 |  |
| NUGA914-1021441 <br> UNBILLED REV - DECOUPLED - G50 | 31-May-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -49,829.06 |  |
| NUGA914-1021442 <br> UNBILLED REV - DECOUPLED - G50 | $\begin{aligned} & \text { 01-Jun-2023 } \\ & \text { Current Entry- } 1021441 \text { Reversal Entry- } 1021442 \end{aligned}$ | 49,829.06 | 0.00 |  |
| NUGA914-1027032 <br> UNBILLED REV - DECOUPLED - G50 | 30-Jun-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -50,554.67 |  |
| NUGA914-1027033 <br> UNBILLED REV - DECOUPLED - G50 | 01-Jul-2023 <br> Current Entry-1027032 Reversal Entry- 1027033 | 50,554.67 | 0.00 |  |
| NUGA914-1033307 <br> UNBILLED REV - DECOUPLED - G50 | 31-Jul-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -50,573.16 |  |
| NUGA914-1033309 <br> UNBILLED REV - DECOUPLED - G50 | 01-Aug-2023 <br> Current Entry- 1033307 Reversal Entry- 1033309 | 50,573.16 | 0.00 |  |
| NUGA914-1039476 <br> UNBILLED REV - DECOUPLED - G50 | 31-Aug-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -52,417.24 |  |
| NUGA914-1039477 <br> UNBILLED REV - DECOUPLED - G50 | 01-Sep-2023 <br> Current Entry- 1039476 Reversal Entry- 1039477 | 52,417.24 | 0.00 |  |
| NUGA914-1046799 <br> UNBILLED REV - DECOUPLED - G50 | $30-S e p-2023$ ACCRUED REVENUE UNBILLED | 0.00 | -58,639.47 |  |
| NUGA914-1046800 <br> UNBILLED REV - DECOUPLED - G50 | 01-Oct-2023 <br> Current Entry- 1046799 Reversal Entry- 1046800 | 58,639.47 | 0.00 |  |
| NUGA914-1053397 <br> UNBILLED REV - DECOUPLED - G50 | 31-Oct-2023 <br> ACCRUED REVENUE UNBILLED | 0.00 | -54,654.82 |  |

NUGA914-99287

Date 01-Jan-2023
 Page 6 of 7

01-Jan-2023
UNBILLED REV - DECOUPLED - G50 Current Entry- 992874 Reversal Entry- 992876

## UGA914-992889

01-Jan-2023
Current Entry-992874 Reversal Entry- 992876
NUGA914-992995
UNBILLED REV - DECOUPLED - G50 Current Entry- 992992 Reversal Entry- 99299
NUGA914-998659 31-Jan-2023
UNBILLED REV - DECOUPLED - G50 ACCRUED REVENUE UNBILLED
01-Feb-2023

UNBILLED REV - DECOUPLED - G50 Current Entry- 998659 Reversal Entry- 99866 Total for Journal Code: NUGA914
30-40-10-60-495-00-07 UNBILLED GAS REVENUE - G51 - NH
NUGA914-1004297
NUGA914-1004297
UNBILLED REV - DECOUPLED - G51 ACCRUED R

UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED

UNBILLED REV - DECOUPLED - G51 Current Entry- 1004297 Reversal Entry- 1004298 31-Mar-2023
UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED
NUGA914-1009963 01-Apr-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 1009962 Reversal Entry- 1009963
NUGA914-1015412 30-Apr-2023
UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED
NUGA914-1015413 01-May-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 1015412 Reversal Entry- 1015413
NUGA914-1021441 31-May-2023
31-May-2023
REVENUE UNBILLED
NUGA914-1021442 01-Jun-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 01-Jun-2023 30-Jun-2023
EVENUE UNBILLED
01-Jul-2023
NUGA914-1027033 $\begin{aligned} & \text { 01-Jul-2023 } \\ & \text { UNBILIED REV - DECOUPLED - G51 Current Entry- 1027032 Reversal Entry-1027033 }\end{aligned}$
UUGA914-1033307 31-Jul-2023
UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED
NUGA914-1033309 01-Aug-2023
UNBILLED REV - DECOUPLED - G51 Current Entry-1033307 Reversal Entry- 1033309
NUGA914-1039476 31-Aug-2023
31-Aug-2023
EVENUE UNBILLED
NUGA914-1039477 01-Sep-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 01-Sep-2023 $\quad$ Reversal Entry- 1039477
NUGA914-1046799 30-Sep-2023 EVENUE UNBILLED
01-Oct-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 1046799 Reversal Entry- 1046800
NUGA914-1053397 31-Oct-2023
UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED
NUGA914-992876 01-Jan-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 992874 Reversal Entry- 992876
NUGA914-992889 01-Jan-2023
Unpost of 992876: Current Entry-992874 Reversal Entry- 992876
NUGA914-992995 01-Jan-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 992992 Reversal Entry- 99299
NUGA914-998659 31-Jan-2023
UNBILLED REV - DECOUPLED - G51 ACCRUED REVENUE UNBILLED
NUGA914-998660 01-Feb-2023
UNBILLED REV - DECOUPLED - G51 Current Entry- 998659 Reversal Entry- 998660

