Docket No. DG 21-104 Schedule CGDN-1 Page 1 of 4

NORTHERN UTILITIES, INC. 2021 RATE PLAN OUTLINE

1.0 PURPOSE AND EFFECTIVE DATE

1.1 <u>Purpose</u>

The purpose of the 2021 Rate Plan is to establish a procedure that allows Northern Utilities, Inc. ("Northern" or the "Company"), subject to the jurisdiction of the New Hampshire Public Utilities Commission (the "Commission"), to provide annual revenue step increases recovering the incremental revenue requirement associated with capital additions and the related expenses , as defined herein. Additionally, the 2021 Rate Plan provides for consumer protections, including a cap for rate increases as well as earnings sharing.

1.2 Effective Date

The rate adjustments associated with each Investment Year beginning on and after January 1, 2021 shall be effective August 1 of the following year with a compliance filing due by the last day of March as outlined below:

Investment Year	Rate Year	Compliance Filing Due
January 1-December 31, 2021	August 1, 2022-July 31, 2023	March 31, 2022 ¹
January 1-December 31, 2022	August 1, 2023-July 31, 2024	March 31, 2023
January 1-December 31, 2023	August 1, 2024-July 31, 2025	March 31, 2024

2.0 ELIGIBLE PLANT ADDITIONS

All utility Non-Growth Plant Additions will be eligible for recovery upon Commission review and approval of the annual compliance filing. The 2021 Rate Plan will recover the revenue requirement associated with all Non-Growth Plant Additions.

¹ The Company proposes to present Investment Year 2021 during the rate case proceeding for effect with permanent rates on August 1, 2022.

3.0 <u>REVENUE REQUIREMENT</u>

An illustrative calculation of the Revenue Requirement is provided in Schedule CGDN-2. Revenue Requirement is the sum of the following for each Investment Year:

- Pre-Tax Rate of Return applied to Rate Base associated with capital spending related to Non-Growth Plant Additions;
- Depreciation Expense on Non-Growth Plant Additions; and
- Property Taxes on the Net Utility Plant related to Non-Growth Plant Additions.

4.0 CUSTOMER PROTECTIONS

4.1 <u>Revenue Requirement Cap</u>

The cumulative Revenue Requirement related to Eligible Facilities is subject to a cap of \$10,500,000.

4.2 Earnings Sharing

Earnings sharing will be triggered if return on equity as submitted in its annual PUC 509.01 F-1 filing exceeds 11.00%. If return on equity exceeds 11.00%, then excess earnings will be shared equally between the distribution ratepayers and the Company.

4.3 <u>Stay Out Provision</u>

Except as specifically provided for under the 2021 Rate Plan, the Company may not petition the Commission for distribution base rate adjustments through the end of calendar year 2024. However, if the Company's return on equity is below 7% as submitted in the Company's annual PUC 509.01 F-1 filing, then the Company may petition the Commission for a distribution base rate adjustment before 2024.

4.4 Exogenous Events

During the term of this 2021 Rate Plan, the Company will be allowed to adjust distribution rates upward or downward resulting from a singular (not collective) exogenous event, as defined herein. For any of the events defined as a State Initiated Cost Change, Federally Initiated Cost Change, Regulatory Cost Reassignment, or Externally Imposed Accounting Rule Change, during the term of this Plan, the Company will be allowed to adjust distribution rates upward or downward (to the extent that the revenue impact of such event is not otherwise captured through another rate mechanism that has been approved by the Commission) if the total distribution revenue impact (positive or negative) of such event exceeds \$200,000.

5.0 RATE DESIGN

For the rate adjustments in section 3.0 above, the revenue requirement increase shall be applied proportionally to all customer classes based on distribution revenue, using current distribution rates and test year billing determinants established in Docket No. DG 21-104. The increase shall be collected through customer or energy charges as applicable for all rate classes.

For earnings sharing and exogenous events in section 4.0 above, rate adjustments shall also be applied proportionally to all customer classes based on distribution revenue, using current distribution rates and test year billing determinants established in Docket No. DG 21-104. The charge or credit shall be made through energy usage charges for all rate classes. There will be no change in the customer charge.

6.0 **DEFINITIONS**

- 1) <u>Accumulated Depreciation</u> is the cumulative net credit balance arising from the provision for Depreciation Expense.
- 2) <u>Accumulated Deferred Income Taxes</u> is the timing difference between book Depreciation Expense and tax depreciation expense utilizing the modified accelerated cost recovery system. The timing difference is multiplied by the federal and statutory effective income tax rate to determine the liability balance.
- 3) <u>Cost of Removal</u> is the cost of demolishing, dismantling, tearing down or otherwise removing gas plant, including the cost of transportation and handling incidental thereto.
- 4) <u>Depreciation Expense</u> is established at 3.73% and is based on the average depreciation rate provided in Docket No. DG 21-104.
- 5) <u>Externally Imposed Accounting Rule Change</u> shall be deemed to have occurred if the Financial Accounting Standards Board or the Securities and Exchange Commission adopts a rule that requires utilities to use a new accounting rule that is not being utilized by the Company as of January 1, 2022.
- 6) <u>Federally Initiated Cost Change</u> shall mean any externally imposed changes in the federal tax rates, laws, regulations, or precedents governing income, revenue, or sales taxes or any changes in federally imposed fees, which impose new obligations, duties or undertakings, or remove existing obligations, duties or undertakings, and which individually decrease or increase the Company's distribution costs, revenue, or revenue requirement.

- 7) <u>Investment Year</u> is the annual period beginning January 1 and ending December 31 of each calendar year 2021 through 2023 for which capital investments are made by the Company and placed in service.
- 8) <u>Net Utility Plant</u> is the "per books" utility Non-Growth Plant Additions for plant in service after Accumulated Depreciation is deducted and Cost of Removal is added.
- 9) <u>Non-Growth Plant Additions</u> are the capitalized costs of non-growth plant placed in service as recorded on the Company's books during the Investment Year.
- 10) <u>Pre-Tax Rate of Return</u> is 9.75% which is established based on the cost of capital and a tax gross up on common stock equity per Docket No. DG 21-104.
- 11) <u>Property Taxes</u> shall include State utility property taxes for all Non-Growth Plant Additions, calculated using the statutory tax rate in RSA 83-F:2, currently \$6.60 per \$1,000 of investment. Local property taxes shall not be included in the calculation and will be recovered through the proposed Regulatory Cost Adjustment Mechanism.
- 12) <u>Rate Base</u> is Non-Growth Plant Additions plus Cost of Removal less Accumulated Depreciation less Accumulated Deferred Income Taxes.
- 13) <u>Rate Year</u> is the annual period August 1 through July 31, following the Investment Year.
- 14) <u>State Initiated Cost Change</u> shall mean any externally imposed changes in state or local law or regulatory mandates or changes in other precedents governing income, revenue, sales, franchise, or property or any new or amended regional, state or locally imposed fees (but excluding the effects of routine annual changes in municipal, county and state property tax rates and revaluations), which impose new obligations, duties or undertakings, or remove existing obligations, duties or undertakings, and which individually decrease or increase the Company's distribution costs, revenue, or revenue requirement.
- 15) <u>Regulatory Cost Reassignment</u> shall mean the reassignment of costs and/or revenues now included in the generation, transmission, or distribution functions to or away from the distribution function by the Commission, FERC, NEPOOL, the ISO or any other official agency having authority over such matters.

Northern Utilities, Inc. - New Hampshire Rate Plan Capital Expenditures - Non-Growth Plant Additions For Calendar Years 2021-2023

Northern Utilities, Inc. Docket No. DG 21-104 Schedule CGDN-2 Page 1 of 3

	Rate Effective Date		8/1/2022	8/1/2023	8/1/2024
Line No.	Description	Inv	vestment Year 2021	Investment Year 2022	Investment Year 2023
	Rate Base:				
1	Utility Plant Additions	\$	20,770,248		
2	Cost of Removal		2,307,805	2,312,281	2,376,633
3	Capital Expenditures - Non-Growth Plant Additions		23,078,053	23,122,814	23,766,334
4	Accumulated Depreciation		387,365	388,116	398,918
5	Net Utility Plant		22,690,688	22,734,697	23,367,416
6	Accumulated Deferred Income Taxes (ADIT)		1,125	1,127	1,159
7	Rate Base	\$	22,689,563	\$ 22,733,570	\$ 23,366,257
	Revenue Requirement:				
8	Rate Base	\$	22,689,563		
9	Pre-Tax Rate of Return		9.75%		
10	Return and Related Income Taxes		2,213,321	2,217,614	2,279,331
11	Depreciation Expense		774,730	776,233	797,836
12	Property Taxes ⁽¹⁾		149,759	150,049	154,225
13	Revenue Requirement	\$	3,137,810	\$ 3,143,896	\$ 3,231,392
	Rate Cap Limit:				
14	Revenue Requirement	\$	3,137,810	\$ 3,143,896	\$ 3,231,392
15	Cumulative Revenue Requirement		3,137,810	6,281,705	9,513,097
16	Revenue Requirement Cap		10,500,000	10,500,000	10,500,000
17	Allowable Revenue Requirement	\$	3,137,810	\$ 3,143,896	\$ 3,231,392

