STATE OF NEW HAMPSHIRE BEFORE THE NEW HAMPSHIRE PUBLIC UTILIITES COMMISSION

Docket No. DG 23-085
Northern Utilities Inc.

Petition for Approval of 2023-2024 Winter and 2024Summer Cost of Gas
[COG Supply and LDAC]

Technical Statement of Faisal Deen Arif, Ph.D. Gas Director & Ashraful Alam, Utility Analyst
Department of Energy, Division of Regulatory Support
October 20, 2023

The New Hampshire Department of Energy ("DOE" or the "Department") submits this technical statement in compliance with the Public Utilities Commission's ("PUC" or the "Commission") Commencement of Adjudicative Proceeding and Notice of Hearing dated October 4, 2023 in Docket No. DG 23-085. The purpose of this statement is to provide the Commission with required information and a framework for understanding DOE's position in advance of the Cost of Gas hearing scheduled for October 26, 2023 at 1:00 p.m. to review Northern's proposed Cost of Gas (COG) and Local Distribution Adjustment Clause (LDAC).

As explained below, after review and analysis, the DOE recommends that the Commission review and approve Northern's proposed Winter 2023/2024 rates to be effective November 1, 2023 (including contingent revenue decoupling adjustment recovery) and Summer 2024 rates to be effective May 1, 2024, (including contingent revenue decoupling adjustment recovery) in this instant docket.

In the opinion of the Department, for greater accuracy, recency, and to benefit from the Department's Final Audit of Northern's Summer 2023 Reconciliation, it would be useful were Northern to make an updated filing in March 2023, commenting on its forecasted rates, for Department's comment and potentially a Commission hearing, if required.

Background

Northern Utilities, Inc. ("Northern" or "the Company") filed its petition on September 15, 2023. Northern's petition for Winter and Summer rates includes both the proposed COG, the proposed LDAC, and for the first time a contingent Revenue Decoupling Adjustment Factor (RDAF). The Department issued one set of Data Requests (DRs) on October 2, 2023. The responses to the DRs were received on October 12, 2023. See Attachment 1 (Northern Responses to DOE DR Set 1, 1-1 through 1-12 excluding attachments other than Northern's Attachment 1-5.1). A technical session was held on October 13, 2023.

The Department's analysis takes all received information into account and makes every effort to be as exhaustive as possible given the challenging and expedited timeline. The Department's position is subject to the DOE Final Audit Reports for both Northern's Winter 2022-2023 Reconciliation, its Summer 2023 Reconciliation, and Reconciliation of LDAC components from 2022-2023. The Final Audit for the

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Winter period is in process but has not been completed. The Final Audit for the Summer period will not begin until well after the Summer 2023 period concludes.

In the context of Northern's current 2023/2024 COG filing, the DOE Gas Division reviewed the available 2021-2022 Winter Cost of Gas Reconciliation Final Audit Report. See Attachment 2. The Department could reasonably tie all relevant over/under-collection figures as they are reported in the Audit Report and the current filing. The DOE also reviewed Northern's LDAC Reconciliation Final Audit Report from 2021/2022 COG Season. See Attachment 3. The figures reflecting beginning balances for various LDAC components in the Audit Report appear to be in sync with the commensurate figures in the current submission. No concerns are raised at the present time. In this context, however, the Department reserves the right to inform any further observations to the Commission upon completion of the 2022/2023 COG and LDAC Audit Reports.

Filing Facts and DOE Analysis

1. Therm Sales Projection

- The Company's projected total sales over Winter 2023/2024 (i.e., November 1, 2023 to April 30, 2024) period is 32,992,252 therms, of which 16,200,606 (or 49.1%) is for residential, and 16,791,646 (or 50.9%) is for C&I sector. When compared to the last year's filing for projected Winter 2022/2023 sales, DOE notes that the total projected sales were 35,507,405. That is, this year the projected therm sales are down by 2,515,153 therms for the Winter period.
- The projected total sales over Summer 2024 (i.e., May 1, 2024 to October 31, 2024) period for Northern is 7,054,322 therms, of which 2,706,958 (or 38.4%) is for residential, and 4,347,365 (or 61.6%) is for C&I sector. When compared to the last year's filing for projected Summer 2023 sales, the Department notes that the commensurate total sales figure was 8,625,565. That is, this year's projected therm sales are down by 1,571,243 therms for the Summer period.
- Overall, for the COG season, including both the Winter and Summer Periods, the 2023/2024 the total projected therm sales is 40,046,575 therms with a sectoral split of 18,907,563 (or 47.2%) for residential and 21,139,011 (or 52.8%) therms for C&I customers. The overall seasonal projected therm sales is down by 4,086,395 therms (or 9.3%) as compared to the last season 2022/2023.

2. COG (Supply) Rates

2.1 Proposed Winter COG Rates

• As filed by Northern, the proposed Winter 2023/2024 rates are as follows¹:

¹ The Department looked through the calculations for proposed COG rates as presented and generally concurs to the calculation methodologies used to devise the proposed rates.

Table 1: COG Rates for Winter 2023/2024

Beginning Period (per therm rate)	(A) Rates: Winter 2023/2024	Maximum Rates: Winter 2023/2024
Residential (Heating and Non-		
Heating)	\$0.7282	\$0.9103
C&I - LLF (High Winter Use)	\$0.7402	\$0.9253
C&I - HLF (Low Winter Use)	\$0.6587	\$0.8234

Table 2: COG Rates for Winter 2022/2023 & Percentage Change

Sector	(B) Rates: Effective April 1- 30, 2023	% change between current proposed COG rate (A) & last approved Winter COG rate (B)
Residential	\$0.6902	5.5%
C&I - LLF (High Winter Use)	\$0.7041	5.1%
C&I - HLF (Low Winter Use)	\$0.6149	7.1%

• As indicated in Table 2, the Department notes that the proposed residential Winter COG rate this COG Season 2023/2024 is 5.5% higher than the last approved Winter 2022/2023 rates as was effective in April 2023. When compared among commensurate figures for C&I - LLF and C&I - HLF, proposed 2023/2024 rates are higher by 5.1% and 7.1% respectively. By and large, the observed increase in the proposed rates appears to be reflective of future gas market prices between April 2023 and now.

2.2 Proposed Summer COG Rates

• The proposed Summer 2024) rates are as follows:

Table 3: COG Rates for Summer 2024

Beginning Period (per therm rate)	(C) Rates: Summer 2024	Maximum Rates: Summer 2024
Residential (Heating and Non-		
Heating)	\$0. 5117	\$0.6396
C&I - LLF (High Winter Use)	\$0.5622	\$0.7028
C&I - HLF (Low Winter Use)	\$0.4443	\$0.5554

Table 4: COG Rates for Summer 2023 & Percentage Change

Sector	(D) Rates: Effective October 1-31, 2023	% change between current proposed COG rate (C) & last approved Winter COG rate (D)
Residential	\$0.3708	38.0%
C&I - LLF (High Winter Use)	\$0.4175	34.7%
C&I - HLF (Low Winter Use)	\$0.3123	42.3%

• As indicated in Table 4, DOE observes that the proposed residential Summer 2024 COG rates this 2023/2024 Season is 38.0% higher than the last approved Summer 2023 rates as was effective in October 2023. When compared among similar figures for C&I - LLF and C&I - HLF, proposed Summer 2024 rates are higher by 34.7% and 42.3% respectively. The observed increase in the proposed could be

motivated by a number of factors that includes among others the change in the future gas market prices, the projected therm sales.

2.3 Proposed LDAC Rates

• The proposed COG Season 2023/2024 (i.e., November 2023 to October 2024) LDAC rates are as follows²:

Table 5: LDAC Rates

Beginning Period (per therm rate)	Rates: COG Season 2023/2024	Rates: COG Season 2022/2023 ³	% change between 2022/23 & 2023/24
Residential (Heating and Non-Heating)	\$0.0883	\$0.1871	-52.8%
C&I (Small, Medium, Large)	\$0.0362	\$0.0503	-28.0%

[•] As provided in Table 5, the LDAC portion of the proposed rates (as compared to the rates approved in COG Season 2022/2023) went down by 52.8% this year for residential customers and by 28.0% for the C&I customers.

2.4 Proposed Overall Rates Comparison

Table 6: Overall Winter and Summer Rate Comparison

	Winter			Summer		
Sector	Proposed Rates: 2023/24	Last Effective Rates ⁴ : 2022/23	% change	Proposed Rates: 2023/24	Last Effective Rates⁵: 2022/23	% change
Residential	\$0.8165	\$0.8773	-6.9%	\$0.6000	\$0.5579	7.5%
C&I - LLF (High Winter Use)	\$0.7764	\$0.7544	2.9%	\$0.5984	\$0.4678	27.9%
C&I - HLF (Low Winter Use)	\$0.6949	\$0.6652	4.5%	\$0.4805	\$0.3626	32.5%

[•] As provided in Table 6, the Department observes that the proposed residential rate is going down in Winter 2023/24 by 6.9%, while rising in Summer 2024 by 7.5%. When noted for C&I - LLF, both proposed Winter and Summer rates are going up by 2.9% and 27.9% respectively. The commensurate figures for C&I - HLF appear also to be rising in Winter and Summer by 4.5% and 32.5% respectively.

3. Bill Impacts

² The Department reviewed the calculations for proposed COG rates as presented and generally concurs to the calculation methodologies used to devise the proposed rates.

³ This LDAC rate was effective as of January 1, 2023, which reflects updated Energy Efficiency Charge (EEC) for CY 2023 per HB549 (codified in RSA 374:F-3, VI-a, (d)).

⁴ For Winter period, as of April 2023.

⁵ For Summer period, as of October 2023.

Table 7: Winter and Summer Bill Impacts

		Wir	nter		Summer			
Rate Class	Therm Use	Total Bill: 2023/24	\$ Change (as compared to 2022/23)	% change	Therm Use	Total Bill: 2023/24	\$ Change (as compared to 2022/23)	% change
R-5 (Residential-Heating)	488	\$1,164.22	- \$159.91	- 13.7%	111	\$297.95	\$16.52	5.5%
R-6 (Residential Non- Heating)	120	\$445.94	- \$38.59	- 8.7%	58	\$247.22	\$7.73	3.1%
G-40 C&I – Low Annual/High Winter Use	1,527	\$2,449.24	- \$418.05	- 16.7%	256	\$665.15	\$33.60	5.1%
G-41 C&I – Medium Annual/High Winter Use	15,661	\$22,564.73	- \$4,278.89	- 19.0%	3,837	\$4,251.15	\$503.79	11.9%
G-42 C&I – High Annual/High Winter Use	119,420	\$163,096.57	- \$34,202.87	- 21.0%	42,188	\$37,047.04	\$5,537.51	15.0%
G-50 C&I – Low Annual/Low Winter Use	1,119	\$1,834.23	- \$327.24	- 17.8%	940	\$1,041.71	\$106.36	10.2%
G-51 C&I – Medium Annual/Low Winter Use	10,715	\$13,694.12	- \$3,129.38	- 23.0%	7,479	\$5,383.09	\$851.46	15.8%
G-52 C&I – High Annual/Low Winter Use	277,772	\$329,202.63	- \$81,441.31	- 24.7%	232,746	\$117,978.37	\$26,557.51	22.5%

[•] As provided in Table 7, the typical bill impact over Winter 2023/2024 is a reduction, while it appears to be going up in Summer 2024 period.

• The bill impacts for C&I customers appear to be generally negative (that is, bills are projected to be going down for typical customers) in Winter 2023/2024 despite the rates rising over the same period (see Table 6). While this may seem anomalous, it is important to note that the rate comparison in Table 6 was performed between the proposed rates for Winter 2023/2024 as compared to the *most recent* Winter 2022/2023 rates (from April 2023). The bill comparisons, on the other hand, were performed using actual effective rates with average therm consumption over the appropriate period (i.e., Winter 2022/2023 and Summer 2023) for the relevant rate classes.