| Net Debits | Net Credits |
| ---: | ---: |
| $68,868.97$ | 0.00 |
| 0.00 | $-68,868.97$ |
| $57,606.53$ | 0.00 |
| 0.00 | $-55,275.29$ |
| $55,275.29$ | 0.00 |

55,275.29
592,585.24 -589,633.53

| $592,585.24$ | $-589,633.53$ | $2,951.71$ |  |
| ---: | ---: | ---: | ---: |
| $\underline{592,585.24}$ | $\underline{-589,633.53}$ | $\underline{2,951.71}$ | $\underline{2,951.71}$ |
| $815,835.70$ | $-803,050.41$ | $12,785.29$ | $12,785.29$ |
| 0.00 | $-69,018.78$ |  |  |

68,028.33 0.00
$0.00-62,492.27$
62,492.27 0.00

| $71,384.51$ | 0.00 |
| :--- | :--- |

$0.00-72,965.76$


```
Northern Utilities
DG 23-086 DOE 2-7 Attachment
DG 23-086 DOE 2-7
Unbilled
```




# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 2 

Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-8 (RDAF):

Reference: Reference: Northern's Response to DOE 1-6b.
Northern states that "The Actual Number of Customers is calculated by dividing the actual monthly Customer Charge revenue collected, as reported by the Company's billing system, by the customer charge in effect, for each customer class."
a) Does Northern have a separate billing cycle for the purpose of collecting the Monthly Customer Charge Revenue?
b) If yes, please provide evidence that two separate set of billing cycles exist for Customer Charge Revenue and Actual Billed Base Revenue.
c) If not, does this imply that, akin to the calculation of the "Net Unbilled Revenue", a portion of the "Customer Charge Revenue" is also estimated, and consequently, the actual customer count for each month is also estimated?
Please explain.

## Response:

a) No, it does not. The customer charge is a per bill charge.
c) No, actual customer charge revenue is the actual revenue recorded in the Company's billing system.

Person Responsible: S E Demeris

# Northern Utilities, Inc. <br> DG 23-086 <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests - Set 2 

Date Request Received: 11/08/23
Date of Response: 11/20/23

## DOE 2-9 (RDAF):

Reference: Attachment SED-1 RDAF, pg. 10-14; and Attachment SED-1 RDAF.xlsx, tab "Base Revenue Res" \& "Base Revenue Gen Service".
a) Please describe the process of calculating the customer count used in Northern's last Base Revenue Distribution Case in Docket No. DG 21-104.
b) Is the process of calculating the customer count the same in Docket No. DG 21-104 (for Base Revenue calculation) and Docket No. DG 23-086 (for RDAF calculation)?
c) If not, why not? Please explain.

## Response:

a) DG 21-104 customer counts are based on test year revenues. Actual monthly customer charge revenues divided by the customer charge in effect equals the customer count for the month.
b) Yes. The process is the same, the only difference is the time period.

Person Responsible: S E Demeris

# Before the New Hampshire Public Utilities Commission 

DG 23-086
Northern Utilities, Inc.
Revenue Decoupling Adjustment Factor (RDAF) 2023-24

## NH Department of Energy Technical Session Data Requests-Set 1 (TS

 DR Set 1)December 4, 2023
For the following data requests, Northern Utilities shall be referred to interchangeably as "Northern" or "the Company" unless otherwise indicated. The New Hampshire Department of Energy shall be referred to as "DOE" or "Department." For any response that requires calculations, please provide a live Excel spreadsheet, i.e., a spreadsheet that shows all formulas and inputs and that permits new calculation/inputs.

These technical session data requests are based upon topics discussed at the November 30, 2023 technical session. Please provide updates to Data Request Set 1 and Set 2 if appropriate.