Supporting Calculations

	Book Depreciation			
18	Utility Plant Additions	\$ 20,770,248 \$	20,810,532 \$	21,389,700
19	Book Depreciation Rate ⁽²⁾	3.73%	3.73%	3.73%
20	Book Depreciation	 774,730	776,233	797,836
	Tax Depreciation			
21	Utility Plant Additions	20,770,248	20,810,532	21,389,700
22	Tax Depreciation Rate	3.75%	3.75%	3.75%
23	Tax Depreciation	 778,884	780,395	802,114
24	Tax-Book Timing Difference	4,154	4,162	4,278
25	Income Tax Rate	27.08%	27.08%	27.08%
26	Accumulated Deferred Income Taxes (ADIT)	 1,125	1,127	1,159
27	Accumulated Depreciation = Book Depreciation * 0.5	\$ 387,365 \$	388,116 \$	398,918

Notes:

(1) Property Taxes shall include State utility property taxes for all Non-Growth Plant Additions, calculated using the statutory tax rate in RSA 83-F:2, currently \$6.60 per \$1,000 of investment. Local property taxes shall not be included in the calculation and will be recovered through the proposed Regulatory Cost Adjustment Mechanism

(2) Book Depreciation Rate Based on the Average Depreciation Rate in Docket No. DG 21-104

Northern Utilities, Inc. - New Hampshire 2021-2023 Non-Growth Capital Expenditures Project Detail \$'s in Thousands

				Inv	estment	Year 20	021			Inv	vestment	Yea	r 2022			Inv	vestmen	t Yea	r 2023	
Line No.	Budget Category	Work Order	Install	Ren	noval ⁽¹⁾	Tot		In Service Date	nstall	Rer	moval ⁽¹⁾		Total	In Service Date	 Install	Rei	moval ⁽¹⁾)	Total	In Service Date
1	Non-Growth Capital Expenditures																			
2	[Code Number]	Exhibit KES-2	\$ 20,770	\$	2,308	\$ 23	3,078	MM/YYYY	\$ 20,811	\$	2,312	\$	23,123	MM/YYYY	\$ 21,390	\$	2,377	\$	23,766	MM/YYYY
3	[Code Number]	Work Order Name	-		-		-	MM/YYYY	-		-		-	MM/YYYY	-		-		-	MM/YYYY
4	[Code Number]	Work Order Name	-		-		-	MM/YYYY	-		-		-	MM/YYYY	-		-		-	MM/YYYY
5	Total Non-Growth Capital Expenditures		\$ 20,770	\$	2,308	\$ 2	3,078		\$ 20,811	\$	2,312	\$	23,123		\$ 21,390	\$	2,377	\$	23,766	=

10%

<u>Notes:</u> (1) Estimated Cost of Removal Percentage for Illustrative Purposes. Actual Cost of Removal will be used.

Northern Utilities, Inc. Docket No. DG 21-104 Schedule CGDN-2 Page 2 of 3

		Northern Utiliti Pre Ta 5 Quarter Average End	x Rate of Re	turn	Forma	Docl	ern Utilities, Inc. ket No. DG 21-104 Schedule CGDN-2 Page 3 of 3
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Line No.	Description	Amount	Weight	Cost of Capital	Weighted Cost of Capital	Tax Factor	Pre-Tax Cost
1	Common Stock Equity	\$229,204,938	52.47%	10.30%	5.40%	1.3714	7.41%
2	Long Term Debt	207,640,000	47.53%	4.93%	2.34%		2.34%
3	Short Term Debt		0.00%	1.69%	0.00%		0.00%
4	Total	\$ 436,844,938	100.00%		7.75%		9.75%

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NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DOCKET DG 21-104 COMPUTATION OF REVENUE REQUIREMENT FOR TEMPORARY RATES

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE **REVENUE REQUIREMENT TABLE OF CONTENTS** 12 MONTHS ENDED DECEMBER 31, 2020

(1)

(2)

	(1)	(2)
LINE NO.	DESCRIPTION	REFERENCE
NO.	DESCRIPTION	
1	Summary of Financial Schedules	
2	Computation Of Revenue Deficiency And Revenue Requirement	Schedule RevReg-1
3	Computation Of Gross-Up Factor For Revenue Requirement	Schedule RevReg-1-1
4	Operating Income Statement	Schedule RevReq-2 P1
5	Pro Forma Distribution Operating Income Statement	Schedule RevReq-2 P2
6	Summary Of Adjustments	Schedule RevReq-3
7	Summary of Revenue Adjustment Schedules	
8	Weather Normalization	Schedule RevReq-3-1
9	New Customer Revenue Annualization	Schedule RevReq-3-2
10	Residential Low Income	Schedule RevReq-3-2
11	Unbilled Revenue	Schedule RevReq-3-2
12	Non-Distribution Bad Debt	Schedule RevReq-3-2
13	Misc. Revenue Adjustment	Schedule RevReq-3-2
14	Billed Accuracy Adjustment	Schedule RevReq-3-2
15	O&M Expense Adjustments	
16	Production Expense (O&M)	Schedule RevReq-3-3
17	Non-Distribution Bad Debt	Schedule RevReq-3-2
18	D&A Expense Adjustments	
19	Depreciation Annualization	Schedule RevReq-3-16 P1
20	Production Expense (Depreciation)	Schedule RevReq-3-3
21	Taxes Other Than Income Adjustments	
22	Property Taxes	Schedule RevReq-3-19
23	Income Taxes Adjustments	
24	Federal Income Tax	Schedule RevReq-3-21 P1
25	NH State Tax	Schedule RevReq-3-21 P1
26	Remove Prior Year Federal Income Tax	Schedule RevReq-3-21 P4
27	Remove Prior Year State Income Tax	Schedule RevReq-3-21 P4
28	Remove Prior Year Deferred Federal Income Tax	Schedule RevReq-3-21 P4
29	Remove Prior Year Deferred State Income Tax	Schedule RevReq-3-21 P4
30	Balance Sheet & Plant in Service and Accumulated Depreciation	
31	Utility Plant in Service	Schedule RevReq-4-3
32	Rate Base & Related Adjustments	
33	Rate Base Calculation	Schedule RevReq-5
34	Quarterly Rate Base	Schedule RevReq-5-1
05		

- **Quarterly Rate Base** 34
- 35 **Cash Working Capital**
- **Supplemental Plant** 36
- Deferred Income Tax Settlement Adjustment 37
- 38 **Cost of Capital Related Schedules**
- 39 Weighted Average Cost Of Capital
- **Capital Structure for Ratemaking Purposes** 40
- 41 Weighted Average Cost Of Long-Term Debt
- 42 Cost of Short-Term Debt
- 43 Rate Case Expense Costs
- Workpapers 44

Schedule RevReq-5-2 Schedule RevReq-5-3 Schedule RevReq-5-4

Schedule RevReq-6 Schedule RevReq-6-1 Schedule RevReq-6-4 Schedule RevReq-6-5

Workpapers

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE COMPUTATION OF REVENUE DEFICIENCY AND REVENUE REQUIREMENT 12 MONTHS ENDED DECEMBER 31, 2020

LINE	(1)	(2)	(3)
NO.	DESCRIPTION	REFERENCE	
1	Rate Base	Schedule RevReq-5	\$ 187,852,245
2	Rate of Return	Schedule RevReq-6	7.33%
3	Income Required	Line 1 * Line 2	13,765,436
4	Adjusted Net Operating Income	Schedule RevReq-2	11,416,967
5	Deficiency	Line 3 - Line 4	2,348,469
6	Income Tax Effect	Line 7 - Line 5	872,274
7	Revenue Deficiency	1.3714 (Schedule RevReq-1-1) * Line 5	\$ 3,220,742

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE COMPUTATION OF GROSS-UP FACTOR FOR REVENUE REQUIREMENT 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-1-1 Table of Contents

	(1)	(2)	(3)
LINE NO.	DESCRIPTION	RATE	AMOUNT
1	Federal Income Tax Rate	21.00%	0.2100
2	State Income Tax Rate	7.70%	0.0770
3	Federal Benefit of State Income Tax	-(Line 1 * Line 2)	(0.0162)
4	Northern Effective Tax Rate	(Line 1 + Line 2 + Line 3)	0.2708
5	Gross-Up Factor	(1 / 1 - Line 4)	1.3714