RDAF Recovery (contingent)

The Department notes that the RDAF recovery proposed by Northern in this docket is contingent upon the final hearing to be held in Docket No. DG 23-086. See Dkt. No. DG 23-086 Procedural Order Re Company, OCA, and DOE Motions and Canceling Oct 23 Hearing (Oct 13, 2023) ("Commission expects to issue an Order nisi granting Northern's requested PEAD RDAF rates, in advance of, and for implementation by, November 1, 2023 subject to future reconciliation based on the parties' and Commission's review, with hearing anticipated in early January 2024"); Dkt. No. DG 21-104, Order No. 26,650 (July 20, 2022) at 6 (In the Company's next distribution rate case, parties to that proceeding may propose specific treatment of any carried balances remaining at that time).

COG Over/Under Collection Calculation

- For the 2023/2024 COG season, the Company identified a prior period over-collection of \$1,201,907. This included a prior winter period over-collection \$1,453,183 and a summer period under-collection of \$251,276.
- The Company uses a 2% threshold for Winter months and a 4% threshold for Summer months to initiate a trigger filing. That is, in any given period (i.e., summer or winter), if the variance between the estimated end of period balance and targeted end of period balance is beyond the threshold percentage, the Company submits a trigger filing proposing a rate change. This adjustment mechanism is instituted to keep the over/under-collection within a reasonable bound and to avoid an unwanted price shock to the customer. The adjustment mechanism so practiced by the Company seems to be working effectively.

COG Components

• Over November 2023 to April 2024 period, total projected adjusted direct and indirect supply Cost of Gas ("COG") sendout is \$24,024,915. The composition of this total projected cost is as follows:

Table 8: Winter 2023/2024 COG Components

Category	Amount (\$) ⁶	% of Adjusted Total Winter Cost
Prior Period (Over)/Under-Collection	(\$1,453,183)	-6.0%
Commodity Cost	\$17,312,467	72.1%
Demand Charges	\$17,551,242	73.1%
Asset Management Credits	(\$10,298,558)	-42.9%
Indirect Cost ⁷	\$929,308	3.9%
Other Costs ⁸	(\$16,361)	-0.1%
Adjusted Total Winter Cost	\$24,024,915	100.0%

• Over May 2024 to October 2024 period, total projected adjusted direct and indirect supply Cost of Gas ("COG") sendout is \$15,506,433. The composition of this total projected cost is as follows:

Table 9: Summer 2024 COG Components

Category	Amount (\$)	% of Adjusted Total Summer Cost
Prior Period (Over)/Under-Collection	\$251,276	7.0%
Commodity Cost	\$1,770,654	49.0%
Demand Charges	\$1,449,961	40.2%
Asset Management Credits	-	0.0%
Indirect Cost	\$138,388	3.8%
Other Costs	-	0.0%
Adjusted Total Summer Cost	\$3,610,279	100.0%

⁶ Any figure in parenthesis indicates a negative cost.

⁷ Indirect costs include: Working Capital Allowance \$53,233; Bad Debt Allowance \$157,446; Local Production and Storage Capacity Cost \$214,538; and Miscellaneous Overhead Cost \$504,091.

Other costs include: Inventory Finance Charge \$8,639; and Re-entry Rate & Conversion Rate Revenues \$(25,000).

Table 10: COG Components for 2023/2024 Season

Category	Amount (\$)	% of Adjusted Total Cost
Prior Period (Over)/Under-Collection	(\$1,201,908)	-4.3%
Commodity Cost	\$19,083,121	69.1%
Demand Charges	\$19,001,203	68.8%
Asset Management Credits	(\$10,298,558)	-37.3%
Indirect Cost	\$1,067,693	3.9%
Other Costs	(\$16,361)	-0.1%
Adjusted Total Cost	\$27,635,193	100.0%

DOE Recommendations

In light of the current Winter 2023/2024 and Summer 2024 COG Season submission, the foregone DOE analysis, and subject to 2022-2023 Audit Reports, the Department recommends that:

- The Commission review and approve Winter 2023/2024 rates to be effective November 1, 2023;
- The Commission review and approve Summer 2024 rates to be effective May 1, 2024; and
- The Commission direct the Company to submit an updated Summer 2024 COG filing at the end of March 2024 for DOE review, Commission review, and a hearing, if necessary.

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Northern Utilities, Inc. DG 23-085

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-1 (COG & LDAC):

Reference: Northern's Sept. 15, 2023 filing and any updates thereto.

Please provide all live Excel files that correspond to all the tables and schedules included in the Company's Winter 2023-2024 and Summer 2024 filing. "Live files should include the formulas and allow the user to input new figures, if needed. If all live spreadsheets have been provided, please simply confirm.

Response:

Excel files were emailed directly to the NH Public Utilities Commission and Department of Energy on September 19, 2023.

Person Responsible: Christopher Kahl

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Northern Utilities, Inc. DG 23-085 Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC]

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

NH Department of Energy Data Requests - Set 1

DOE 1-2 (COG & LDAC):

Reference: Northern's Sept. 15, 2023 filing and any updates thereto.

Please confirm that the Company is using the current EE charge as a placeholder for adjustment to be made effective January 1, 2024 for the purposes of calculating the Company's LDAC to be effective November 1, 2023.

Response:

That is correct.

Person Responsible: S E Demeris

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Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-3 (COG & LDAC):

Reference: Northern's Sept. 15, 2023 filing and any updated thereto.

With regard to the Peak (Winter spanning November 1, 2023 to April 30, 2024) period:

- a. Please confirm that Northern has filed its Winter 2022-2023 Reconciliation with DOE's Audit Division and provide a copy.
- b. Please identify any issues the Audit Division has identified to date with regard to Northern's Winter 2023-2023 Reconciliation. Does Northern accept any recommendations DOE Audit has made thus far?
- c. For the sake of argument, would Northern stipulate that the Winter 2022-2023 over-collection identified in this filing as a basis for forecast rates is temporary, pending the DOE Audit & DOE and PUC review, and pending resolution of whether (or for how long) reconciling rates can be updated or altered, unless otherwise ordered?
- d. Hypothetically would Northern assent to a DOE proposal that the proposed COG rates are approved subject to Audit (and DOE Regulatory and PUC review)?

Response:

- a. Northern included its 2022-2023 annual reconciliation in its 2023-2024 annual cost of gas filing as Attachment NUI-CAK-10. An Excel version of the file was sent on September 19, 2023.
- b. To date, the Audit Division has not identified any issues with the 2022-2023 annual reconciliation.
- c. The Company objects to this subpart of request DOE 1-3 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, and reserving all rights, the Company responds as follows: Both the reconciliation and the cost of gas are proposed for approval, and must be approved, by or before November 1st.

In addition, both cost of gas and the reconciliation are reconcilable. In the event a reconciliation inaccuracy is discovered that cannot be corrected and approved by November 1, the winter season ending balance will then be revised in the

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Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

November monthly gas report and will reflect any updates and or corrections. If the revision results in a change in the projected ending balance that is greater than 2% of total projected winter costs, then the COG rates will be adjusted accordingly on December 1, 2023. For the following year's reconciliation, the starting balance would be adjusted by the correction to the prior years' reconciliation. Since Northern was acquired by Until, there have not been any significant inaccuracies or errors in the reconciliations submitted with the COG fillings.

d. The Company objects to this subpart of request DOE 1-3 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, and reserving all rights, the Company responds as follows: Due to the reconciliation balance being a key input into COG rates, Northern would not assent to having COG rates approved subject to Audit of the reconciliation. In addition, as stated in DOE 1-3(c), any change to the reconciliation balance can be input into the monthly COG report. If the change impacts the projected ending variance by more than 2% of the projected cost of gas, then rates will be adjusted.

Person Responsible: Christopher Kahl Date: October 12, 2023

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Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-4 (COG & LDAC):

Reference: Northern's Sept.15, 2023 filing and any updated thereto.

Please answer questions asked in DOE 1-3 (above) for Northern's Off-Peak Season (Summer spanning May 1, 2024 to October 31, 2024).

Response:

- a) Please see the response to DOE 1-3(a)
- b) Please see the response to DOE 1-3(b)
- c) The Company objects to this subpart of request DOE 1-4 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, and reserving all rights, the Company responds as follows:

The 2022-2023 summer season reconciliation is partially based on estimates. In the November 2023 monthly cost of gas update, Northern will replace estimated costs and revenues with actuals. This update can also include any revisions due to inaccuracies in the initial reconciliation. The updated reconciliation balance will be input into the COG model and this will impact the beginning and ending summer season balances. If the change in the ending balance results in a variance that is greater than 4% of total projected summer costs, then COG rates will be adjusted accordingly on May 1, 2024. Since Northern was acquired by Until, there have not been any significant inaccuracies or errors in the reconciliations submitted with the COG fillings.

d) The Company objects to this subpart of request DOE 1-4 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, and reserving all rights, the Company responds as follows: Please see the response to DOE 1-3(d)

Person Responsible: Christopher Kahl Date: October 12, 2024

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Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-5 (COG & LDAC):

Reference: Sept 15, 2023 Filing and any updates thereto

What NYMEX data was used to forecast the first of the month price for baseload quantities and the daily price (call option) for the Peak and Off-Peak Periods? Please provide documentation showing the NYMEX data and identify the date it describes, and the date it was obtained.

Response:

The NYMEX data was based on closing strip on September 5, 2023 as provided by CME Group on their website. The NYMEX data is identified in Attachment NUI-FXW-10, Line 18 and in Attachment NUI-CAK-5, Lines 13 and 14. DOE 1-5 Attachments 1 & 2 provide the source data for monthly and daily gas prices respectively.

Person Responsible: Francis X. Wells **Date:** October 12, 2024

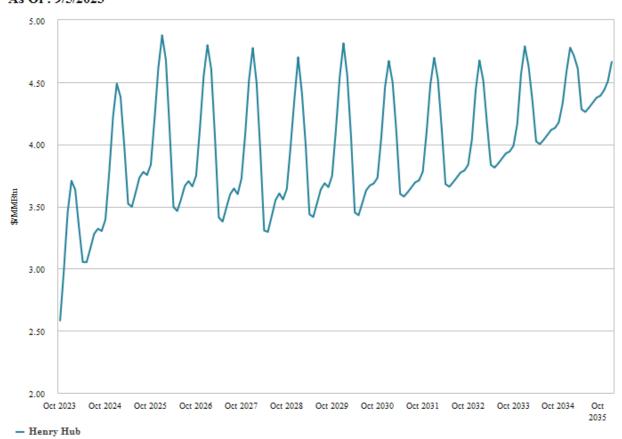
Natural Gas Forwards & Futures

CME Group/NYMEX Source: Price Type: Full Value Future/Forward

Forward Term: Monthly Region: Gulf Coast - LA As Of: 09/05/2023

Chart

As Of: 9/5/2023



Data

As Of: 9/5/2023

TERM	HENRY HUB
Oct 2023	2.582
Nov 2023	2.991
Dec 2023	3.453
Jan 2024	3.706
Feb 2024	3.634
Mar 2024	3.328
Apr 2024	3.052
May 2024	3.051
Jun 2024	3.161

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TERM	Atta dence: Permission Statement of Art and Alam Attadence: Hub
Jul 2024	Page 8 of 30.279
Aug 2024	3.320
Sep 2024	3.302
Oct 2024	3.395
Nov 2024	3.776
Dec 2024	4.219
Jan 2025	4.487
Feb 2025	4.380
Mar 2025	3.979
Apr 2025	3.520
May 2025	3.498
Jun 2025	3.613
Jul 2025	3.732
Aug 2025	3.777
Sep 2025	3.753
Oct 2025	3.835
Nov 2025	4.204
Dec 2025	4.617
Jan 2026	4.877
Feb 2026	4.677
Mar 2026	4.110
Apr 2026	3.495
May 2026	3.463
Jun 2026	3.556
Jul 2026	3.665
Aug 2026	3.703
Sep 2026	3.661
Oct 2026	3.747
Nov 2026	4.132
Dec 2026	4.551
Jan 2027	4.797
Feb 2027	4.605
Mar 2027	4.048
Apr 2027	3.411
May 2027	3.378
Jun 2027	3.489
Jul 2027	3.597
Aug 2027	3.644