## DOE TS 1-1 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 2023; Northern Responses to DOE DR Set 1; Northern Tariff No. 12, First Revised Page 162, Section 4.2

Please explain how Northern, including but not limited to Northern's accounting division, defines "equivalent bills;" please explain how Northern calculates "equivalent bills," including but not limited to providing an illustrative calculation, and the formula for determining "equivalent bills."

## DOE TS 1-2 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 2023; Northern Responses to DOE DR Set 1 and 2; Northern Tariff No. 12 Section 4.2

Please explain whether Northern's RDAF Targets, as established in Docket No. DG 21104 (Northern's most recent rate case) include elements of unbilled revenue.. Please provide relevant documents and spread sheets if applicable. Please provide live Excel Versions of the following schedules from Docket No. DG 21-104: TSL-4, RAJT-11 (3 pp).

Please confirm and explain how TSL-4 supports column H in RAJT-11. What supports the calculations in column B of RAJT-11? Please provide formulas for column B and H.

How does Northern estimate and/or calculate "unbilled revenue" on a monthly basis?
What is the impact of unbilled revenue on "actual" and "allowed" revenue calculations. Please explain separately for each.

What is the impact of calculating unbilled revenue on a monthly rather than annual or seasonal (Winter/Summer, i.e., Peak/Off Peak) basis? Of those three possible periodicities, which does Northern use in its RDAF calculations?

## DOE TS 1-3 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 2023; DG 23-085 (Northern COG LDAC Winter 2023-24/Spring 2024)

Please provide a (redacted) actual residential bill, and an actual commercial bill that includes rates approved in DG 23-085. If a sample bill (showing real calculations and usage but for non-existent customers is available), that is acceptable too. Please specify the rate class for the bills provided.

## DOE TS 1-4 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 202
In Northern's current billing system, for any given month (illustratively, for example, November) and between the consecutive months (e.g., October \& November and/or November \& December), can:

- Billed revenues be identified in sub-categories such as fixed charges, commodity charges, and LDAC charges?
- Un-billed revenues be identified in the same revenue sub-categories (e.g., fixed charges, commodity charges, and LDAC charges)?


## DOE TS 1-5 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 202
Did Northern perform any rate reclassification over the current RDAF claim period? If yes, please provide a detailed description of:

- the rate class(es)
- the timeframe of such rate reclassification (when was it done)
- the reason(s) for such rate reclassification (why was it done; who initiative it; what's the process)
- the number of customers in each of the rate class(es) prior to and after such rate reclassification
- the impact on such rate reclassification on RDAF calculation


## DOE TS 1-6 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 2023; Northern's Tariff No. 12, First Revised Page 163-65

Does Northern's unbilled revenue in any given month include estimates for fixed charges, cost of gas (supply) and LDAC? If yes, can Northern's accounting system identify the "actual (i.e., not-estimated)" revenue associated with the prior estimates for fixed charges, cost of gas (supply) and LDAC? Why or why not?

Does Northern compare the Company's initial monthly RDAF estimate with the subsequent "actual (i.e., not estimated)" revenue to reconcile the monthly RDAF calculation?

If not, in Northern's opinion, could Northern's inability to reconcile estimates with "actual (i.e., not estimated)" figures create a bias month-over-month?

In light of the above, please provide a comparison for the twelve-month period at issue here between estimated and "actual (i.e., not-estimated)" monthly figures. If not possible, please explain why not, and if there is any possible work-around.

## DOE TS 1-7 (RDAF)

Reference: DG 23-086 RDAF Filing (Sept 15, 2023); Supporting schedules filed Oct 4, 2023; Northern's Response to DOE 2-06

Please provide a response to DOE 2-06 with a chart "as Northern would draft it." For example, (but in no way exhaustive) as discussed at the November 30, 2023 Technical Session, making column B "the preceding month" (October, not December if November is identified in column A).

# Before the New Hampshire Public Utilities Commission <br> DG 23-086 <br> Northern Utilities, Inc. <br> Revenue Decoupling Adjustment Factor (RDAF) 2023-24 <br> NH Department of Energy Data Requests-Set 3 

December 6, 2023
For the following data requests, Northern Utilities shall be referred to interchangeably as "Northern" or "the Company" unless otherwise indicated. The New Hampshire Department of Energy shall be referred to as "DOE" or "Department." For any response that requires calculations, please provide a live Excel spreadsheet, i.e., a spreadsheet that shows all formulas and inputs and that permits new calculation/inputs.