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE OPERATING INCOME STATEMENT 12 MONTHS ENDED DECEMBER 31, 2020

	(1)		(2)		(3)	SS	(4)		(5)		(6)		(7)		(8)		(9)
LINE NO.	DESCRIPTION	12 MC	EST YEAR ONTHS ENDED 2/31/2020		COST OF GAS EXCLUDING PROD. & OH. ⁽¹⁾		OTHER .OWTHROUGH ⁽²⁾	DI	TEST YEAR STRIBUTION, ROD. & OH.		EST YEAR		EST YEAR ROD. & OH.	0	ALENDAR YEAR 2019 ⁽³⁾	C	ALENDAR YEAR 2018 ⁽³⁾
	Operating Revenues:																
1	Total Sales	\$	65,455,125	\$	22,701,750	\$	3,458,228	\$	39,295,147	\$	38,237,257	\$	1,057,890	\$	72,009,468	\$	78,261,307
2	Total Other Operating Revenues		1,228,348		120,656		-		1,107,692		1,107,692		-		841,893		380,541
3	Total Operating Revenues	\$	66,683,473	\$	22,822,406	\$	3,458,228	\$	40,402,839	\$	39,344,949	\$	1,057,890	\$	72,851,361	\$	78,641,848
	Operating Expenses:																
4	Production	\$	23,544,860	\$	22,696,215	\$	398,908	\$	449,736	\$	449,736	\$	-	\$	28,226,731	\$	36,699,896
5	Transmission		63,829	•	-		-		63,829	·	63,829	•	-		72,713		54,452
6	Distribution		3,733,377		-		-		3,733,377		3,733,377		-		3,509,448		3,547,813
7	Customer Accounting		2,608,189		99,544		-		2,508,645		2,508,645		-		2,768,758		2,548,545
8	Customer Service		2,341,706		(0)		2,268,632		73,074		73,074		-		2,319,375		1,946,672
9	Sales Expense		69,178		-		-		69,178		69,178		-		64,467		62,224
10	Administrative & General		6,740,777		-		58,225		6,682,552		6,682,552		-		7,679,291		7,670,327
11	Depreciation		8,876,582		-		-		8,876,582		8,876,582		-		8,166,463		7,482,080
12	Amortizations		816,977		-		-		816,977		816,977		-		838,480		196,816
13	Taxes Other Than Income		4,867,774		-		-		4,867,774		4,867,774		-		4,306,298		4,242,098
14	Federal Income Tax		(30,211)		-		-		(30,211)		(30,211)		-		52,380		(353,526)
15	State Income Tax		(384,644)		-		-		(384,644)		(384,644)		-		(309,547)		(463,245)
16	Deferred Federal & State Income Taxes		2,600,179		-		-		2,600,179		2,600,179		-		2,975,683		3,341,111
17	Interest on Customer Deposits		9,258		-		-		9,258		9,258		-		14,374		18,486
18	Total Operating Expenses	\$	55,857,829	\$	22,795,759	\$	2,725,765	\$	30,336,305	\$	30,336,305	\$	-	\$	60,684,915	\$	66,993,749
19	Net Operating Income	\$	10,825,644	\$	26,647	\$	732,463	\$	10,066,533	\$	9,008,643	\$	1,057,890	\$	12,166,447	\$	11,648,100

<u>Notes</u>

(1) Refer to Workpaper - Cost of Gas

(2) Refer to Workpaper - Flowthrough Detail. Consists of Energy Efficiency, Environmental Response Costs, Residential Low Income Assistance, Rate Case Costs, Recoupment, Lost Revenue, and On Bill Financing

(3) Calendar Years 2019 and 2018 represents Total Company (i.e., Flowthrough and Distribution).

Schedule RevReq-2 Page 1 of 2 <u>Table of Contents</u>

NORTHERN UTILITIES. INC. - NEW HAMPSHIRE

	PRO FORMA	DISTRIBUTI	ITIES, INC NE ON OPERATING INDED DECEME	g inco	ME STATEMENT	г					nedule RevReq-2 Page 2 of 2 able of Contents
	(1)		(2)		(3)	-	(4) FEST YEAR		(5)	ROOF	(6)
		т	EST YEAR				STRIBUTION,		F		PRO FORMA
LINE			TRIBUTION,	Р	RO FORMA	:	ROD. & OH.	F	REVENUE		RATE
NO.	DESCRIPTION		ROD. & OH.		JUSTMENTS		RO FORMA		QUIREMENT		RELIEF
	Operating Revenues:										
1	Total Sales	\$	39,295,147	\$	2,820,216	\$	42,115,363	\$	3,220,742	\$	45,336,105
2	Total Other Operating Revenues		1,107,692		-		1,107,692		-		1,107,692
3	Total Operating Revenues	\$	40,402,839	\$	2,820,216	\$	43,223,055	\$	3,220,742	\$	46,443,797
	Operating Expenses:										
4	Production	\$	449,736	\$	76,191	\$	525,927	\$	-	\$	525,927
5	Transmission		63,829		-		63,829		-		63,829
6	Distribution		3,733,377		-		3,733,377		-		3,733,377
7	Customer Accounting		2,508,645		(97,468)		2,411,177		-		2,411,177
8	Customer Service		73,074		-		73,074		-		73,074
9	Sales Expense		69,178		-		69,178		-		69,178
10	Administrative & General		6,682,552		-		6,682,552		-		6,682,552
11	Depreciation		8,876,582		506,868		9,383,450		-		9,383,450
12	Amortizations		816,977		-		816,977		-		816,977
13	Taxes Other Than Income		4,867,774		617,939		5,485,713		-		5,485,713
14	Federal Income Tax		(30,211)		206,901		176,690		624,276		800,966
15	State Income Tax		(384,644)		(732,910)		(1,117,554)		247,997		(869,557)
16	Deferred Federal & State Income Taxes		2,600,179		892,262		3,492,441		-		3,492,441
17	Interest on Customer Deposits		9,258		-		9,258		-		9,258
18	Total Operating Expenses	\$	30,336,305	\$	1,469,783	\$	31,806,088	\$	872,274	\$	32,678,361
19	Net Operating Income	\$	10,066,533	\$	1,350,434	\$	11,416,967	\$	2,348,469	\$	13,765,436

Schedule RevRea-2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE SUMMARY OF ADJUSTMENTS 12 MONTHS ENDED DECEMBER 31, 2016

	(1)	(2)	(3)		(4)
LINE NO.	DESCRIPTION	CLASSIFICATION	SCHEDULE NO.	A	AMOUNT
1	Revenue Adjustments			•	4 00 4 07 4
2	Weather Normalization	Dist Rev	Schedule RevReq-3-1	\$	1,994,374
3	New Customer Revenue Annualization	Dist Rev	Schedule RevReq-3-2		004 500
4	Residential Low Income	Dist Rev	Schedule RevReq-3-2		264,523
5	Unbilled Revenue	Dist Rev	Schedule RevReq-3-2		294,543
6	Non-Distribution Bad Debt	Dist Rev	Schedule RevReq-3-2		(97,468)
7	Misc. Revenue Adjustment	Dist Rev	Schedule RevReq-3-2		4,788
8	Late Fee Adjustment	Oth Rev	Schedule RevReq-3-2		
9	Billed Accuracy Adjustment	Dist Rev	Schedule RevReq-3-2		367
10	Lost Base Revenue Moved from FT to Base	Dist Rev	WP - FT Detail		359,089
11	Special Contract Customer Revenue Adjustment	Dist Rev	Schedule RevReq-3-2		
12	Total Revenue Adjustments			\$	2,820,216
13	Operating & Maintenance Expense Adjustments				
14	Production Expense (O&M)	Prod	Schedule RevReq-3-3	\$	76,191
15	Payroll	Dist	Schedule RevReq-3-4		
16	Distribution Bad Debt	Cust Acct	Schedule RevReq-3-5		
17	Non-Distribution Bad Debt	Cust Acct	Schedule RevReq-3-2		(97,468)
18	Medical & Dental Insurances	A&G	Schedule RevReq-3-6		
19	Pension	A&G	Schedule RevReq-3-7		
20	PBOP	A&G	Schedule RevReq-3-7		
21	SERP	A&G	Schedule RevReg-3-7		
22	401K	A&G	Schedule RevReq-3-7		
23	Deferred Comp Expense	A&G	Schedule RevReq-3-7		
24	Property & Liability Insurances	A&G	Schedule RevReq-3-8		
25	NH PUC Assessment	A&G	Schedule RevReq-3-9		
26	Dues & Subscriptions	A&G	Schedule RevReg-3-10		
20	Pandemic Costs	A&G	Schedule RevReg-3-11		
28	Severance Expense	A&G	Schedule RevReq-3-12		
28 29	•	A&G	Schedule RevReq-3-12		
	Rent Expense		•		
30 31	Arrearage Management Program (AMP) Implementation Cost	Cust Acct	Schedule RevReq-3-14		
31 32	Inflation Allowance Total Operating & Maintenance Expense Adjustments	A&G	Schedule RevReq-3-15	\$	(21,277)
	· · · · · · · · · · · · · · · · · · ·			<u> </u>	(
33	Depreciation And Amortization Expense Adjustments	D		•	400.000
34	Depreciation Annualization	Depr	Schedule RevReq-3-16 P1	\$	469,003
35	Proposed Depreciation Rates	Depr	Schedule RevReq-3-16 P2		
36	Production Expense (Depreciation)	Depr	Schedule RevReq-3-3		37,865
37	Software Amortization	Amort	Schedule RevReq-3-17		
38	Excess ADIT Flowback	Amort	Schedule RevReq-3-18		
39	Total Depreciation And Amortization Expense Adjustments			\$	506,868