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TERM	Attable Technical Statement of Arif and Alam Attable Technical Statement of Arif and Alam
Sep 2027	Page 9 of 3.599
Oct 2027	3.724
Nov 2027	4.083
Dec 2027	4.521
Jan 2028	4.774
Feb 2028	4.494
Mar 2028	3.943
Apr 2028	3.306
May 2028	3.295
Jun 2028	3.421
Jul 2028	3.549
Aug 2028	3.604
Sep 2028	3.556
Oct 2028	3.640
Nov 2028	3.982
Dec 2028	4.358
Jan 2029	4.700
Feb 2029	4.414
Mar 2029	3.991
Apr 2029	3.436
May 2029	3.415
Jun 2029	3.525
Jul 2029	3.637
Aug 2029	3.686
Sep 2029	3.655
Oct 2029	3.747
Nov 2029	4.119
Dec 2029	4.540
Jan 2030	4.812
Feb 2030	4.552
Mar 2030	4.061
Apr 2030	3.451
May 2030	3.429
Jun 2030	3.529
Jul 2030	3.629
Aug 2030	3.669
Sep 2030	3.684
Oct 2030	3.730

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Nov 2030	Page 10 of 4.050
Dec 2030	4.460
Jan 2031	4.670
Feb 2031	4.500
Mar 2031	4.100
Apr 2031	3.601
May 2031	3.579
Jun 2031	3.614
Jul 2031	3.654
Aug 2031	3.694
Sep 2031	3.709
Oct 2031	3.779
Nov 2031	4.099
Dec 2031	4.479
Jan 2032	4.695
Feb 2032	4.525
Mar 2032	4.125
Apr 2032	3.680
May 2032	3.658
Jun 2032	3.693
Jul 2032	3.733
Aug 2032	3.773
Sep 2032	3.788
Oct 2032	3.834
Nov 2032	4.039
Dec 2032	4.439
Jan 2033	4.674
Feb 2033	4.514
Mar 2033	4.164
Apr 2033	3.834
May 2033	3.812
Jun 2033	3.847
Jul 2033	3.887
Aug 2033	3.927
Sep 2033	3.942
Oct 2033	3.988
Nov 2033	4.163
Dec 2033	4.563

3, 4:20 PM	Exhibit 5 Natural Gas Forwards & Futures DG 23-085 DOE Technical Statement of Arif and Alam
TERM	Atta HENRY HUB
Jan 2034	Page 11 of 4.788
Feb 2034	4.628
Mar 2034	4.353
Apr 2034	4.023
May 2034	4.001
Jun 2034	4.036
Jul 2034	4.076
Aug 2034	4.116
Sep 2034	4.131
Oct 2034	4.177
Nov 2034	4.327
Dec 2034	4.577
Jan 2035	4.777
Feb 2035	4.712
Mar 2035	4.612
Apr 2035	4.282
May 2035	4.260
Jun 2035	4.295
Jul 2035	4.335
Aug 2035	4.375
Sep 2035	4.390
Oct 2035	4.436
Nov 2035	4.508
Dec 2035	4.663

The MI Forward natural gas curve models monthly forward values for regional gas hubs based on observed monthly quotes and forward seasonal basis values, to facilitate monthly forward basis and full value review.

NYMEX and CME Clearport market data provided by DTN.

NYMEX and CME Clearport market data is property of the Chicago Mercantile Exchange, Inc. and its licensors. All rights reserved.

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Northern Utilities, Inc. DG 23-085

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-6 (COG & LDAC):

Reference: Sept 15, 2023 Filing and any updates thereto; Dkt. No. DG 22-059

Northern's Response to DOE 1-9.

The Commission has expressed interest in possibly separating LDAC and COG (supply) calculations. What is the Company's view of this proposal, as compared to current practices?

Response:

The Company objects to DOE 1-6 on the grounds that (a) it is not reasonably calculated to lead to the discovery of admissible evidence and (b) it is improperly premised upon a statement of the purported intent or state of mind of the Commission. Without waiving this objection, and reserving all rights, Northern responds as follows: From Northern's perspective, it makes sense for the COG and LDAC filing to continue to be part of the same filing and docket. In addition to the administrative efficiencies of having a single docket with a single procedural schedule and single hearing, there are components of the LDAC, like the Gas Assistance Program ("GAP") rate, that rely on the proposed COG rate for forecasting the GAP cost to be recovered. Additionally by filing the COG and LDAC in the same filing it allows for one set of bill impacts to be presented that capture all of the changes occurring on the rate effective date.

Person Responsible: Christopher Kahl Date: October 12, 2023

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DOE Technical Statement of Arif and Alam
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Northern Utilities, Inc. DG 23-085

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-7 (COG & LDAC):

Reference: Sept 15, 2023 Filing and any updated thereto.

- a. Please provide summaries of the RFP responses to all of this year's RFPs (for Winter 2023-24 and Summer 2024 issued in the last 12 months, for all gas supplies. Please also provide a comparison of the RFP responses, focusing on the differences. Please include the date the RFP was issued and the date of the response. If no response to a particular RFP was received, please so indicate.
- b. As compared to prior years, has the RFP process been protracted or different in any way?
- c. Has Northern contracted for different percentages quantities of CNG, LNG and propane as compared to natural gas for the 2023-2024 Peak and Off-Peak seasons? Why or why not?

Response:

a. Northern issued its annual RFP for the April 1, 2023 – March 31, 2024 term on February 8, 2023, with a due date of February 21, 2023. This RFP sought bids for asset management arrangements and baseload supply. Four bidders responded to the RFP. A summary of the responses is included in DOE 1-7 Attachment 1 CONFIDENTIAL.

Northern issued an LNG supply RFP for the November 1, 2023 – October 31, 2024 term on July 11, 2023, with a due date of July 25, 2023. Three bidders responded to the RFP and an award was made. A summary of the responses is included in DOE 1-7 Attachment 2 CONFIDENTIAL.

Northern issued a peaking supply RFP for a 1 year term beginning November 1, 2024 and offered bidders the option to submit bids for terms longer than one year within that RFP. This RFP was issued on May 2, 2023, with a due date of May 8, 2023. One bidder responded to the RFP and an award was made. The response is included in DOE 1-7 Attachment 3 CONFIDENTIAL.

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Exhibit 5
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DOE Technical Statement of Arif and Alam
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Northern Utilities, Inc. DG 23-085

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-8 (COG & LDAC):

Does Northern have any plans that might result in serving RNG (with or without environmental attributes) or Hydrogen in the next 18 months? If yes, please describe and provide documentation if any.

Response:

Northern does not have specific RNG plans at this time, but is actively exploring RNG opportunities. The Company will advise DOE of any such plans if and as they become actionable. Northern has no Hydrogen plans at this time.

Person Responsible: Christopher Kahl Date: October 12, 2023

DG 23-085 DOE Technical Statement of Arif and Alam Attachment 1 Page 15 of 20

Northern Utilities, Inc. DG 23-085 Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC]

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

NH Department of Energy Data Requests - Set 1

- b. Northern's process for procuring baseload supplies and asset management arrangements was very successful, resulting in historically high asset management revenues, which are passed through to ratepayers. These high asset management revenue results indicate that the market places a high value on the pipeline and storage contracts in Northern's portfolio. Northern's RFP process was not protracted nor did it deviate from past practices. No subsequent rounds to initial RFP's were necessary as was the case in the RFP process for procuring peaking and LNG supplies the previous year.
- c. Northern does not contract for CNG or propane on its system. Northern's LNG Contract is for the same volume, a maximum daily volume equal to 3,000 Dth and a maximum annual volume equal to 75,000 Dth as it was for the 2022-2023 Winter and Summer Periods.

Person Responsible: Francis X. Wells **Date:** October 12, 2023

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Northern Utilities, Inc. DG 23-08

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-9 (COG & LDAC):

Are Northern's hedging plans consistent with the prior year? Why or why not? What steps has Northern taken to reduce the volatility of the gas market as compared to last year? Does Northern anticipate a similar swing in the gas market this year?

Response:

Northern's Price Risk Mitigation Plan is unchanged from the prior year. This plan is summarized beginning on Bates page 81 of the Initial Filing. However, the balance between underground storage and physical gas for which the NYMEX portion of the price is fixed has changed due to an increase in the contracted volume of underground storage, which is discussed on Bates page 73 of the Initial Filing.

Northern is unable to reduce the volatility in the gas market. It can only manage its exposure to price volatility, which it has done through implementation of its Price Risk Mitigation Plan, contracting for appropriate Pipeline, Storage, and Peaking Capacity, and structuring its supply contracts to avoid exposure to volatile New England daily index prices, such as Tennessee Zone 6 or Algonquin city-gates.

At the current time, natural gas prices appear to be less volatile than they were going into last winter, but natural gas price volatility is unpredictable by nature. The objective of its Price Risk Mitigation Plan is to mitigate the risk of significant mid-Winter Cost of Gas rate increases, while maintaining operational flexibility to respond to changes in gas volumes demanded.

Person Responsible: Francis X. Wells Date: October 12, 2023

DG 23-085 DOE Technical Statement of Arif and Alam Attachment 1 Page 17 of 20

DOE 1-9b (COG & LDAC):

Reference Sept 15, 2023 Filing and any update thereto.

Please explain the factors that, in the Company's opinion, are contributing to higher forecasted Off-Peak rates.

Response:

Compared to the 2022-23 Off-peak rates, the 2023-24 Off-peak rates are higher due to higher commodity costs, a higher reconciliation balance, and a lower sales forecast.

Person Responsible: Christopher Kahl Date: October 12, 2023

Attachment 1

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Northern Utilities, Inc. DG 23-085

Petition for Approval of 2023-2024 Winter and 2024 Summer Cost of Gas [and LDAC] NH Department of Energy Data Requests - Set 1

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

DOE 1-10 (COG & LDAC):

Reference Sept 15, 2023 Filing and any update thereto.

Please describe Northern's "Simplified Market Based Allocation" (SMBA) method. Testimony of Kahl at Bates 43. How long has Northern been using this method. Has this method been updated or altered by the inclusion of Northern's RDAF? Why or why not?

Response:

Use of the SMBA method predates Unitil Corp's acquisition of Northern Utilities and has been used continuously since that time. The SMBA method allocates commodity costs between rate classes, and allocates demand costs between seasons as well as between rate classes. For demand costs, seasonal cost allocation is based on the PR allocation method for assigning costs to months. Base load demand costs are then allocated to each rate class based on the monthly percentage of base load demand made up from each rate class times total projected base load demand costs for that month. Remaining load demand cost are allocated to each rate class by multiplying total projected monthly remaining design day demand costs by each rate classes' percentage of total remaining design demand.

For commodity costs, the SMBA method allocates costs to each rate class by multiplying each rate classes' percentage of total monthly sales by total monthly commodity cost. This is done separately for base commodity and remaining commodity costs.

The SMBA methodology is not related to or impacted by the RDAF.

Person Responsible: Christopher Kahl Date: October 12, 2023

DG 23-085 DOE Technical Statement of Arif and Alam Attachment 1 Page 19 of 20

DOE 1-11 (COG & LDAC):

Reference Sept 15, 2023 Filing and any update thereto.

Does Northern's RDAF account for weather variations separately on customer bills or in some other manner? Please explain.

