**STATE OF NEW HAMPSHIRE**
**BEFORE THE**
**NEW HAMPSHIRE PUBLIC UTILIITES COMMISSION**

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


Technical Statement of Faisal Deen Arif, Gas Director &
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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, Sub-section 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.

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[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).

## 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 (Aug 2022 - Jul 2023) | % |
|---|---|---|
| Peak | $3,792,266 | 87.9% |
| Off-Peak | $520,993 | 12.1% |
| **DY1 Total** | **$4,313,259** | **100.0%** |

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 (Aug 2022 - Jul 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 Revenue | 4.25% Cap | Distribution Revenue | 4.25% 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 | **$1,274,295** | $14,522,910 | **$617,224** |

[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.

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 | |
|---|---|---|---|---|
| | $ | % | $ | % |
| **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** | **$1,274,295** | 100.0% | **$617,224** | 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**

| | **TY Customer Count (in DG 21-104)** | **RDAF DY1 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 Low-Income 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 R-10 (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, G-41, 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

[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".

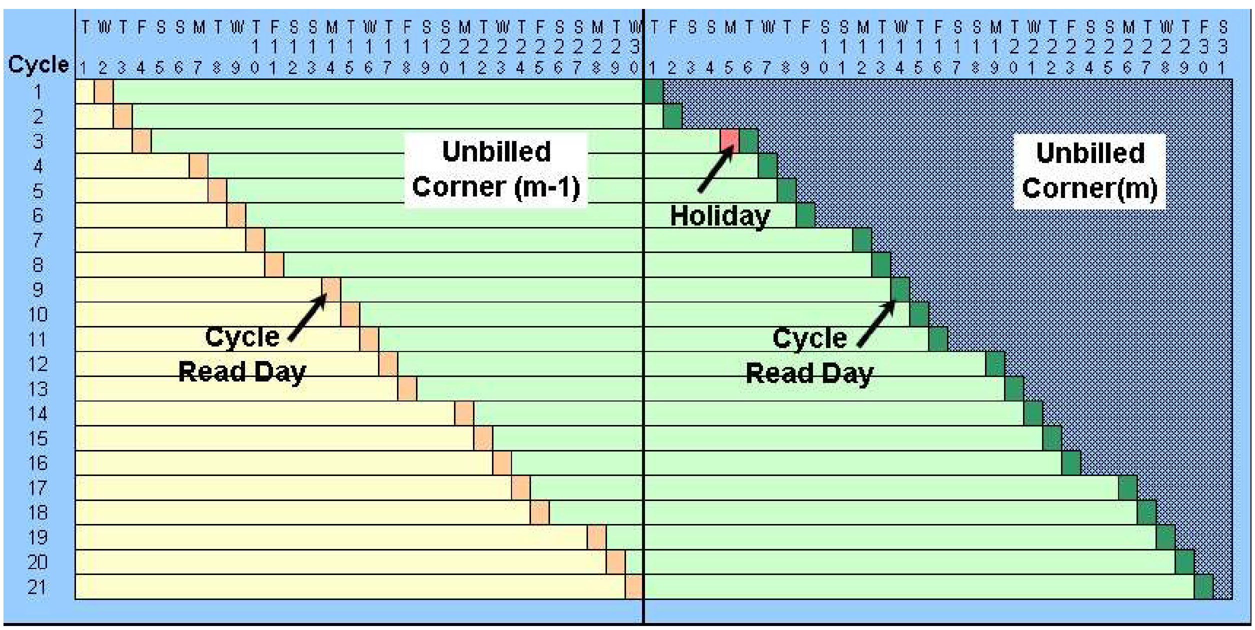
[7] For a greater discussion on the normalization process, see Testimony of Ronald J. Amen & John D. Taylor in DG 21-104.

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, 2nd Paragraph. In the

[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).

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.