40	Taxes Other Than Income Adjustments			
41	Property Taxes	Oth Tax	Schedule RevReq-3-19	\$ 617,939
42	Payroll Taxes - Wage Increases	Oth Tax	Schedule RevReq-3-20 P1	
43	Payroll Taxes - Employee Retention Credit	Oth Tax	Schedule RevReq-3-20 P2	
44	Total Taxes Other Than Income Adjustments			\$ 617,939
45	Income Taxes Adjustments			
46	Federal Income Tax	FIT	Schedule RevReq-3-21 P1	\$ 256,535
47	NH State Tax	SIT	Schedule RevReq-3-21 P1	101,910
48	Remove Prior Year Federal Income Tax	FIT	Schedule RevReq-3-21 P4	(49,634)
49	Remove Prior Year State Income Tax	SIT	Schedule RevReq-3-21 P4	(834,820)
50	Remove Prior Year Deferred Federal Income Tax	DIT	Schedule RevReq-3-21 P4	57,442
51	Remove Prior Year Deferred State Income Tax	DIT	Schedule RevReq-3-21 P4	834,820
52	Total Income Taxes Adjustments			\$ 366,253
53	Rate Base Adjustments			
54	NH Supplemental Plant Adjustment	Plant	Schedule RevReq-5-3	\$ 1,873,246
55	NH Supplemental Plant Adjustment	Acc Depr	Schedule RevReq-5-3	1,350,190
56	DIT Settlement Adjustment	RB DIT	Schedule RevReq-5-4	-
57	Cash Working Capital (Due To Pro Forma Adjustments)	CWC	Schedule RevReq-5-2	(23,564)
58	Total Rate Base Adjustments		-	\$ 499,492

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE WEATHER NORMALIZATION 12 MONTHS ENDED DECEMBER 31, 2020

LINE NO.	(1)	(2)
	DESCRIPTION	TOTAL
1	To Increase Test Year Base Revenue to Normalize for the Effect of Warmer than Normal Weather ⁽¹⁾	<u>\$ 1,994,374</u>

<u>Notes</u>

(1) Refer to Direct Testimony of Ron Amen & John Taylor



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE REVENUE ADJUSTMENTS 12 MONTHS ENDED DECEMBER 31, 2020

(1)	(2)	
DESCRIPTION		TOTAL
To Increase Test Year Base Revenue for 2020 Customer Growth ⁽¹⁾		
Residential Low Income Assistance Revenue Adjustment		
To Reflect Recovery Of The Low Income Discount Through the LDAC $^{(2)}$	\$	264,523
Unbilled Revenue Adjustment		
Remove Unbilled Revenue	\$	294,543
Non Distribution Bad Debt Adjustment (Revenue & Expense)		
Remove: Accrued Revenue - Non Dist Bad Debt	\$	(97,468)
Remove: Provision For Doubtful Accts - Non-Dist - NH	\$	(97,468)
Misc. Revenue Adjustment		
Clear Remaining Rate Case Expense And Recoupment Balances	\$	4,788
Late Payment Revenue Adjustment		
Normalized Late Payment Revenue ⁽³⁾		
Test Year Late Payment Revenue		
Late Payment Revenue Adjustment	\$	-
Billed Accuracy Adjustment		
Booked to Calculated Bill Adjustment ⁽¹⁾	\$	367
Special Contract Customer Revenue Adjustment		
Full Year Special Contract Customer Revenue at Special Contract Rate ⁽⁴⁾		
Net Special Contract Customer Revenue Adjustment	\$	-
Notes		
(1) Refer to Direct Testimony of Ron Amen & John Taylor		
(2) See Workpaper - Flowthrough Detail		
	DESCRIPTION Customer Growth Revenue Adjustment To Increase Test Year Base Revenue for 2020 Customer Growth (*) And Revenue Assistance Revenue Adjustment (*) Co Reflect Recovery Of The Low Income Discount Through the LDAC (*) Or Reflect Recovery Of The Low Income Discount Through the LDAC (*) Distribution Bad Debt Adjustment (Revenue & Expense) Remove: Accrued Revenue - Non Dist Bad Debt Remove: Provision For Doubtful Accts - Non-Dist - NH Remove: Provision For Doubtful Accts - Non-Dist - NH Margaized Late Payment Revenue (*) Test Payment Revenue Adjustment Bate Remaining Rate Case Expense And Recoupment Balances Eta Payment Revenue Adjustment Bate apyment Revenue (*) Test Year Late Payment Revenue (*) Boten to Calculated Bil Adjustment (*) Chest Colculated Bil Adjustment (*) Margaized Late Payment Revenue adjustment Distribution Calculated Bil Adjustment (*) Distribution Calculated Bil Adjustment (*) Revenue Adjustment (*) Margaized Late Payment Revenue adjustment (*) Distribution Calculated Bil Adjustment (*) Distribution Calculated Bil Adjustment (*) Margaized Late Payment Revenue Adjustment (*) Distribution Calculated Bil Adjustment (*) Distribution Calculated Bil Adjustment (*) Distribution Calculated Bil Adjustment (*) Distribution Calculated Calculated Revenue (*) Distr	DESCRIPTION Customer Growth Revenue Adjustment To Increase Test Year Base Revenue for 2020 Customer Growth ⁽¹⁾ Residential Low Income Assistance Revenue Adjustment To Reflect Recovery Of The Low Income Discount Through the LDAC ⁽²⁾ \$ Unbilled Revenue Adjustment Remove Unbilled Revenue \$ Non Distribution Bad Debt Adjustment (Revenue & Expense) Remove: Provision For Doubtful Accts - Non-Dist - NH \$ Misc. Revenue Adjustment Clear Remaining Rate Case Expense And Recoupment Balances \$ Misc. Revenue Adjustment Clear Remaining Rate Case Expense And Recoupment Balances \$ Misc. Revenue Adjustment Clear Remaining Rate Case Expense And Recoupment Balances \$ Billed Accuracy Adjustment Late Payment Revenue Late Payment Revenue Adjustment \$ Special Contract Customer Revenue Adjustment (¹⁾ \$ Special Contract Customer Revenue at Special Contract Rate (¹⁾ Net Special Contract Customer Revenue Adjustment \$ Not Special Contract Customer Revenue Adjustment \$ Not Special Contract Customer Revenue Adjustment \$ Not Special Contract Customer Revenue Adjustment \$ Nets \$ Notes \$ Notes \$ Seworkpape

(3) Normalized Late Payment Revenue based on 2019 calendar year activity

(4) Refer to Workpaper 1.1 and Workpaper 1.2



NORTHERN UTILITIES, INC NEW HAMPSHIRE PRODUCTION EXPENSE ADJUSTMENTS 12 MONTHS ENDED DECEMBER 31, 2020						dule RevRec able of Cont			
	(1)	(2)		(3)	(4)	(5) NH	(6) ME	(7) NH	(8) ME
LINE NO.	DESCRIPTION	NH		ME	TOTAL	40.88%	PR ALLOC. 59.12%	REVREQ ADJUST.	REVREQ ADJUST.
1	Operation & Maintenance Expense								
2	Liquefied Propane Gas Production								
3	Operation Expense								
4	710 - Operation Supervision and Engineering	\$	- \$	29,447	\$ 29,447	\$ 12,038	\$ 17,409		
5	717 - Production Operation Labor		-	24,228	24,228	9,904	14,324		
6	735 - Production Operation Miscellaneous		-	59,588	59,588	24,360	35,228		
7	Total Operation Expense		-	113,263	113,263	46,302	66,961		
8	Maintenance								
9	740 - Production Maintenance Supervision		-	29,447	29,447	12,038	17,409		
10	741 - Maintenance of Plant		-	8,464	8,464	3,460	5,004		
11	742 - Maint of Equipment		-	28,588	28,588	11,687	16,901		
12	Total Maintenance Expense		-	66,499	66,499	27,185	39,314		
13	769 - Maint of Scada - Product		-	6,615	6,615	2,704	3,911		
14	Total Manuf Gas Prod Exp	\$	- \$	186,377	\$ 186,377	\$ 76,191	\$ 110,186	\$ 76,191	\$ (76,191
15	Depreciation Expense								
16	Production Plant								
17	305 - Structures	\$	- \$	2,277	\$ 2,277	\$ 931	\$ 1,346		
18	Total Production Plant		-	2,277	2,277	931	1,346		
19	Other Storage Plant								
20	361 - Structures & Improve		-	11,705	11,705	4,785	6,920		
21	362 - Gas Holders		-	78,642	78,642	32,149	46,493		
22	Total Other Storage Plant		-	90,347	90,347	36,934	53,413		
23	Total Depreciation & Amortization	\$	- \$	92,624	\$ 92,624	\$ 37,865	\$ 54,759	\$ 37,865	\$ (37,865)