Response:

The Company objects to DOE 1-11 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence in Docket DG 23-085. The Company's RDAF proposal is pending in Docket DG 23-086. Without waiving this objection, and reserving all rights, the Company responds as follows: Northern's RDAF does not account for weather variations. Actual customer counts and therm usage is used in RDAC calculations, any forecasted therm usage is weather normalized.

Person Responsible: S E Demeris

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DOE 1-12 (COG & LDAC):

Reference Sept 15, 2023 Filing and any update thereto.

Does the State of Maine have an RDAF or an equivalent mechanism? How do RDAF calculations impact the allocation(s) the Company must make between NH and ME volumetric use and recovery or expenses? Please explain. Please also describe how formulas were adjusted to address RDAF, if applicable.

Response:

The Company objects to DOE 1-11 on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence in Docket DG 23-085. The Company's RDAF proposal is pending in Docket DG 23-086. Without waiving this objection, and reserving all rights, the Company responds as follows: Northern does not have a revenue decoupling mechanism in Maine. The supply allocations made between NH and ME have no bearing on RDAF calculations.

Person Responsible: S E Demeris

DG 23-085
DOE Technical Statement of Arif and Alam
Attachment 2
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STATE OF NEW HAMPSHIRE

Intra-Department Communication

DATE: October 18, 2022

FROM: Sean Courtois, Audit Staff, Division of Enforcement

New Hampshire Department of Energy

SUBJECT: Northern Utilities, Inc. / New Hampshire Division

DG 22-059, 2021-2022 Winter/Summer Cost of Gas Reconciliation

Final Audit Report

TO: Tom Frantz, Director, Regulatory

Faisal Deen Arif, Assistant Director-Gas, Regulatory Mary Schwarzer, Attorney, Department of Energy

Introduction

An audit of Northern Utilities, Inc., NH Division 2021-2022 Annual Cost of Gas Reconciliation was conducted for the actual expenses incurred for the Winter and Summer periods of 2021 and 2022. DG 22-059, filed electronically on September 16, 2022 contains the Annual Cost of Gas (COG) and associated charges for the period of August, 2021 through July, 2022. The 2022-2023 Annual COG filing incorporates the results of the 2021-2022 reconciliation and (over)/under collection. On September 23, 2022 an electronic spreadsheet version and PDF of the 2021-2022 annual cost of gas reconciliation was filed at the request of Chairman Goldner in the docket book. The spreadsheet/PDF contains many differences compared to the PDF version filed on September 16, 2022.

The September 23, 2022 Christopher A. Kahl supplemental testimony indicated the Company made changes to the indirect demand costs related to the most recent DG 21-104 rate case but collected through the cost of gas were revised effective August 1, 2021. Despite being revised for effect on August 1, 2021, the revisions to the monthly demand charges, as utilized in the reconciliation were not available at the time the initial cost of gas filing needed to be made. The specific costs that changed in the updated filing are as described in footnote section 2.1 of the May 26, 2022 settlement agreement indirect costs related to production and storage capacity and overheads were being revised downwards through the settlement. The change in the reconciliation appears in Attachment NUI-CAK-10 on Schedule 4 Page 2. The Other A&G Allowance shows a small increase in costs while the Local Production and Storage shows a \$262,000 decrease in costs.

Form III, Schedule 2 Summary of the Annual Balance, DG 22-059

The reported activity for the 2021-2022 Annual period from August 1, 2021 to the period ending October 31, 2022 is shown below. The expenses for August 2022, through October 2022 are estimated.

	Actuals Estimates		
	8/21 - 7/22	8/22-10/22	TOTAL
Initial Beginning Balance (over) collection	\$ (3,091,269)		\$ (3,091,269)
Adjustment (1)	\$ 6,269		\$ 6,269
Adjusted Beginning Balance	\$ (3,085,000)		\$ (3,085,000)
Plus: Cost of Firm Gas	\$ 35,875,722	\$ 5,997,965	\$ 41,873,687
Less: Reported Collections	\$ (36,327,026)	\$ (5,003,622)	\$ (41,330,648)
Interest Applied	\$ (87,497)	\$ (33,603)	\$ (121,100)
Annual Ending (over)/under collection	\$ (3,623,801)	\$ 960,740	\$ (2,663,062)

Audit verified the July 2020-2021 Annual period ending balance over-collection of \$(3,091,269) from DG 21-131 to the August 2021-2022 beginning balance shown on filing schedule Form III, schedule 2. The balance also agrees with the 2020-2021 Audit report issued on November 5, 2021.

The \$6,269 beginning balance adjustment reflects \$828 in fuel tax recovery plus \$4,845 of fuel replacement costs plus interest, not included in the 2020-2021 reconciliation.

There is no specific tariff page requiring a due date for either the winter or summer cost of gas reconciliation filing schedule.

As of <u>July 31, 2022</u> the actual (over)-collection was verified to the GL true up reconciliation:

30-40-00-00-191-20-00 Unrecovered Gas Costs-Peak-Comm-NH	(\$4,171,359)
30-49-10-11-495-00-90 Accrd Rev-Dem-Com-Unbilled-Peak-NH	\$547,557
	\$(3,623,801)
547,557	

Annual Collections

Annual Collections of \$(41,330,648) were reported on the cost of gas Form III, Schedule 2. The figure is comprised of actuals in the amount of \$(36,327,026) for August, 2021 through July, 2022 and estimated amounts for August, 2022 through October, 2022 of \$(5,003,622). Audit verified the actual collection credits of \$(36,327,026) to the following general ledger accounts' credit balances: Missing August-October 2021 actual GL account data.

Demand Revenue	
30-49-01-10-480-XX-XX	\$ 5,985,040 3 GL Accounts
30-49-01-10-481-XX-XX	\$ 7,025,725 6 GL Accounts
	\$ 13,010,765
Commodity Revenue	
30-49-01-10-480-XX-XX	\$ 10,004,254 3 GL Accounts
30-49-01-10-481-XX-XX	\$ 12,017,810 6 GL Accounts
	\$ 22,022,064
Production and Storage Revenue	
30-49-01-16-480-XX-XX	\$ 206,028 3 GL Accounts
30-49-01-16-481-XX-XX	\$ 238,863 6 GL Accounts
	\$ 444,891
Misc. Overhead Allowance Revenue	
30-49-01-15-480-XX-XX	\$ 240,971 3 GL Accounts
30-49-01-15-481-XX-XX	\$ 290,867 6 GL Accounts
	\$ 531,838
Reconciliation Revenue	
30-49-01-12-480-XX-XX	\$ 86,138 3 GL Accounts
30-49-01-12-481-XX-XX	\$ 106,127 6 GL Accounts
	\$ 192,265
Accrued Revenue - Unbilled	
30-49-10-11-495-00-90	\$ 125,204
	\$ 125,204
Total Actual Collections	\$ 36,327,026

Estimated Annual Collections of \$(5,003,622) were reported for August, 2022 through October, 2022 as noted below:

Estimated August Collections	\$ (994,555)
Estimated September Collections	\$(1,353,401)
Estimated October Collections	\$(2,665,666)
Total Estimated Collections	\$(5,003,622)

On October 29, 2021, in Docket DG 21-131, Order no. 26,539, the Commission approved 2021-2022 winter and summer cost of gas rates. The winter rates are for the period of November 1, 2021 through April 30, 2022. The summer rates are effective from May 1, 2022 through October 31, 2022. The first chart below reflects the cost of gas rates approved in the 26,539 Order. On May 12, 2022 Commission Order 26,626 the Summer COG rates were increased due to rising NYMEX prices, with rate increases effective June 1, 2022. On May 17, 2022 a clarifying Commission Order 26,627 was issued, as Northern was seeking details regarding the ability to increase the price adjustments upwards to 25% and unlimited downward adjustments. The Commission Order indicated only a downward adjustment was allowed. On August 17, 2022 the

Commission Order 26,669 was issued raising cost of gas rates again due to continuing increases in the NYMEX prices. The gas rates were effective September 1, 2022.

Cost of Gas Rates

	2021-2022	2021-2022	2022	2022
Customer Class	Winter COG	Winter Maximum	Summer COG	Summer Maximun
Residential	\$0.9392	\$1.1740	\$0.4412	\$0.5515
C&I High Winter Use	\$0.9551	\$1.1939	\$0.4733	\$0.5916
C&I Low Winter Use	\$0.8453	\$1.0566	\$0.3943	\$0.4929

June 1, 2022 COG Rates <u>Customer Class</u>	2022 Summer COG	September 1, 2022 COG Rates <u>Customer Class</u>	2022 Summer COG
Residential	\$0.9126	Residential	\$1.1204
C&I High Winter Use	\$0.9395	C&I High Winter Use	\$1.1473
C&I Low Winter Use	\$0.8690	C&I Low Winter Use	\$1.0768

Audit requested the billing system summary and the general ledger interface for the month of January 2022. Audit verified the October and April billing collections from the filing Form III, Schedules 2, to the general ledger.

Below are the collections for January 2022:

Collections	Jan	uary 31, 2022
Demand Cost of Gas	\$	2,641,033
Commodity Cost of Gas	\$	3,795,233
Production & Storage	\$	98,210
Miscellaneous Overhead	\$	95,272
Reconcilition Revenue	\$	30,512
Accrued Revenue	\$	641,860
Total Billed Revenue	\$	7,302,120

Annual Cost of Gas August 2021 – October 2022

The total actual and estimated gas costs of \$41,873,686 were reported for the period of August 2021 through October, 2022. A total of \$35,875,722 in actual costs were incurred over the period of August 2021 through July 2022 and \$5,997,965 in estimated costs for August 2022 through October 2022 were reported on Form III, Schedule 4.

Total Gas Costs

Commodity - Supply	\$ 19,621,823
Commodity - Transportation	\$ 129,530
Commodity - Estimates/Reversals	\$ 228,828
Commodity - Other	\$ 2,424,351
Pipeline Reservation	\$17,261,390
Product Demand	\$ 4,668,376
Storage and Demand Reservation	\$ 1,212,444
Demand Estimates/Reversals	\$ (385,915)
Indirect Demand Costs	\$ (9,286,393)
Capacity Release Estimates/Reversals	\$ 1,289
August - October 2022 Estimates	\$ 5,997,965
Total Annual Costs	\$41,873,686

The total <u>Commodity Supply</u> costs of \$19,621,823 and the <u>Commodity</u> <u>Transportation</u> of \$129,530 shown on the Filing Schedule 4 were verified to the general ledger accounts shown below:

30-49-13-11-804-02-02 Supply Purchases Commodity-Peak NH	\$19	9,621,823
30-49-13-11-804-01-02 Transportation Commodity Peak NH	\$	129,530

Audit reviewed in detail 100% of the invoices for the total commodity supply and transportation invoices for the months of August 2021, November 2021, February 2022, and March of 2022. No exceptions were noted.

The total <u>Commodity Cost Estimates and Reversals</u> filing amount of \$228,828 is shown in the general ledger and Northern's working model, and was verified to the following general ledger accounts:

Account Name		Account Description		Amount	
	30-49-13-11-804-12-90	Transportation Variable Peak-NH	\$	(215)	
	30-49-13-11-804-22-90	Supply Purchases Commodity Peak-NH	\$	229,043	
	30-49-13-11-808-21-90	Storage Withdrawls Peak-Est-NH	\$		
		Total	\$	228,828	

The total <u>Commodity - Other</u> of \$2,424,351 Audit was not able to verify the Other Commodity Costs booked on the filing. There was a \$6,213 difference. The Company on the filing listed (\$390,939) for ATV Reconciliation Charges and (\$384,728) was booked to the GL. **Audit Issue #1**

Account Name	ount Name Account Description		Amount	
30-49-13-11-808-02-00	Withdrawl Underground Storage	\$	3,710,615	
30-49-13-11-804-04-01	ATV Reconciliation Charges Net Peak	\$	(384,728)	
30-49-13-11-483-00-01	Off System Sales	\$	(1,036,906)	
30-49-13-41-806-01-00	Net OBA Adjustment	\$	(86,346)	
30-49-13-11-483-02-00	Company Managed	\$	(832,535)	
30-49-13-11-808-01-01	LNG Boiloff	\$	109,345	
30-49-13-11-484-00-00	Supplier Balancing	\$	948,091	
30-49-01-11-431-00-99	Inventory Finance Charge	\$	2,359	
30-49-13-11-808-20-01	Storage Costs Commodity Peak	\$	669	
	Total	\$	2,430,564	
	Commodity Other-Per Form III Sch 4 page 1	\$	2,424,351	
	Variance due to (\$390,939) ATV recon charges booked on filing.	\$	6,213	

The <u>Sales for Resale Estimates and Reversals</u> were verified to two general ledger accounts that had a zero balance. The accounts were 30-49-13-11-483-02-90 Company Managed Commodity Peak NH and 30-49-13-11-483-10-90 Sales for Resale Commodity Peak NH.