## DOE 3-1 (RDAF)

Reference: DR Set-3 Data Shell.xlsx (attached) and DG 23-086 RDAF Filing.
For the attached excel data shell, please provide information on tabs titled:

- Report 1 - Therm Sales
- Report 2 - Customer Count
- Report 3 - Revenue

Additional instructions: For each tab, please note that DOE is looking for:

- An excel file with data for each month spanning August 2022 to November 2023.
- (In each of the excel file to be provided) Therm sales and corresponding customer count and revenues by each rate class, and by time.
- For example, for "Report 3 - Revenue" tab: say for the month of August 2023, the data should show how much of overall revenue collected in August 2023 is attributable to the month of August 2023, and how much of it is attributable to the preceding months).
- Please follow the same method for the other two tabs.


## DOE 3-2 (RDAF)

Reference: Technical Session discussion held on November 30, 2023 and DG 23-086 RDAF Filing.

During the technical session discussion, Northern may have indicated that the Company's current decoupling structure was audited by a third-party auditor (not DOE's Audit Group). Please provide a copy of any third-party final Audit Report and indicate the page or pages that include review of the decoupling formula, or RDAF calculations, or other support for the relief the Company seeks in this docket.

Docket DG 23-086
NH DOE Tech Stataement / Arif Attachment D

Northern Utilities, Inc.
Calendar Month Delivery Service Therm Sales by Rate Class
Revenue Month XXX 202X

|  | RateCI |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R-6 | R5-R10 | G40 | G50 | C41 | G51 | G42 | G52 |  |
| BillPeriod | Therm Sales | Therm Sales | Therm Sales | Therm Sales | Therm Sales | Therm Sales | Therm Sales | Therm Sales | Total |
| Dec2021 |  |  |  |  |  |  |  |  | 0 |
| Jan2022 |  |  |  |  |  |  |  |  | 0 |
| Feb2022 |  |  |  |  |  |  |  |  | 0 |
| Mar2022 |  |  |  |  |  |  |  |  | 0 |
| Apr2022 |  |  |  |  |  |  |  |  | 0 |
| May2022 |  |  |  |  |  |  |  |  | 0 |
| Jul2022 |  |  |  |  |  |  |  |  | 0 |
| Aug2022 |  |  |  |  |  |  |  |  | 0 |
| Sep2022 |  |  |  |  |  |  |  |  | 0 |
| Oct2022 |  |  |  |  |  |  |  |  | 0 |
| Nov2022 |  |  |  |  |  |  |  |  | 0 |
| Dec2022 |  |  |  |  |  |  |  |  | 0 |
| Jan2023 |  |  |  |  |  |  |  |  | 0 |
| Feb2023 |  |  |  |  |  |  |  |  | 0 |
| Mar2023 |  |  |  |  |  |  |  |  | 0 |
| Apr2023 |  |  |  |  |  |  |  |  | 0 |
| May2023 |  |  |  |  |  |  |  |  | 0 |
| Jun2023 |  |  |  |  |  |  |  |  | 0 |
| Jul2023 |  |  |  |  |  |  |  |  | 0 |
| Aug2023 |  |  |  |  |  |  |  |  | 0 |
| Sep2023 |  |  |  |  |  |  |  |  | 0 |
| Oct2023 |  |  |  |  |  |  |  |  | 0 |
| Nov2023 |  |  |  |  |  |  |  |  | 0 |
| Dec2023 |  |  |  |  |  |  |  |  | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Docket DG 23-086
NH DOE Tech Stataement / Arif Attachment D
Northern Utilities, Inc.
Calendar Month Delivery Service Customer Count by Rate Class
Revenue Month XXX 202X