	DEPRECIA	TIES, INC NEW HAMPSHIRE TION ANNUALIZATION NDED DECEMBER 31, 2020		Schedule RevReq-3-16 Page 1 of 2 <u>Table of Contents</u>
	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	PLANT BALANCE 12/31/2020	CURRENT DEPRECIATION RATES	ANNUAL DEPRECIATION EXPENSE
1	Amortizable Plant:			
2	303 Misc Intangible Plant	\$ 12,826,347	N/A	N/A
3	Total Amortizable Plant	12,826,347	N/A	-
4	Mfg. Gas Produc. Plant:			
5	304.2 Land & Rights - Mfg Gas Prod. Pl	6,816	N/A	N/A
6	305 Struct. And Improvements	-	N/A	N/A
7	320 Other Equipment	-	N/A	N/A
8	321 LNG Equipment	-	N/A	N/A
9	Total Mfg Gas Prod. Plant	6,816	N/A	-
10	Distribution Plant:			
11	374.4 Land Rgts, Other Distr Sy	89,111	N/A	N/A
12	374.5 Land Rgts, Rights Of Way	17,911	N/A	N/A
13	375.2 Structures - City Gate Meas & Reg	43,350	1.43%	620
14	375.7 Structures - Other Dist Sys	3,217,521	1.43%	46,011
15	376.2 Mains - Coated/Wrapped	29,746,227	2.66%	791,250
16	376.3 Mains - Bare Steel	190,837	N/A	N/A
17	376.4 Mains - Plastic	120,342,184	2.87%	3,453,821
18	376.5 Mains - Joint Seals	542,145	N/A	N/A
19	376.6 Mains - Cathodic Protection	1,082,739	4.17%	45,150
20	376.8 Mains - Cast Iron	28,455	N/A	N/A
21	378.2 Mea & Reg Station Eq, Regulating	7,288,982	3.50%	255,114
22	379 Mea & Reg Ta-G	39,266	3.50%	1,374
23	380 Services	82,837,047	3.67%	3,040,120
24	381 Meters	4,624,610	3.33%	154,000
25	382 Meter Installations	26,001,685	3.33%	865,856
26	383 House Regulators	733,550	3.33%	24,427
27	386 Water Heaters/Conversion Burners	1,978,895	7.41%	146,636
28	Total Distribution Plant	278,804,516	3.17%	8,824,379
29	General Plant:			
30	389.1 Land	232,947	N/A	N/A
31	391.10 Off Furn & Eq Unspecified	508,135	8.70%	44,208
32	393 Stores Equipment	31,520	N/A	N/A
33	394.10 Tools, Garage & Service Equipment	1,430,421	5.26%	75,240
34	396 Power Operated Equipment	75,266	N/A	N/A
35	397 Communication Equipment	1,873,480	9.09%	170,299
36	397.25 Metscan Communication Equip	112,656	N/A	N/A
37	397.35 ERT Automatic Reading Dev	3,470,146	6.67%	231,459
38	Total General Plant	7,734,572	7.16%	521,206

39	Total Plant in Service	\$ 299,372,252	3.28% \$	9,345,585
40	Test Year Expense		\$	8,876,582
41	Increase In Depreciation Expense		\$	469,003

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE PROPERTY TAXES 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)	(3)	(4)	(5)
LINE NO.	MUNICIPALITY & STATE	TAXATION PERIOD	LOCAL X RATE	ASSESSED VALUATION	TOTAL TAXES ⁽¹⁾
1	Atkinson	4/1 - 3/31	\$ 16.24	1,564,100	25,401
2	Brentwood	4/1 - 3/31	\$ 21.36	1,489,600	31,818
3	Brentwood	4/1 - 3/31	\$ 23.19	400	9
4	Dover	4/1 - 3/31	\$ 24.85	1,200	30
5	Dover	4/1 - 3/31	\$ 22.92	37,150,600	851,492
6	Durham	4/1 - 3/31	\$ 25.73	7,742,400	199,212
7	East Kingston	4/1 - 3/31	\$ 20.50	746,700	15,307
8	Epping	4/1 - 3/31	\$ 23.64	1,079,900	25,529
9	Exeter	4/1 - 3/31	\$ 22.50	13,803,800	310,586
10	Greenland	4/1 - 3/31	\$ 14.58	733,400	10,693
11	HamptonClass 4000	4/1 - 3/31	\$ 13.93	18,884,700	263,064
12	HamptonClass 5000	4/1 - 3/31	\$ 14.43	9,301,400	134,219
13	Hampton Falls	4/1 - 3/31	\$ 19.33	36,400	704
14	Kensington	4/1 - 3/31	\$ 18.61	1,442,400	26,843
15	Madbury	4/1 - 3/31	\$ 23.41	347,000	8,123
16	Newington	4/1 - 3/31	\$ 8.02	2,848,900	22,848
17	North Hampton	4/1 - 3/31	\$ 14.80	1,822,800	26,977
18	Plaistow	4/1 - 3/31	\$ 19.60	9,849,580	193,052
19	Portsmouth	4/1 - 3/31	\$ 12.80	47,562,000	608,794
20	Rochester	4/1 - 3/31	\$ 22.67	26,840,200	608,468
21	Rollinsford	4/1 - 3/31	\$ 22.57	194,600	4,392
22	Rollinsford	4/1 - 3/31	\$ 24.68	20,000	494
23	Salem	4/1 - 3/31	\$ 19.82	9,478,700	187,867
24	Seabrook	4/1 - 3/31	\$ 13.90	12,142,100	168,775
25	Somersworth	4/1 - 3/31	\$ 25.91	9,713,200	251,669
26	Somersworth	4/1 - 3/31	\$ 27.85	62,000	1,727
27	Stratham	4/1 - 3/31	\$ 17.14	497,200	8,522
28	State Of NH ⁽²⁾	4/1 - 3/31			1,359,585
29	Total		=	\$ 215,355,280	\$ 5,346,199
30	Test Year Property Taxes ⁽³⁾				\$ 4,728,948
31	Less: Test Year Property Tax Ab	atements ⁽⁴⁾			688
32	Total Test Year Property Tax Ex				\$ 4,728,260
33	Total Property Tax Increase (I	_ine 29 - Line 32)			\$ 617,939

<u>Notes</u>

(1) Based on final 2020 property tax bills. Company will update for final 2021 property tax bills during pendency of case

(2) Based on current estimated 2021 State Property Tax. Amount will be updated during pendency of case

(3) Test Year Property Taxes adjusted to exclude Greenland 2019 bill correction of \$317

000206

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE COMPUTATION OF FEDERAL AND STATE INCOME TAXES 12 MONTHS ENDED DECEMBER 31, 2020

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\$ 1,496,713

	(1)		(2)	
LINE NO.	DESCRIPTION	Amount		
1	Increases / (Decreases) To Revenue			
2	Weather Normalization	\$	1,994,374	
3	New Customer Revenue Annualization		-	
4	Residential Low Income		264,523	
5	Unbilled Revenue		294,543	
6	Non-Distribution Bad Debt		(97,468)	
7	Misc. Revenue Adjustment		4,788	
8	Late Fee Adjustment		-	
9	Billed Accuracy Adjustment		367	
10	Lost Base Revenue Moved from FT to Base		359,089	
11	Special Contract Customer Revenue Adjustment		-	
12	Total Revenue Adjustments	\$	2,820,216	
13	Increases / (Decreases) To Expenses			
14	Production Expense (O&M)	\$	76,191	
15	Payroll		-	
16	Medical & Dental Insurances		-	
17	Distribution Bad Debt		(97,468)	
18	Non-Distribution Bad Debt		-	
19	Pension		-	
20	PBOP		-	
21	SERP		-	
22	401K		-	
23	Deferred Comp Expense		-	
24	Property & Liability Insurances		-	
25	NH PUC Assessment		-	
26	Dues & Subscriptions		-	
27	Pandemic Costs		-	
28	Severance Expense		-	
29	Rent Expense		-	
30	Arrearage Management Program (AMP) Implementation Cost		-	
31	Inflation Allowance		-	
32	Depreciation Annualization		469,003	
33	Proposed Depreciation Rates		-	
34	Production Expense (Depreciation)		37,865	
35	Software Amortization		-	
36	Excess ADIT Flowback		-	
37	Property Taxes		617,939	
38	Payroll Taxes - Wage Increases		-	
39	Payroll Taxes - Employee Retention Credits		-	
40	Flowthrough Net Operating Income		759,111	
41	Change In Interest Exp (Refer To Schedule RevReq 3-21 Page 2)		(365,928)	
12	Total Expanse Adjustments	<u> </u>	1 406 712	