The <u>Pipeline Reservation</u> total of \$17,261,390 on the filing was able to be verified to general ledger account 30-49-13-10-804-01-01. Audit reviewed the invoices for the Pipeline Reservation expenses for the months of October 2021-January 2022 with no exceptions noted.

The <u>Product Demand</u> period total of \$4,668,376 shown on schedule 4, page 2 of 4 agrees with the general ledger account 30-49-13-10-804-02-01. Audit reviewed the invoices for Product Demand expenses for the months of November 2021-February 2022 with no exceptions noted.

The <u>Storage and Demand Reservation</u> shown on Form III, Schedule 4, page 2 of 4 totaled \$1,212,444 and was verified to general ledger account 30-49-13-10-808-02-00. Audit reviewed the invoices for the Storage and Demand Reservation expenses for the months of September and November of 2020 and February and March of 2021 with no exceptions noted.

Audit verified the <u>Demand Estimates/Reversals</u> total of (\$385,915) were verified to the following general ledger accounts that summed to (\$385,915)

Account Name		Account Description		Amount	
	30-49-13-10-804-11-90	Transportation Demand-Peak NH	\$	(15,597)	
	30-49-13-10-804-21-90	Supply Purchases-Demand-NH	\$	882	
	30-49-13-10-808-20-90	Storage Costs Demand Peak NH	\$	178	
	30-49-13-10-798-60-90	Capacity Release NH Peak	\$	(371,378)	
		Total	\$	(385,915)	

The total <u>Indirect Demand Costs</u> of \$(9,286,393) were not able to be verified to the GL accounts on the following page. There is a net (\$232,328) difference compared to the indirect costs on Form III Schedule 4 page 2 for the August 2021-July 2022 actuals.

The variance is due to Local Production and Storage Allowances and Other Administrative and General allowances that were increased during the most recent DG 21-104 rate case. There was also a \$492 difference for the fuel tax recovery that was booked on the GL and the filing. **Audit Issue #1**

Account Name Account Description		Amount	
30-49-13-10-798-06-00	Capacity Release	\$	(5,155,209)
30-49-13-10-798-06-02	Pipeline Capacity Release	\$	(4,561,417)
30-49-01-10-930-00-99	Other A and G Allowance	\$	576,492
30-49-13-10-710-04-99	Local Production and Storage Allowance	\$	476,106
30-49-13-10-798-06-08	Conversion and Rentry Fees	\$	(9)
30-49-01-10-807-05-10	Fuel Tax Recovery	\$	4,572
30-49-01-10-807-05-00	Outage Replacement Costs	\$	7,575
30-49-13-10-483-02-00	Company Managed	\$	(401,683)
	Total Indirect Costs Per GL	\$	(9,053,573)
	Total Indirect Cost per Filing Schedule 4 page 2	\$	(9,286,393)
	Variance Filing Vs. GL	\$	(232,820)
	\$4,080 Fuel Tax Recovery per Fil. Sch. 4		492
	Adjusting Filing vs GL Variance	\$	(232,328)

Audit verified the <u>Capacity Release Estimates/Reversals</u> total of \$1,289 to the following general ledger account

Account Name	Account Description	Amount	
30-49-13-10-483-20-90	Transportation Demand-Peak NH	\$	1,289

The total <u>August through October 2022 estimated</u> commodity and demand expenses were stated to be \$5,997,965 per Schedule 4. The monthly totals are noted as:

	Commodity	Demand
August 2022	\$ 910,677	\$741,365
September 2022	\$1,076,126	\$741,365
October 2022	\$1,787,068	\$741,365
	\$3,773,871	\$2,224,094

Interest

Interest in the amount of \$(121,100) was reported on Form III, Schedule 1 and Schedule 2. Interest charges of \$(87,497) are actuals for August, 2021 through July, 2022 and \$(33,603) are estimates for August, 2022 through October, 2022. Form III, Schedule 2 provided the month's average balance, the interest rate used and the interest applied. Audit recalculated the interest applied amount by verifying the average balance and multiplying it by the interest rate, dividing it by 360 days and multiplying it by the number of days in the month. Using the Company's criteria on the tariff page 20 for the prime rates used, Audit verified that the interest rate used was the prime rate stated on the website:

http://www.fedprimerate.com/wall_street_journal_prime_rate_history.htm

Allocation Factors

All costs are allocated between Northern Utilities – New Hampshire and Northern Utilities – Maine. The Company provided the detailed variable and fixed commodity cost allocations between New Hampshire and Maine for the period of August, 2021 through July, 2022. The variable commodity factors are calculated monthly and were as follows:

	Variable Commodity Factors		
	NH	ME	Total
August 2021	30.22%	69.78%	100.00%
September 2021	30.01%	69.99%	100.00%
October 2021	29.55%	70.45%	100.00%
November 2021	33.39%	66.61%	100.00%
December 2021	36.69%	63.31%	100.00%
January 2022	37.87%	62.13%	100.00%
February 2022	38.95%	61.05%	100.00%
March 2022	37.91%	62.09%	100.00%
April 2022	36.30%	63.70%	100.00%
May 2022	35.10%	64.90%	100.00%
June 2022	32.25%	67.75%	100.00%
July 2022	29.38%	70.62%	100.00%

The fixed demand factors are calculated in November of each year. Audit verified that the correct allocation factors were used each month on the invoice support sheets. No exceptions were noted.

Fixed Demand Factors					
	NH	ME	Total		
August 2021	40.88%	59.12%	100.00%		
September 2021	40.88%	59.12%	100.00%		
October 2021	40.88%	59.12%	100.00%		
November 2021	40.99%	59.01%	100.00%		
December 2021	40.99%	59.01%	100.00%		
January 2022	40.99%	59.01%	100.00%		
February 2022	40.99%	59.01%	100.00%		
March 2022	40.99%	59.01%	100.00%		
April 2022	40.99%	59.01%	100.00%		
May 2022	40.99%	59.01%	100.00%		
June 2022	40.99%	59.01%	100.00%		
July 2022	40.99%	59.01%	100.00%		

Working Capital

Audit verified filing Attachment A, working capital collections amount of \$(4,862) to the following general ledger accounts for the month of January, 2022 without exception:

Working Capital - January 2022

30-49-01-13-480-01-01	R-6 W-NEXT-WORKING CAP	\$ 20
30-49-01-13-480-02-01	R-5 W-NEXT-WORKING CAP	\$ 1,960
30-49-01-13-480-02-02	R-10 W-NEXT-WORKING CAP	\$ 42
30-49-01-13-481-01-01	G-40 W-NEXT-WORKING CAP	\$ 1,084
30-49-01-13-481-01-02	G-50 W-NEXT-WORKING CAP	\$ 92
30-49-01-13-481-02-01	G-41 W-NEXT-WORKING CAP	\$ 757
30-49-01-13-481-02-02	G-51 W-NEXT-WORKING CAP	\$ 165
30-49-01-13-481-03-01	G-42 W-NEXT-WORKING CAP	\$ 194
30-49-01-13-481-03-02	G-52 W-NEXT-WORKING CAP	\$ 41
30-49-10-13-495-00-90	Accrued WC Revenue Unbilled	\$ 507
		\$ 4,862

The Company provided their working and master accounting models to which Audit verified the "Total Revenue" balance to the above mentioned general ledger accounts. Audit recalculated Attachment A without exception and verified the July 31, 2022 ending balance, including interest, on Attachment A of \$(53,152) to the general ledger account 30-40-00-00-173-32-00, Regulatory Asset-Working Capital. Account 173 complies with the tariff.

Audit verified the interest rates Northern was using on Attachment A to the prime rates shown on the Federal Bank Prime Rate History throughout the Annual period including the estimated months of August through October of 2022.

The Working Capital Allowance Percentage (WCA%) is calculated by dividing the supply related net lag days of 10.02 by the total days of year and multiplied by the interest rate through July 2022. Audit recalculated the WCA percentage with only minor, immaterial differences.

The Second Revised Tariff Page 22 effective August 1, 2022 indicates the supply related net lag days will be 9.3. The Company provided estimates for August-October 2022.

Bad Debt Expense

Audit verified filing Attachment B, Bad Debt Collections amount of (\$835) to the following general ledger accounts for the month of May, 2022 without exception:

Bad Debt - May 2022		
30-49-01-13-480-01-01	R-6 W-NEXT-WORKING CAP	\$ 19
30-49-01-13-480-02-01	R-5 W-NEXT-WORKING CAP	\$ 1,116
30-49-01-13-480-02-02	R-10 W-NEXT-WORKING CAP	\$ 52
30-49-01-13-481-01-01	G-40 W-NEXT-WORKING CAP	\$ 454
30-49-01-13-481-01-02	G-50 W-NEXT-WORKING CAP	\$ 113
30-49-01-13-481-02-01	G-41 W-NEXT-WORKING CAP	\$ 400
30-49-01-13-481-02-02	G-51 W-NEXT-WORKING CAP	\$ 198
30-49-01-13-481-03-01	G-42 W-NEXT-WORKING CAP	\$ 66
30-49-01-13-481-03-02	G-52 W-NEXT-WORKING CAP	\$ 28
30-49-10-13-495-00-90	Accrued WC Revenue Unbilled	\$ (3,281)
		\$ (835)

Northern provided their working model and master accounting models for Annual Bad Debt. Audit verified the "Total Revenue" total on the models to the total of the accounts noted above. Audit recalculated Attachment B and was able to verify the July 2022 ending balance, including interest of \$(53,152) to the general ledger account 30-40-00-00-173-34-00, Regulatory Asset-Deferred Bad Debt. Use of account 173 complies with the tariff.

Audit verified the interest rates Northern was using on Attachment B to the prime rates shown on the Federal Bank Prime Rate History website noted earlier, throughout the Annual period including the estimated months of August through October of 2022.

Summary

Audit reviewed all expenses and revenues for the Annual Cost of Gas period of August 2021 through July 2022, and the estimated expenses and revenues for August 2022 through October 2022. The total annual costs are as follows:

Initial Beginning Balance	\$ (3,091,269)
ATV Adjustment	\$ 6,269
Adjusted Beginning Balance	\$ (3,085,000)
Plus: Cost of Firm Gas August 21-July 2022	\$ 35,875,722
Plus Cost of Firm Gas Aug-Oct. 22 Est.	\$ 5,997,965
Total Cost of Gas Per Filing	\$ 41,873,687
Less: Reported Collections	\$ (41,330,648)
Annual Account Ending Balance	\$ 39,331,726
Interest Applied	\$ (121,100)
Annual Ending (over)/under collection	\$ (2,663,062)
Audit Issue #1 Fuel Recovery Costs	\$ 492
Audit Issue #1 ATV Reconcilation Charges	\$ (6,213)
Total Adjusted Annual Over/Under Collection	\$ (2,668,783)

The reported activity for the 2021-2022 Annual period as stated on Form III, Schedule 2 is with an over recovery of (\$2,663,062) matches the model provided by the Company when the filing was filed on the updated September 23, 2022 filing. The initial filing filed on September 16, 2022 had an annual ending balance of (\$2,419,538). The updated September 23, 2022 filing made (\$243,062) in adjustments related to the A and G allowance and Local Production and Storage indirect costs that were approved in the DG 21-104 rate case approved by the Commission in July 2022.