|  | RateCI |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R-6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |  |
| BillPeriod | Cust. Count | Cust. Count | Cust. Count | Cust. Count | Cust. Count | Cust. Count | Cust. Count | Cust. Count | Total |
| Dec2021 |  |  |  |  |  |  |  |  | 0 |
| Jan2022 |  |  |  |  |  |  |  |  | 0 |
| Feb2022 |  |  |  |  |  |  |  |  | 0 |
| Mar2022 |  |  |  |  |  |  |  |  | 0 |
| Apr2022 |  |  |  |  |  |  |  |  | 0 |
| May2022 |  |  |  |  |  |  |  |  | 0 |
| Jul2022 |  |  |  |  |  |  |  |  | 0 |
| Aug2022 |  |  |  |  |  |  |  |  | 0 |
| Sep2022 |  |  |  |  |  |  |  |  | 0 |
| Oct2022 |  |  |  |  |  |  |  |  | 0 |
| Nov2022 |  |  |  |  |  |  |  |  | 0 |
| Dec2022 |  |  |  |  |  |  |  |  | 0 |
| Jan2023 |  |  |  |  |  |  |  |  | 0 |
| Feb2023 |  |  |  |  |  |  |  |  | 0 |
| Mar2023 |  |  |  |  |  |  |  |  | 0 |
| Apr2023 |  |  |  |  |  |  |  |  | 0 |
| May2023 |  |  |  |  |  |  |  |  | 0 |
| Jun2023 |  |  |  |  |  |  |  |  | 0 |
| Jul2023 |  |  |  |  |  |  |  |  | 0 |
| Aug2023 |  |  |  |  |  |  |  |  | 0 |
| Sep2023 |  |  |  |  |  |  |  |  | 0 |
| Oct2023 |  |  |  |  |  |  |  |  | 0 |
| Nov2023 |  |  |  |  |  |  |  |  | 0 |
| Dec2023 |  |  |  |  |  |  |  |  | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Docket DG 23-086
NH DOE Tech Stataement / Arif Attachment D
Northern Utilities, Inc.
Calendar Month Delivery Service Revenue by Rate Class
Revenue Month XXX 202X

|  | RateCI |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R-6 | R5-R10 | G40 | G50 | G41 | G51 | G42 | G52 |  |
| BillPeriod | Revenue | Revenue | Revenue | Revenue | Revenue | Revenue | Revenue | Revenue | Total |
| Dec2021 |  |  |  |  |  |  |  |  | 0 |
| Jan2022 |  |  |  |  |  |  |  |  | 0 |
| Feb2022 |  |  |  |  |  |  |  |  | 0 |
| Mar2022 |  |  |  |  |  |  |  |  | 0 |
| Apr2022 |  |  |  |  |  |  |  |  | 0 |
| May2022 |  |  |  |  |  |  |  |  | 0 |
| Jul2022 |  |  |  |  |  |  |  |  | 0 |
| Aug2022 |  |  |  |  |  |  |  |  | 0 |
| Sep2022 |  |  |  |  |  |  |  |  | 0 |
| Oct2022 |  |  |  |  |  |  |  |  | 0 |
| Nov2022 |  |  |  |  |  |  |  |  | 0 |
| Dec2022 |  |  |  |  |  |  |  |  | 0 |
| Jan2023 |  |  |  |  |  |  |  |  | 0 |
| Feb2023 |  |  |  |  |  |  |  |  | 0 |
| Mar2023 |  |  |  |  |  |  |  |  | 0 |
| Apr2023 |  |  |  |  |  |  |  |  | 0 |
| May2023 |  |  |  |  |  |  |  |  | 0 |
| Jun2023 |  |  |  |  |  |  |  |  | 0 |
| Jul2023 |  |  |  |  |  |  |  |  | 0 |
| Aug2023 |  |  |  |  |  |  |  |  | 0 |
| Sep2023 |  |  |  |  |  |  |  |  | 0 |
| Oct2023 |  |  |  |  |  |  |  |  | 0 |
| Nov2023 |  |  |  |  |  |  |  |  | 0 |
| Dec2023 |  |  |  |  |  |  |  |  | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


[^0]:    ${ }^{1}$ The billing determinants included but are not limited to: i) the number or count of customers per rate class, per month; and ii) the total therm sales per rate class, per month.
    ${ }^{2}$ The average therm consumption is the number of therms each customer would consume on average in a given rate class.
    ${ }^{3}$ For example, this may include the customer count methodology the rate re-classification practices, etc.
    ${ }^{4}$ For example, a monthly decoupling revenue reconciliation process would require the utility accounting practices to reconcile values between the billing cycles and the monthly calendarization process by updating monthly "unbilled revenue" estimates with actual figures from the subsequent month(s).

[^1]:    ${ }^{5}$ This section complies information from two separate dockets - the submission RDAF Docket No. DG 23-086, and Northern's last rate case Docket No. DG 21-104.

[^2]:    ${ }^{6}$ Since Northern's Tariff 12 refers to "equivalent bills" but does not define so, DOE's understanding of EB is likely different from Northern's reference to "equivalent bills".
    ${ }^{7}$ For a greater discussion on the normalization process, see Testimony of Ronald J. Amen \& John D. Taylor in DG 21104.

[^3]:    ${ }^{8}$ In this context, please see Northern's response to DOE 2-7 (attached).
    ${ }^{9}$ In this context, please also see Northern's response to DOE 2-6 and DOE 2-8 (attached).

[^4]:    Lstomer counts in estimated months fom Company forecast $\qquad$