43	Increase / (Decrease) In Taxable Income	\$	1,323,504
44	Effective Federal Income Tax Rate ⁽¹⁾		19.38%
45	NH State Tax Rate ⁽²⁾		7.70%
	Federal Income & NH State Tax		
46	Effective Federal Income Tax	\$	256,535
47	NH State Tax		101,910
48	Increase (Decrease) In Income Taxes	\$	358,445
	Notes		
49	Federal Income Tax Rate		21.00%
50	Federal Benefit of State Tax -(Line 49 * Line 52)		-1.62%
51	(1) Effective Federal Income Tax Rate		19.38%
52	(2) State Income Tax Rate		7.70%
53	Northern New Hampshire Tax Rate (Line 51 + Line 52)	<u> </u>	27.08%

42

Total Expense Adjustments

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE CHANGE IN INTEREST EXPENSE APPLICABLE TO INCOME TAX COMPUTATION 12 MONTHS ENDED DECEMBER 31, 2020

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=	(1)		(2)
LINE NO.	DESCRIPTION		AMOUNT
1	Ratemaking Interest Synchronization		
2	Rate Base ⁽¹⁾	\$	187,852,245
3	Cost Of Debt In Proposed Rate Of Return ⁽²⁾		2.34%
4	Interest Expense for Ratemaking	\$	4,401,969
5	Test Year Interest Expense		
6	Interest Charges (427-431)	\$	4,767,897
7	Increase / (Decrease) in Interest Expense	<u> </u> \$	(365,928)
	Notes		

(1) Refer to Schedule RevReq-5

(2) Refer to Schedule RevReq-6



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE COMPUTATION OF FEDERAL AND STATE INCOME TAXES 12 MONTHS ENDED DECEMBER 31, 2020

	(1)		(2)	(3)		(4)
LINE NO	DESCRIPTION		EST YEAR ACTUAL	PRO-FORMA ADJUSTMENTS		TEST YEAR UTILITY	
1	Net Income	\$	6,096,270	\$	-	\$	6,096,270
2	Federal Income Tax-Current		(19,629)		-		(19,629)
3	NH State Income Tax-Current		(380,440)		-		(380,440)
4	NH State Business Enterprise Credit Against NH BPT		63,600		-		63,600
5	Deferred Federal Income Tax		1,637,521		-		1,637,521
6	Deferred State Income Tax		962,658		-		962,658
7	Net Income Before Income Taxes		8,359,980		-		8,359,980
8	Permanent Items						
9	Lobbying		22,225		-		22,225
10	Parking Lot Disallowance		2,543		-		2,543
11	Penalties		2,500		-		2,500
12	Total Permanent Items		27,268		-		27,268
13	Temporary Differences						
14	Accrued Revenue		(3,295,760)		-		(3,295,760)
15	Bad Debt		81,370		-		81,370
16	FASB 87-Pensions		(211,016)		-		(211,016)
17	PBOP SFAS 106		96,936		-		96,936
18	Remediation		267,789		-		267,789
19	Utility Plant Differences		(5,924,514)		-		(5,924,514)
20	Total Temporary Differences		(8,985,195)		-		(8,985,195)
21	Federal And State Tax Differences						
22	Tax Depreciation		(2,123,819)				(2,123,819)
23	Total Federal And State Tax Differences		(2,123,819)		-		(2,123,819)
24	State Taxable Base Income		(2,721,766)		-		(2,721,766)
25	State Business Profits Tax - Current		(209,576)		-		(209,576)
26	Less: Business Enterprise Tax		63,600		-		63,600
27	Total State Tax Expense		(273,176)		-		(273,176)
28	Federal Taxable Income Base Before Federal And State Tax Differences		(2,512,190)		-		(2,512,190)
29	Less: Federal And State Tax Differences		(2,123,819)		-		(2,123,819)
30	Federal Taxable Income Base		(388,371)		-		(388,371)
31	Federal Income Tax-Current		(81,558)		-		(81,558)
32	Summary Of Utility Income Taxes:						
33	Federal Income Tax-Current		(92,140)		-		(92,140)
34	Federal Income Tax-Prior		49,634		-		49,634

34	Federal Income Tax-Prior	49,634	-	49,634
35	Federal Income Tax-NOL	12,295	-	12,295
36	Federal Amount To Non-Distribution Operations	10,582	(10,582)	-
37	State Business Profits Tax-Current	(277,380)	-	(277,380)
38	State Business Profits Tax-Prior	834,820	-	834,820
39	State Business Profits Tax-NOL	(942,084)		(942,084)
40	State Amount To Non-Distribution Operations	4,204	(4,204)	-
41	Deferred Federal Income Tax	1,707,258	-	1,707,258
42	Deferred Federal Income Tax-Prior	(57,442)	-	(57,442)
43	Deferred Federal Income Tax-NOL	(12,295)	-	(12,295)
44	Deferred State Business Profits Tax	855,394	-	855,394
45	Deferred State Business Profits Tax-Prior	(834,820)	-	(834,820)
46	Deferred State Business Profits Tax-NOL	942,084		942,084
47	Total Income Taxes	\$ 2,200,110	\$ (14,786)	\$ 2,185,324

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE PRIOR YEAR INCOME TAXES 12 MONTHS ENDED DECEMBER 31, 2020

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	(1)	(2)
LINE NO	DESCRIPTION	ACTUAL
1	Remove Prior Year Federal Income Taxes	\$ (49,634)
2	Remove Prior Year State Income Taxes	(834,820)
3	Remove Prior Year Deferred Federal Income Taxes	57,442
4	Remove Prior Year Deferred State Income Taxes	834,820
5	Total	\$ 7,808

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE UTILITY PLANT IN SERVICE 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7) COMPLETED
LINE NO.	Account Name	CAPITAL 1/1	ADDITIONS	RETIREMENTS	TRANSFER ADJ	SERVICE 12/31	NOT CLASSIFIED 12/31
1	Amortizable Plant:						
2	303 Misc Intangible Plant	\$ 11,262,452 \$	960,046	5 - 9	- \$	12,222,498	\$ 603,849
3	Total Amortizable Plant	11,262,452	960,046	-	-	12,222,498	603,849
4	Mfg. Gas Produc. Plant:						
5	304.2 Land & Rights - Mfg Gas Prod. Pl	6,816	-	-	-	6,816	-
6	305 Struct. And Improvements	161,860	-	(75,459)	(86,401)	-	-
7	320 Other Equipment	7,640	-	(7,006)	(634)	-	-
8	321 LNG Equipment	84,156	-	(84,156)	-	-	-
9	Total Mfg Gas Prod. Plant	260,472	-	(166,621)	(87,035)	6,816	-
10	Distribution Plant:						
11	374.4 Land Rgts, Other Distr Sy	89,111	-	-	-	89,111	-
12	374.5 Land Rgts, Rights Of Way	17,911	-	-	-	17,911	-
13	375.2 Structures - City Gate Meas & Reg	45,256	-	(1,906)	-	43,350	-
14	375.7 Structures - Other Dist Sys	3,124,357	4,495	-	87,035	3,215,887	1,634
15	376.2 Mains - Coated/Wrapped	24,602,506	5,182,813	(78,525)	-	29,706,795	39,433
16	376.3 Mains - Bare Steel	190,837	-	-	-	190,837	-
17	376.4 Mains - Plastic	104,050,393	9,284,825	(600,390)	-	112,734,828	7,607,356
18	376.5 Mains - Joint Seals	542,145	-	-	-	542,145	-
19	376.6 Mains - Cathodic Protection	1,005,475	54,885	-	-	1,060,360	22,380
20	376.8 Mains - Cast Iron	28,455	-	-	-	28,455	-
21	378.2 Mea & Reg Station Eq, Regulating	4,400,294	3,002,141	(279,719)	-	7,122,716	166,266
22	379 Mea & Reg Ta-G	39,266	-	-	-	39,266	-
23	380 Services	74,470,438	5,463,157	(87,804)	-	79,845,791	2,991,256
24	381 Meters	4,086,446	493,715	(241,099)	-	4,339,063	285,548
25	382 Meter Installations	23,126,115	2,038,526	(1,108,186)	-	24,056,455	1,945,231
26	383 House Regulators	685,777	43,536	-	-	729,313	4,237
27	386 Water Heaters/Conversion Burners	1,823,459	159,350	(88,909)	-	1,893,900	84,996
28	Total Distribution Plant	242,328,242	25,727,443	(2,486,538)	87,035	265,656,182	13,148,334
29	General Plant:						
30	389-1 Land	232,947	-	-	-	232,947	-
31	391.10 Off Furn & Eq Unspecified	431,834	65,465	-	-	497,299	10,836
32	393 Stores Equipment	31,520	-	-	-	31,520	-
33	394.10 Tools, Garage & Service Equipment	1,314,945	54,709	-	-	1,369,654	60,767
34	396 Power Operated Equipment	75,266	•		-	75,266	•
35	397 Communication Equipment	1,639,792	237,572	(37,264)	-	1,840,100	33,380
36	397.25 Comm EQ, Metscan/Telemet	112,656	•	-	-	112,656	•
37	397.35 ERT Automatic Reading Dev-G	3,126,899	212,363	-	-	3,339,262	130,884
38	Total General Plant	6,965,859	570,110	(37,264)	-	7,498,705	235,867
39	Total Plant in Service	\$ 260,817,025 \$	27,257,599	\$ (2,690,423) \$	\$ (0) \$	285,384,202	\$ 13,988,050