The Company booked \$4,080 on the fuel tax recovery on Form 3 Schedule 4 page 2 while they booked \$4,572 to account 30-49-13-10-807-05-10 for August 2021-July 2022. This is a \$492 difference as the filing understates the expense. **Audit Issue #1**

The Company booked (\$390,939) on the Form III Schedule 4 page 1 in ATV Reconciliation Peak charges. The Company on the GL booked (\$384,728) in August 2021-July 2022 ATV reconciliation charges to account 30-49-13-11-804-04-01. This is a (\$6,213) difference as the filing is overstated. **Audit Issue #1**

Audit recommends an adjusted (\$2,668,783) over/under ending balance. **Audit Issue #1**

Audit Issue #1

Gas Cost Differences

Background

Audit reviewed the September 23, 2022 Form III, Schedule 4, Total Gas Costs of \$35,875,722 for August 2021-July 2022.

Issue

The reported Total Gas Costs did not agree with the GL provided by the Company.

The Company booked \$4,080 on the fuel tax recovery on Form 3 Schedule 4 page 2 while they booked \$4,572 to account 30-49-13-10-807-05-10 for August 2021-July 2022. This is a \$492 difference as the filing understates the expense.

The Company booked (\$390,939) on the Form III Schedule 4 page 1 in ATV Reconciliation Peak charges. The Company on the GL booked (\$384,728) in August 2021-July 2022 ATV reconciliation charges to account 30-49-13-11-804-04-01. This is a (\$6,213) difference as the <u>filing is overstated</u>.

Recommendation

The Company should adjust the filing schedule and perform any adjusting entries for the ATV reconciliation charges and fuel tax recovery.

Company Response

The \$492 difference between the general ledger amount of \$4,572 and the \$4,080 identified as fuel tax recovery was included in the filing; however, it was inadvertently included in the interest amount in the filing. Overall, the expense is not understated in the filing.

NU booked a general ledger entry for \$10,875 in January 2022 and a general ledger entry for (\$395,603) in June 2022; these entries net to (\$384,728). However, the January 2022 entry contained three amounts totaling \$6,213 [\$7,949 + \$2,177 + (\$3,913)] that were for the preceding filing period (May, June and July 2021) so the \$6,213 is correctly excluded from the filing for the period from August 2021 to July 2022. Overall, the expense is not overstated in the filing.

Audit Comment

Audit agrees with the Company and appreciates the clarification. Based on the details provided, the filing and GL differences did not have any net impact on the filing, and the

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recommendation to reduce the filing is withdrawn. The filing as presented is not overstated.

STATE OF NEW HAMPSHIRE

Intra-Department Communication

DATE: October 18, 2022

FROM: Sean Courtois, Audit Staff, Division of Enforcement

New Hampshire Department of Energy

SUBJECT: Northern Utilities, Inc. /New Hampshire Division

DG 22-059, LDAC Reconciliation

Final Audit Report

TO: Tom Frantz, Director of Regulatory

Faisal Deen Arif, Gas Director, Regulatory

Mary Schwarzer, Attorney, NH Department of Energy

Introduction

On September 16, 2022 Northern Utilities filed the Local Distribution Adjustment Clause (LDAC) charges that consist of seven rate components as a PDF. Audit reviewed the Excel version of the LDAC filing reconciliation that was provided to the PUC and the DOE through the e-filing system on September 23, 2022. The rate components are the Gas Assistance Program (GAP), Environmental Response Cost (ERC), Lost Revenue Rate (LRR), Rate Case Expenses (RCE), Reconciliation of Permanent Changes (RPC) in distribution rates, Property Tax Adjustment Mechanism (PTAM), and the Regulatory Assessment Adjustment Mechanism (RAAM). The Company is not proposing to change the Interruptible Transportation Margin (ITM) and the Energy Efficiency Charge (EEC). The Company will file a proposed January 1, 2023 EEC on December 1, 2022 in accordance with HB 549.

An updated Rate Case Expense Revised Attachment NUI-SED-1 was filed on October 4, 2022 that reflected the final invoices for services rendered related to the most recent rate case. The purpose of this Audit Report is to verify the over/under beginning balances, specific GL account activity, and ending balances to the filing schedules. A detailed review of invoices and related activity was conducted only for the Environmental and Property Tax portions of the LDAC.

Gas Assistance Program (Low Income) NUI-SED-1-GAP

The Company provided the balance sheet account for the Low-Income portion of the LDAC. The specific purpose of the Gas Assistance Program is to allow the Company to recover revenue discounts associated with customers participating in the Gas Assistance Program, as well as the associated administrative costs. On August 27, 2020, the Commission Order #26,397 approved the Settlement Agreement for the changes made to the (RLIAP) Residential Low

Income Assistance Program for gas to be called GAP or the Gas Assistance Program. The Settlement Agreement replaces a qualified customer's 60 percent bill credit on distribution and supply rates (exclusive of the LDAC) over twelve months with a 45 percent bill credit on the distribution and supply rates (exclusive of the LDAC) during the winter months, November 1, to April 30. On November 1, 2022 Northern is proposing to raise the GAP rate from \$0.0033 to \$0.0037 per therm. The Audit review did not consist of a detailed Audit of the specific Gas Assistance Program. The Audit review strictly included a review of the GL beginning balances, activity, details, and ending balances.

Audit verified the DG 22-059 the RGAP Filing Schedule Page 2 November 2021-July 2022 monthly actual balances to the general ledger account 30-40-00-00-173-77-00. The \$20,554 beginning balance for Northern on the GL was verified to the beginning balance on the filing.

Account 30-40-00-00-173-77-00 reflected the following for the period 11/2021 - 7/2022:

Summary of Gas Assistance Program Account Activity				
November 1, 2021 beginning balance	\$	20,554		
LI Discount-Distribution	\$	29,682		
LI Discount-Supply	\$	25,856		
Regulatory Assessments	\$	(10,631)		
Total Expenses	\$	44,907		
RLIARA Revenue	\$	(82,046)		
Ending Balance Before Interest	\$	(16,585)		
Net Interest	\$	15		
December 31, 2021 Ending Balance	\$	(16,570)		
January 1, 2022 beginning balance	\$	(16,570)		
LI Discount-Distribution	\$	137,006		
LI Discount-Supply	\$	131,341		
Regulatory Assessments	\$	61,116		
Total Expenses	\$	329,463		
RLIARA Revenue	\$	(274,596)		
Ending Balance Before Interest	\$	38,297		
2022 Interest Charges	\$	529		
December 31, 2022 Ending Balance	\$	38,826		

Environmental Response Cost (ERC)

Introduction

Northern Utilities, Inc. (Northern) filed its annual Environmental Response Cost Report for the period July 2021 through June 2022 on September 16, 2022, in accordance with Order 23,046 in docket DR 98-049. Audit reviewed a PDF version of the filing.

The total adjustment to the ERC was calculated in the filing DG 22-059 on Attachment NUI-SED-1 ERC, page 1 of 2,

Total ERC Costs for the Period	\$423,485
Less Current (Over)/Under Collections (Estimated)	\$ 27,275
Total ERC Cost to be Recovered	\$450,760

Forecasted Firm Sales % Firm Transportation Volumes 78,881,226

ERC Recovery Rate \$0.0058

The \$423,485 figure was verified to the DG 22-059 filing Schedule 1, page 1 of 1. The figure is the sum of one seventh of the unamortized costs of remediation expenses from July 2014 through June 2022.

Review of the Environmental Response Costs

Northern provided the ongoing reconciliation of the manufactured gas plant (MGP) site specific environmental remediation expenses, required as part of the Remediation Adjustment clause compliance filing. With the reconciliation, the Company provided photocopies of the associated expenses for which recovery is sought. There were no third-party insurance recoveries for the period.

Expenses sought for recovery from July, 2021 through June, 2022 amount to \$48,434. Schedule 2 of the Environmental Response Cost binder shows the summarized expenses, by location and type, as follows:

ERC Reponse Costs

	Consulting		Rer	nediation	<u>Other</u>	<u>Total</u>
Portsmouth Gas Works	\$	-	\$	-	\$ -	\$ -
Exeter Gas Works	\$	-	\$	-		\$ -
Rochester Gas Works	\$	-	\$	48,275	\$ 159	\$ 48,434
Dover Gas Works	\$	-	\$	-	\$ -	\$ -
Somersworth Gas Works	\$	_	\$		\$ 	\$
Totals	\$	-	\$	48,275	\$ 159	\$ 48,434

Portsmouth Gas Works

Portsmouth incurred no expenses during the July 2021 through June 2022 period.

Exeter Gas Works

Exeter incurred no expenses during the July 2021 through June 2022 period.

Rochester Gas Works \$48,434

Rochester Remediation \$48,275

Audit reviewed in detail attachment 3B, which included fourteen AECOM invoices totaling \$48,275. The invoices were as follows:

Vendor Name	invoice #	A	mount
AECOM	2000514190	\$	9,538
AECOM	2000521235	\$	2,573
AECOM	2000523418	\$	1,305
AECOM	2000525319	\$	1,360
AECOM	2000535749	\$	2,115
AECOM	2000536962	\$	5,324
AECOM	2000549490	\$	2,190
AECOM	2000559945	\$	9,036
AECOM	2000567400	\$	3,707
AECOM	2000580518	\$	2,130
AECOM	2000588365	\$	1,789
AECOM	2000604281	\$	2,707
AECOM	2000626357	\$	1,746
AECOM	2000633989	\$	2,755
		\$	48,275

Rochester Other \$159

Four invoices were from the City of Rochester totaling \$64 for the Water and Sewer bills.

No exceptions were noted with the review of the Rochester Gas Works expenses.

Somersworth Gas Works

The Somersworth site incurred no expenses during the July 2021 through June 2022 period.

ERC General Ledger

The total new expenses sought for recovery through the ERC over seven years beginning November 1, 2022, are \$48,434. All of the invoices reviewed for the Rochester site were reconciled with the general ledger detail, account 30-40-00-00-182-29-00, Regulatory Asset-ERC Costs-NH without exception.

The reported actual ending balance for the month ending June, 2022 per filing DG 21-131, Attachment C, of \$95,918 was verified to the general ledger account 30-40-00-00-173-31-00, ERC Site Costs – Current.

ERC Revenues

Audit requested a billing summary noting the total therms sold. Northern provided a breakdown of the total therms sold for each month by rate class for both NU supplied therms and 3rd party supplied therms. The total monthly therms sold were verified to Attachment C from Docket DG 22-059. The monthly recoveries noted on Attachment C were recalculated by Audit with no exceptions:

evenues/Therms Sold

<u>Month</u>	Therms Sold	ERC Rate	Reco	very/Passback
July 2021	2,992,333	0.0061	\$	18,264
August 2021	2,739,797	0.0061	\$	16,722
September 2021	2,699,225	0.0061	\$	16,475
October 2021	3,205,050	0.0061	\$	19,518
Novemer 2021	5,403,127	0.0059	\$	31,069
December 2021	8,703,876	0.0056	\$	48,743
January 2022	11,396,267	0.0056	\$	63,820
February 2022	11,590,946	0.0056	\$	64,913
March 2022	9,836,237	0.0056	\$	55,086
April 2022	6,649,114	0.0056	\$	37,236
May 2022	4,690,240	0.0056	\$	26,265
June 2022	2,964,732	0.0056	\$	16,612
	72,870,944		\$	414,723

The estimated current under collection of \$3,446 for October 2022 was verified to the DG 22-059 filing Attachment C. This schedule reflects actual revenue from May 2021 through July 2022, and estimated revenues for August through October 2022.