Schedule RevReq-4-3 Table of Contents

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE RATE BASE 12 MONTHS ENDED DECEMBER 31, 2020

	(1)		(3)	(4)		(5)		(6)		(7)
LINE			EST YEAR	5 QUARTER		RATE BASE AT		PRO FORMA		PRO FORMA ATE BASE AT
NO.	DESCRIPTION	A	VERAGE ⁽¹⁾	AVERAGE	DEC	CEMBER 31, 2020	Α	DJUSTMENTS	DEC	EMBER 31, 2020
1	Utility Plant In Service	\$	289,824,481	\$ 286,491,423		299,372,252	\$	1,873,246		301,245,498
2 3	Less: Reserve for Depreciation Net Utility Plant		85,085,831 204,738,650	85,651,383 200,840,040		88,023,262 211,348,990		<u>1,350,190</u> 523,056		<u>89,373,452</u> 211,872,045
4	Add: M&S Inventories		2,671,150	2,770,028		2,773,457		-		2,773,457
5	Prepayments		740,275	1,213,708		64,895		-		64,895
6	Cash Working Capital ⁽¹⁾		1,164,937	1,164,937		1,164,937		(23,564)		1,141,373
7	Sub-Total		4,576,362	5,148,673		4,003,290		(23,564))	3,979,726
8	Less: Net Deferred Income Taxes	\$	20,221,877	\$ 20,784,379	\$	21,177,756	\$	-	\$	21,177,756
9	Excess Deferred Income Taxes		6,572,092	6,572,092		6,572,092		-		6,572,092
10	Customer Advances		-	-		-		-		-
11	Customers Deposits		269,548	264,461		249,677		-		249,677
12	Sub-Total		27,063,517	27,620,932		27,999,526		-		27,999,526
13	Rate Base	\$	182,251,495	\$ 178,367,781	\$	187,352,753	\$	499,492	\$	187,852,245

<u>Notes</u>

(1) Computed Working Capital Based on Test Year O&M Expenses. Refer to Schedule RevReq-5-2

Schedule RevReq-5 Table of Contents

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE RATE BASE ITEMS QUARTERLY BALANCES

LINE NO.	(1) DESCRIPTION	DE	(2) ECEMBER 31 2019	 (3) MARCH 31 2020	 (4) JUNE 30 2020	SE	(5) EPTEMBER 30 2020	D	(6) ECEMBER 31 2020	 (7) 5 QUARTER AVERAGE
1	Utility Plant in Service									
2	Plant In Service	\$	260,817,025	\$ 266,498,877	\$ 269,468,172	\$	272,008,852	\$	285,384,202	\$ 270,835,426
3	Completed Construction not Classified		19,459,684	 16,390,088	 14,114,541		14,327,620		13,988,050	 15,655,997
4	Total Utility Plant in Service		280,276,709	282,888,965	283,582,713		286,336,471		299,372,252	286,491,423
5	Depreciation Reserve	\$	(82,148,399)	\$ (84,295,016)	\$ (86,310,091)	\$	(87,480,144)	\$	(88,023,262)	\$ (85,651,383)
6	Add:									
7	M&S Inventories									
8	Material and Supplies	\$	2,268,328	\$ 2,387,075	\$ 2,514,326	\$	2,569,166	\$	2,416,575	\$ 2,431,094
9	Stores Expense Undistributed		300,515	417,170	334,238		285,865		356,883	338,934
10	Total M&S Inventories	\$	2,568,843	\$ 2,804,245	\$ 2,848,563	\$	2,855,032	\$	2,773,457	\$ 2,770,028
11	Prepayments	\$	1,415,655	\$ 1,415,655	\$ 1,415,655	\$	1,756,682	\$	64,895	\$ 1,213,708
12	Cash Working Capital	\$	1,164,937	\$ 1,164,937	\$ 1,164,937	\$	1,164,937	\$	1,164,937	\$ 1,164,937
13	Less:									
14	Total Deferred Income Taxes									
15	Def Inc Tax - Accel Depr	\$	20,062,817	\$ 22,388,845	\$ 22,014,104	\$	21,283,095	\$	22,009,122	\$ 21,551,597
16	Def Inc Tax - FAS 87 / 106		(775,910)	(788,563)	(774,047)		(591,877)		(788,419)	(743,763)
17	Def Inc Tax - Bad Debt		(19,095)	(26,052)	(10,935)		(10,989)		(41,133)	(21,641)
18	Def Inc Tax - Def Rate Case Costs		0	0	0		0		0	-
19	Def Inc Tax - Insurance Claim		(1,814)	 (1,814)	 (1,814)		(1,814)		(1,814)	 (1,814)
20	Total Deferred Income Taxes	\$	19,265,998	\$ 21,572,415	\$ 21,227,308	\$	20,678,415	\$	21,177,756	\$ 20,784,379
21	Less: Excess Deferred Income Taxes	\$	6,572,092	\$ 6,572,092	\$ 6,572,092	\$	6,572,092	\$	6,572,092	\$ 6,572,092
22	Less: Customer Advances	\$	-	\$ -	\$ -	\$	-	\$	-	\$ -
23	Less: Customer Deposits	\$	289,419	\$ 269,680	\$ 263,516	\$	250,011	\$	249,677	\$ 264,461
24	Rate Base	\$	177,150,236	\$ 175,564,598	\$ 174,638,861	\$	177,132,459	\$	187,352,753	\$ 178,367,781

Schedule RevReq-5-1 Table of Contents

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE CASH WORKING CAPITAL 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)		(3)		(4)		(5)
LINE NO.	DESCRIPTION	REFERENCE	۱ 	EST YEAR ACTUAL	PRO FORMA ADJUSTMENTS		TEST YEAR PRO FORMA	
1 2	Distribution O&M Expense Tax Expense	Schedule RevReq-2 Schedule RevReq-2	\$	13,332,381 4,452,919	\$	(1,323,953) 964,203	\$	12,008,428 5,417,122
3	Total		\$	17,785,300	\$	(359,749)	\$	17,425,551
4	Cash Working Capital Requirement:							
5	Other O&M Expense Days Lag (1) / 366	24 days		6.55%		6.55%		6.55%
6	Total Cash Working Capital	Line 5 X Line 3	\$	1,164,937	\$	(23,564)	\$	1,141,374

<u>Notes</u>

(1) Based On Lead-Lag Study in Docket 17-070

Schedule RevReq-5-2 Table of Contents

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE SUPPLEMENTAL PLANT PRO FORMA ADJUSTMENT 12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-5-3 Table of Contents