Per Attachment C in DG 22-059, the Environmental Response Charge was \$0.0061 per therm during the period of July, 2021 – October, 2021. Attachment C notes the November 2021 ERC Rate of \$0.0059 reflects an average of the \$0.0056 rate and \$0.0061 rate. Beginning December 1, 2021, the ERC rate decreased to \$0.0056.

The total recoveries and pass backs were verified to the following general ledger accounts by rate class without exception:

ERC Revenue:	Amount	
30-49-01-73-480-02-01 R-5 Next ERC	\$	100,091
30-49-01-73-480-01-01 R-6 Next ERC	\$	1,397
30-49-01-73-481-01-01 G-40 Next ERC	\$	50,271
30-49-01-73-489-02-01 G-40 Next ERC	\$	7,960
30-49-01-73-480-02-02 R-10 S Next ERC	\$	2,412
30-49-01-73-481-03-01 G-42 Next ERC	\$	9,858
30-49-01-73-489-04-01 G-42-EXT ERC	\$	18,870
30-49-01-73-481-02-01 G-41 S Next ERC	\$	38,010
30-49-01-73-489-03-01 G-41 Ext ERC	\$	43,151
30-49-01-73-481-01-02 G-50 Next ERC	\$	8,693
30-49-01-73-489-02-02 G-50 EXT ERC	\$	1,642
30-49-01-73-481-02-02 G-51NEXT ERC	\$	14,668
30-49-01-73-489-03-02 G-51 EXT ERC	\$	14,530
30-49-01-73-481-03-02 G-52 Next ERC	\$	5,210
30-49-01-073-489-04-02 G-52 EXT ERC	\$	97,961
Total ERC Revenue	\$	414,724

Audit spot-checked the detailed general ledger to ensure the reported monthly revenues properly reflected the figures booked to the detailed general ledger for July 2021-June 30, 2022. No exceptions were noted.

ERC Summary

Audit reviewed the vendor invoices for expenses sought for recovery in the ERC filing from July, 2021 through June, 2022 in the amount of \$48,434. All invoices were reviewed in detail confirming site locations, service dates and verifying that the charges were accurate. All expenses were verified to general ledger account 30-40-00-00-182-29-00, Regulatory Asset, ERC Costs, without exception.

The monthly ERC recoveries noted on Attachment C of the filing were recalculated and verified as accurate, and properly reflected on the general ledger.

Based on the above review, Audit deems the adjustment to the ERC calculated in the filing, DG 22-059 on Attachment NUI-SED-1 ERC to be accurate, through the actual timeframe reviewed.

Total ERC Costs for the Period	\$423,485
Less Current (Over)/Under Collections (Estimated)	\$ 27,275
Total ERC Cost to be Recovered	\$450,760
Forecasted Firm Sales % Firm Transportation Volumes	78,881,226
1	
ERC Recovery Rate	\$0.0058

Lost Revenue Rate (LRR)

The purpose of the LRR is to recover lost distribution revenue related to the Company's Energy Efficiency Programs. This rate mechanism was established in accordance with Order No. 25,932 in DG 15-137 approving a Settlement Agreement which provides for the implementation of the LRR mechanism. On November 1, 2022, the Company is proposing a rate of \$0.00 for all rate classes. In the most recent rate case DG 21-104 the Commission approved the Company's revenue decoupling mechanism. Therefore, lost revenue ceased to accrue in July 2022 with a nominal remaining balance. The Company indicated in the 2022 Annual Energy Efficiency Report filing to be made on June 1, 2023, the Company will reconcile 2022 lost revenue with actual plan savings and propose a method as part of the 2023-2024 LDAC filing to either credit or recover the ending LRR balance to customers. The lost revenue is booked to 15 revenue accounts 30-49-01-72-48X-0X-0X.

Rate Case Expenses (RCE)

The purpose of the RCE is to establish a procedure that allows the Company to adjust its rates for the recovery of NHPUC approved rate case expenses. These expenses are proposed for recovery over a 12-month period, November 2022-October 2023. On September 16, 2022, the Company filed Attachment NUI-SED-1 with a proposed rate for the RCE of \$0.0043. On October 4, 2022, the Company filed with the Commission an updated Attachment SED-1-RCE that included additional invoices from Dr. Woolridge and Gannett Fleming. The filing indicates the rate case expenses to be recovered are \$373,871. The updated proposed October 4, 2022 proposed RCE rate is reflected as \$0.0048 per therm.

On September 22, 2022, the DG 21-104 Final Rate Case Expense Audit Report was issued. The report summary indicates the Company was seeking to recover \$338,696 in rate case expenses. The report recommended a reduction of (\$145) for a discrepancy related to a Staples invoice. This brings the recommended recovery in the Audit Report to \$338,551. The report indicates that, as of the filing of the final report on the 22nd, the DOE invoice for Dr. Woolridge's services has not been provided. Audit reviewed the post-audit report invoices that were provided on October 4, 2022. There was an invoice for \$35,150 from the Department of Energy Business Office for Dr Randall Wooldridge that related to reviewing the cost of capital as part of the most recent DG 21-104 rate case. There was a September 2022 invoice from Gannett Fleming for post-filing depreciation study work. This brings the post report/filing invoices to \$35,320. The updated filing indicates there are \$373,871 that matches the NUI-SED-1-RCE. The adjusted total of \$373,871 rate case expenses were verified to the 30-40-00-00-182-03-40 rate case deferral account. On Friday October 14, 2022 the Commission Order 26,704 approved the \$373,871 rate case expenses.

Reconciliation of Permanent Charges (RPC)

The purpose of the reconciliation of permanent charges (RPC) is to establish a procedure that allows Northern to adjust its rates for the reconciliation of revenue related to a permanent change in the Company's distribution service rates implemented after the effective date of the change. The provision includes the reconciliation of for the difference in revenues charged

under temporary vs. permanent rates. The RPC will be recovered over a 12-month period November 2022-October 2023 per the Settlement Agreement section 8.1 approved in DG 21-104 rate case.

Section 8.1 of the DG 21-104 settlement agreement indicates the RPC shall be a separate uniform rate per therm for the residential and Commercial/Industrial customers, respectively to be recovered over one year. As shown on the bottom of Attachment NUI-SED-RPC, Page 2, the total recoupment attributed to Residential customers is \$2,467,265. Forecasted residential therm usage for the November 2022 – October 2023 period is 20,455,496 therms, resulting in a rate of \$0.1206 per therm. The total commercial and industrial reconciliation was \$580,888, divided by the forecasted C&I therms of 57,425,731 for the 12 months ended October 31, 2023 resulting in an RPC rate of \$0.0101/therm.

The Attachment NUI-SED-1 RPC provides the derivation of the revenue shortfall associated with the change in distribution rates over the October 2021-July 2022 period. The Company used July 2022 usage data for the August 2022 estimate. Audit reviewed the actual October 2021-July 2021 billing reports and the August 2022 estimated billing report for the \$3,048,154 in Residential and Commercial/Industrial recoupment on page 2 of NUI-SED-1 RPC.

Property Tax Adjustment Mechanism (PTAM)

On September 29, 2021, the Final Audit report for DG 21-123 Northern Utilities Regulatory Cost Adjustment Mechanism summarized the review the of property taxes related to HB 700 and RSA 72:8-d and –e. The Audit Report indicates \$521,482 in local property underrecovery for 2020 was booked to account 30-40-00-00-182-15-00. The report indicated adjustments of \$167 to bring the 2020 adjusted recovery for the deferral account to \$521,314 for 2020. For 2021 the deferral recovery was reported to be \$314,411, as included in the filing in 2021 for the property tax expense.

The Excel Attachment NUI-SED-1 PTAM provides the calculation of the PTAM for effect on November 1, 2022. Page 1 provides the calculations of the proposed rate. The property tax for the period, as shown on Schedule DTN-1, plus the prior period over/under collection is offset by Excess ADIT resulting in a proposed recovery of zero. Therefore, the proposed November 1, 2022 is \$0.0000 per therm. Page 2 of the NUI-SED-1 provides a reconciliation of the prior period and support for the \$406,801 ending balance as shown on Page 1, line 2

Audit verified the \$521,314 February 2022 beginning balance (when the account began) on the SED-1 PTAM page 2 to the 30-40-00-00-173-83-00 deferral account. Page 2 of the filing indicates the 2021 property tax deferral was \$314,411. Audit verified the \$312,309 PTAM revenue on the filing to GL account 30-49-01-83-48X-XX-XX for February 2022-July 2022. The August -October 2022 figures are forecast. The 30-40-00-00-182-15-00 deferral account had a \$532,766 July 2022 account ending balance. The GL reconciliation indicates a (\$314,411) 2021 property tax expense deferral adjustment and (\$4,510) lump sum recast interest to arrive at the adjusted 213,845 under-collection adjusted balance. The chart below was provided by the Company explains the PTAM filing beginning balance and adjustments that were done.

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Adjusted bal	\$ 213,845.00
Recast interest	(4,510)
Recast adj per SED-1 pg 9	(314,411)
07/31/22 bal per Attachment SED-1 PTAM:	\$ 532,766

Audit reviewed Attachment NUI-DTN-1 Property Tax Analysis and NUI-DTN-2 that contains both issuances of the 2021 municipal property tax bills. Attachment NUI-DTN-1 page 1 provides an analysis of the property tax expense that on line 9 indicates the 2021 Northern Utilities NH property tax recovery is \$4,783,779. (\$1,125,845 for State +3,657,935 for municipal). The \$4,783,779. property tax recovery includes 9 months in DG 17-070 recovery level and 3 months docket DG 21-104 recovery level allocated by the DG 21-104 test year revenue. Audit verified the \$5,342,824. 2021 (\$1,370,478 Statewide Utility Tax + \$3,972,346 both issuances 2021 municipal tax bills) property tax expense. The \$314,411 local property tax under-recovery on line 12 is the difference between the 2021 municipal property tax expense recovered in rates and the 2021 municipal property tax expense.

Audit verified the \$3,972,346. 2021 municipal property tax expense on NUI-DTN-1 page 2 to the 2021 first and second half issuance property tax bills provided in NUI-DTN-2.

Town	2	021 1st half	2021 2nd Half		Tot	al Tax Yr 2021
Atkinson	\$	12,700	\$	9,173	\$	21,873
Brentwood	\$	15,914	\$	13,201	\$	29,115
Dover	\$	425,760	\$	403,158	\$	828,918
Durham	\$	99,645	\$	85,892	\$	185,537
East Kingston	\$	7,654	\$	6,748	\$	14,402
Epping-annual	\$	12,764	\$	84,760	\$	97,524
Exeter	\$	155,293	\$	132,762	\$	288,055
Greenland	\$	5,347	\$	7,967	\$	13,314
Hampton Class 4000	\$	131,532	\$	130,965	\$	262,497
Hampton Class 5000	\$	67,110	\$	69,528	\$	136,638
Hampton Falls	\$	352	\$	1,396	\$	1,748
Kensington	\$	13,429	\$	10,259	\$	23,688
Kingston			\$	10,260	\$	10,260
Madbury	\$	4,063	\$	3,866	\$	7,929
Newington	\$	11,424	\$	11,626	\$	23,050
North Hampton	\$	13,489	\$	13,124	\$	26,613
Plaistow	\$	96,526	\$	75,025	\$	171,551
Portsmouth	\$	304,398	\$	332,796	\$	637,194
Rochester	\$	295,997	\$	304,220	\$	600,217
Rollinsford	\$	2,442	\$	3,911	\$	6,353
Salem	\$	95,593	\$	92,334	\$	187,927
Seabrook	\$	84,389	\$	74,248	\$	158,637
Stratham	\$	4,261	\$	4,758	\$	9,019
Somersworth	\$	126,697	\$	103,590	\$	230,287
Totals	\$	1,986,779	\$	1,985,567	\$	3,972,346

Audit verified the \$3,972,346 to the actual property tax bills. The Epping, Rochester, Salem, and Somersworth property tax bills showed the statewide education tax on the bill presentation. The Company indicated to Audit that the Company did pay statewide education tax on Epping parcel 040-500-004 on the \$12,764 2021 first half property tax bill. The Company indicated the statewide education tax was corrected and removed on the payment of the 2021 second half issuance bill that was paid for \$84,760.

The statewide education tax mil rate was included on the <u>Rochester and Salem</u> bills, but the Company did not pay any statewide education tax. The Company paid statewide property tax on the <u>Somersworth</u> parcel 9-282A property on the 2021 first half issuance that summed to \$863. The Company on the second half issuance corrected and removed the statewide property tax on the second issuance. The statewide education tax payment was immaterial, approximately \$100.

Audit reviewed the Town of <u>Seabrook</u> invoices for parcel 26-903-1 that indicated the 2021 first half issuance of the bill was for \$83,229. The invoice includes a handwritten note that indicates there was a (\$37,532) property tax abatement. This brought the amount paid to

\$45,696. The 2021 2nd half issuance for the same parcel indicated the property tax bill was for \$73,201. There was a handwritten note that indicated there was a credit by the town for (\$37,532). This reduced the total payment for the second half issuance to \$35,668.

Audit reviewed the July 24, 2019 abatement settlement agreement with the Town of Seabrook. The abatement agreement applies to property tax years 2015-2018. The agreement indicates the town is to grant Northern a \$225,194 which constitutes a tax refund of \$191,067 plus 6% interest per annum June 1, 2020 is calculated to be \$34,127 for all tax years at issue in the 2018 claim. The abatements shall be realized by NU in the form of 6 equal credits of \$37,532 beginning with the April 1, 2020 tax bill going through the April 1, 2022 tax bill. The Company indicated they did not apply the credit on the filing NUI-DTN because they were prior to 2020. The Company therefore included an additional \$37,532*2=\$75,064 in property tax expense that should not have been included for 2021. **Audit Issue #1**

Audit reviewed the Town of <u>Salem</u> invoices for parcel 157-11141-1 that indicated the 2021 first half issuance of the bill was for \$93,935. The invoice indicates there was a (\$36,995) property tax credit. This brought the amount paid to \$56,940. The 2021 2nd half issuance for the same parcel indicated the property tax bill was for \$53,817. This reduced the total payment for the second half issuance to \$35,668. The Company on Line 21 of NUI-DTN-1 page 2 included additional \$36,995 in property tax expense that is the same as the 2021 first half issuance credit. This brings the total tax expense on the filing for the parcel to \$90,812.

Audit reviewed the September 2019 abatement settlement agreement with the Town of Salem. The abatement agreement applies to property tax years 2015-2018. The agreement indicates the town is to grant Northern a \$221,669 which constitutes a tax refund of \$191,009 plus 6% interest per annum June 1, 2020 is calculated to be \$30,660 for all tax years. The abatements shall be realized by NU in the form of 6 equal credits of \$36,995 beginning with the April 1, 2020 tax bill going through the April 1, 2022 tax bill. The Company indicated they did not apply the credit on the filing NUI-DTN because they were prior to 2020. The Company therefore included an additional \$36,995*2=\$73,990 in property tax expense that should not have been included for 2021. **Audit Issue #1**

Audit reviewed the \$1,370,478 2021 State property tax expense to tax bills. Audit reviewed the December 15, 2020 RSA 83-F statewide property tax bill that was for \$1,235,986. The Company paid \$339,896 on April 15, 2021, June 15, 2021, and September 15, 2021. On December 15, 2021 the Company received the updated RSA 83-F tax bill for the year that was \$1,370,478. The tax bill indicated there was a \$350,790 payment due by January 18, 2022. The \$1,370,478 is the figure the Company included on line 10 of the NUI-DTN-1 page 1 for informational purposes. The state utility taxes have been excluded for recovery.

Audit reviewed the 2021 property tax reconciliation on page 3 of the NUI-DTN-1 filing. The 2021 property tax expense was \$5,342,824 (\$1,370,478 state property tax expense +\$3,972,346 municipal property tax expense) to the source documents and the \$4,879,837 that was booked to the GL and 2021 Annual Report page 25b, line 10. The Company verified the \$4,879,937 property tax expense to the 30-40-10-00-408-12-00 Local Operating Property Taxes-NH that summed to \$4,881,937 as of December 31, 2021 and a (\$2,100) Plaistow abatement

credit as of December 31, 2021. The difference between the \$5,342,824 2021 property tax expense and \$4,879,837 2021 annual property tax expense is \$462,000.

The reconciliation of the \$462,000 difference is comprised of a \$31 dollar Rochester invoice discrepancy, \$2 Dover state education tax correction, (\$1 Brentwood bill correction, (\$443,983) in deferred property taxes, and (\$19,036) in property tax abatements.

The abatements of (\$19,036) found on Attachment NUI-DTN-1, page 3, line 5 relates to abatement entries made or received in 2021. Please refer to AR-4 Attachment 1 for supporting details related to these entries. First, there is an abatement from the town of <u>Plaistow</u> totaling (\$2,100). This abatement relates to property tax valuations prior to 2020 and thus has not been included in the Company's cost recovery filing. Next, the Company received an abatement credit of (\$73,990) from the town of <u>Salem</u> on its second bill installment resulting in the Company's GL property tax expense being understated. The Company made an adjustment to the GL property tax expense account of \$57,054 in December 2021 to address the issue, but the adjustment should have been for \$73,990 resulting in difference of expense of (\$16,936) related to the abatement. The Company's cost recovery proposal of \$3,972,346 related to local propety taxes excludes the abatement credit of \$73,990 as it was associated with property tax valuations prior to 2020.

The reclass of deferred property taxes of (\$443,983) found on Attachment NUI-DTN-1, page 3, line 6 relates to the Company's reclassification of deferred property taxes from the expense account to a regulatory asset account for future recovery in the Property Tax Adjustment Mechanism ("PTAM"). The deferral compares the amount of property tax recovery in base rates during the applicable time periods versus actual 2021 property tax bills received resulting in a reclassification of deferred property taxes of (\$444,150). Next, following the Company's 2021 PTAM filing, an Audit adjustment of \$167 was made to the deferral to remove state property taxes.

Regulatory Assessment Adjustment Mechanism (RAAM)

The purpose of the RAAM is to establish a procedure that allows Northern to recover changes in the annual PUC regulatory assessment. The current LRAM is \$0.0027. This is the first year of the reconciliation of the RAAM account. The Company is proposing a RAAM of \$0.00002 effective November 1, 2022 based on the non-distribution regulatory assessment of \$0 and 2020 Covid-19 expense of \$68,061. Per the DG 21-104, July 20, 2022 Order No. 26,250 and a prior period over collection of \$49,848, this brings a net \$18,213 in expenses to be recovered per SED-1-RAAM page 1.

Audit reviewed page 2 of the SED-1-RAAM attachment that includes the actual over/under collection and account activity for November 2021-July2022 for account 30-40-00-00-173-84-00 RAAM deferral account. The actual account activity did not begin until May 2022. Audit verified the May-July 2022 Regulatory Assessment expenses to the Regulatory Assessments account 30-49-01-84-928-03-00. Audit verified \$23,353 in May-July 2022 RAAM revenue to account 30-49-01-84-48. Audit verified the \$22,583 July 2022 ending under collection on page 2 of the filing to the 30-40-00-00-173-84-00 RAAM deferral account.

Audit Issue #1

Salem and Seabrook PTAM Credits

Background

Audit reviewed the NUI-DTN-1 Northern Property Tax Expense filing schedules. The Company received abatements/bill credits on tax bills prior to 2020. The Company only paid the property tax bill that included credits/abatement amount. The Company on the filing did not include the abatements/credits for the benefit of customers but instead the full property tax bill amount.

Issue

Audit reviewed the July 24 2019 abatement settlement agreement with the Town of Seabrook. The abatement agreement applies to property tax years 2015-2018. The agreement indicates the town is to grant Northern a \$225,194 tax refund of \$191,067 plus 6% interest per annum June 1, 2020 is calculated to be \$34,127 for all tax years at issue in the 2018 claim. The abatements shall be realized by NU in the form of 6 equal credits of \$37,532 beginning with the April 1, 2020 tax bill going through the April 1, 2022 tax bill. The Company indicated they did not apply the credit on the filing NUI-DTN because they were prior to 2020. The Company therefore included an additional \$37,532*2=\$75,064 in property tax expense that should not have been included for 2021.

Audit reviewed the September 2019 abatement settlement agreement with the Town of Salem. The abatement agreement applies to property tax years 2015-2018. The agreement indicates the town is to grant Northern a \$221,669 tax refund of \$191,009 plus 6% interest per annum June 1, 2020 is calculated to be \$30,660 for all tax years. The abatements shall be realized by NU in the form of 6 equal credits of \$36,995 beginning with the April 1, 2020 tax bill going through the April 1, 2022 tax bill. The Company indicated they did not apply the credit on the filing NUI-DTN because they were prior to 2020. The Company therefore included an additional \$36,995*2=\$73,990 in property tax expense that should not have been included for 2021.

Recommendation

The Company should reduce the NUI-DTN-1 <u>\$187,927</u> Town of Salem 2021 property tax expense by <u>\$73,990 (\$36,995*2)</u> to reflect the tax credits to customers. The credit adjustment results in a <u>\$113,937</u> 2021 Salem property tax expense. The Company should reduce the NUI-DTN-1 <u>\$158,637</u> Town of Seabrook 2021 property tax expense by <u>\$75,064 (\$37,532*2)</u> to reflect the tax credits to customers. The credit adjustment results in a <u>\$83,573</u> 2021 Seabrook property tax expense. This is a net <u>\$149,054 (</u>\$75,064+\$73,990) reduction in the 2021 property tax expense for property tax credits that should have been applied to customers.

Company Response

As described in Order No. 26,581 in Docket DG 21-123, "On June 21, 2019, the Governor signed HB 700, which established a methodology for valuing utility distribution assets for property tax purposes, codified as RSA 72:8-d and 72:8-e. The law established a five-year phase-in period to fully transition to that new methodology. The first property tax year of the phase-in period is the tax year <u>beginning April 1, 2020</u>. The law also requires the Commission to establish by order a rate recovery mechanism for the property taxes paid by a public utility as a result of the changed assessment methodology." Order at 2.

The Company has accurately reflected 2021 abatement activity when calculating 2021 property tax expense. As explained in the prefiled testimony of company witness Daniel T. Nawazelski, the Company did not receive any abatements in 2021 related to 2020 or 2021 property tax bill valuations. This is further confirmed by Audit staff above.

Because the abatements referenced above relate to property tax bill valuations prior to the start of the period defined in HB 700, it is inaccurate to include the abatement credits as a part of this filing. This is consistent with the Company's prior tax recovery filing as well as the cost recovery filings made by Unitil Energy Systems, Inc.

Audit Comment

Audit agrees with the Company and appreciates the clarification that HB 700, codified as RSA 72:8, does not apply to property tax bills prior to April 2020. Audit understands that RSA 72:8 established a five-year timeframe over which the Company would be compensated for annual incremental property tax payments, inclusive of rebates for the specific property tax years of 2020 through 2024. Because the abatements for Seabrook and Salem relate to property tax years prior to the statute (2015 through 2018), the inclusion of the rebates within the current filing, for property tax year 2021, is not required.

Audit also understands that the Company will reconcile any abatements or credits within the PTAM, relating to such abatement or credit associated with tax year 2020 and later, while the PTAM is in effect.

Finally, Audit understands that any rebates abatements which relate to tax years outside of the RSA 72:8 timeframe will have to be reconciled in a future rate case.