(1)		(2) BALANCE
DESCRIPTION		12/31/2020
Plant In Service:		
New Hampshire		
304 Land - Barberry Lane		\$ 6,816
Total NH		\$ 6,816
Maine		
360 Land - Lewiston		\$ 58,301
361 Structures & Improvements		568,201
362 Gas Holders		3,878,347
363 Other Equipment		 87,313
Total ME		\$ 4,592,161
Total Plant In Service NH And ME		\$ 4,598,977
NH Allocation Via Annual Proportional Responsibility Factor 40.	88%	\$ 1,880,062
ME Allocation Via Annual Proportional Responsibility Factor 59.	12%	\$ 2,718,915
Depreciation Reserve:		
New Hampshire		
Total NH		\$ -
<u>Maine</u>		
361 Structures & Improvements		\$ 267,178
362 Gas Holders		2,943,652
363 Other Equipment		91,983
Total ME		\$ 3,302,812
Total Depreciation Reserve NH And ME		\$ 3,302,812
NH Allocation Via Annual Proportional Responsibility Factor 40.	88%	\$ 1,350,190
ME Allocation Via Annual Proportional Responsibility Factor 59.	.12%	\$ 1,952,623
Supplemental Plant Adjustment		
NH Supplemental Plant Adjustment (Line 12 - Line 4)		\$ 1,873,246
ME Supplemental Plant Adjustment (Line 13 - Line 10)		\$ (1,873,246)
Supplemental Depreciation Reserve Adjustment		
NH Supplemental Plant Adjustment (Line 23 - Line 16)		\$ 1,350,190
ME Supplemental Plant Adjustment (Line 24 - Line 21)		\$ (1,350,190)



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DEFERRED INCOME TAX PRO FORMA ADJUSTMENT SETTLEMENT ADJUSTMENT PURSUANT TO DOCKET 2008-155 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)
LINE NO.	DESCRIPTION	DECEMBER 31 2020
1	Nisource Original Plant Federal and State DIT Basis	\$ 4,053,514
2	Unitil Acquired Plant Federal and State DIT Basis	5,319,173
3	Greater of Line 1 or Line 2 to be Utilized as DIT Basis per Stipulation	\$ 5,319,173
4	Post-Acquisition Capital Expenditures Federal and State DIT Basis	\$ 29,619,418
5	Net Operating Loss DIT Related to Rate Base at 12/31/20	(12,929,468)
6	Total Plant and Capex Federal and State DIT to be Used in Rate Base (Line 3 + Line 4 + Line 5)	\$ 22,009,122
7	Less Test Year: Def Inc Tax - Accel Depr	22,009,122
8	Required Pro Forma Adjustment (Line 6 - Line 7)	<u>\$</u> -

NORTHERN UTILITIES, INC. WEIGHTED AVERAGE COST OF CAPITAL 5 QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA

	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)
LINE NO.	DESCRIPTION	 AMOUNT	PROFORMA ADJUSTMENT	P	ROFORMED AMOUNT	WEIGHT	COST OF CAPITAL	WEIGHTED COST OF CAPITAL	REFERENCE
1	Common Stock Equity	\$ 229,204,938	\$ -	\$	229,204,938	52.47%	9.50%	4.98%	Schedule RevReq 6-1 and 6-2
2	Preferred Stock Equity	-	-		-	0.00%	0.00%	0.00%	Schedule RevReq 6-1 and 6-3
3	Long Term Debt	207,640,000	-		207,640,000	47.53%	4.93%	2.34%	Schedule RevReq 6-1 and 6-4
4	Short Term Debt	 -	 -		-	0.00%	1.69%	0.00%	Schedule RevReq 6-1 and 6-5
5	Total	\$ 436,844,938	\$ -	\$	436,844,938	100.00%		7.33%	

Schedule RevReq-6 Table of Contents

					LITIES, INC. RATEMAKING PURP ECEMBER 31, 2020				Schedule RevReq-6-1 Table of Contents
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(3)	(8)
LINE NO.	DESCRIPTION	DECEMBER 31 2019	MARCH 31 2020	JUNE 30 2020	SEPTEMBER 30 2020	DECEMBER 31 2020	5 QUARTER AVERAGE	PROFORMA ADJUSTMENT	PROFORMA AMOUNT
1	Common Stock Equity								
2	Common Stock	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$-	\$ 1,000
3	Misc. Paid In Capital	200,699,000	200,699,000	205,699,000	205,699,000	207,074,000	203,974,000	-	203,974,000
4	Retained Earnings	24,380,042	29,943,726	26,634,154	20,738,662	24,453,104	25,229,938		25,229,938
5	Total Common Stock Equity	225,080,042	230,643,726	232,334,154	226,438,662	231,528,104	229,204,938	-	229,204,938
6	Preferred Stock Equity	-	-	-	-	-	-	-	-
7	Long-Term Debt	198,200,000	190,000,000	190,000,000	230,000,000	230,000,000	207,640,000	-	207,640,000
8	Short-Term Debt ⁽¹⁾		<u> </u>				<u> </u>		
9	Total	\$ 423,280,042	\$ 420,643,726	\$ 422,334,154	\$ 456,438,662	\$ 461,528,104	\$ 436,844,938	\$-	\$ 436,844,938
10	Capital Structure Ratios								
11	Common Stock Equity	53.18%	54.83%	55.01%	49.61%	50.17%	52.47%		52.47%
12	Preferred Stock Equity	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
13	Long-Term Debt	46.82%	45.17%	44.99%	50.39%	49.83%	47.53%		47.53%
14	Short-Term Debt ⁽¹⁾	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
15	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%

<u>Notes</u> (1) For ratemaking purposes the Company has imputed zero short-term debt



NORTHERN UTILITIES, INC. WEIGHTED AVERAGE COST OF LONG-TERM DEBT DECEMBER 31, 2020 PRO FORMA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
LINE NO.		ISSUE	DATE ISSUED	TERM	FACE VALUE	OUTSTANDING AMOUNT	PROFORMA ADJUSTMENT	PROFORMED OUTSTANDING AMOUNT	ISSUANCE COSTS	NET PROCEEDS RATIO [(5)-(9)/(5)]	UNAMORTIZED ISSUANCE COSTS	NET PROCEEDS OUTSTANDING (8)-(11)	ANNUAL ISSUANCE COST	ANNUAL INTEREST COST Rate * (8)	TOTAL ANNUAL COST (13)+(14)	COST RATE BASED ON NET PROCEEDS (15)/[(8)-(11)]
1	7.72%	Sr. Notes	12/3/2008	30 Yrs	\$ 50,000,000	\$ 50,000,000	\$-	\$ 50,000,000	\$ 435,899	99.13%	\$ 260,401	\$ 49,739,599	\$ 14,534	\$ 3,860,000 \$	3,874,534	7.79%
2	4.42%	Sr. Notes	10/15/2014	30 Yrs	50,000,000	50,000,000	-	50,000,000	482,981	99.03%	383,031	49,616,969	16,099	2,210,000	2,226,099	4.49%
3	3.52%	Sr. Notes	11/1/2017	10 Yrs	20,000,000	20,000,000	-	20,000,000	148,352	99.26%	101,374	19,898,626	14,835	704,000	718,835	3.61%
4	4.32%	Sr. Notes	11/1/2017	30 Yrs	30,000,000	30,000,000	-	30,000,000	222,528	99.26%	199,039	29,800,961	7,418	1,296,000	1,303,418	4.37%
5	4.04%	Sr. Notes	9/12/2019	30 Yrs	40,000,000	40,000,000	-	40,000,000	208,040	99.48%	225,229	39,774,771	6,954	1,616,000	1,622,954	4.08%
6	3.78%	Sr. Notes	9/15/2020	20 Yrs	40,000,000	40,000,000	-	40,000,000	227,434	99.43%	190,778	39,809,222	11,372	1,512,000	1,523,372	3.83%
7		Total		-	\$ 230,000,000	\$ 230,000,000	\$-	\$ 230,000,000	\$ 1,725,233	-	\$ 1,359,851	\$ 228,640,149	\$ 71,212	\$ 11,198,000 \$	11,269,212	4.93%

Schedule RevReq-6-4 Table of Contents

NORTHERN UTILITIES, INC. COST OF SHORT-TERM DEBT 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)		(3)		(4)	(5)
LINE NO.	MONTH	MONTH-END AMOUNT OUTSTANDING		AVERAGE DAILY DRROWINGS	MONTHLY SHORT-TER INTEREST		INTEREST RATE ⁽¹⁾
1	January 2020	28,666,840	\$	25,109,148	\$	60,854	2.86%
2	February 2020	24,794,114		23,351,619		52,155	2.82%
3	March 2020	28,316,841		27,127,612		49,312	2.15%
4	April 2020	27,939,753		25,053,060		39,502	1.92%
5	May 2020	26,822,898		25,283,108		29,299	1.37%
6	June 2020	25,298,270		24,327,028		26,512	1.33%
7	July 2020	33,152,219		29,181,116		32,655	1.32%
8	August 2020	37,754,315		34,429,766		38,141	1.31%
9	September 2020	4,906,721		20,504,100		21,844	1.30%
10	October 2020	18,132,923		9,559,681		10,476	1.29%
11	November 2020	22,751,664		19,566,665		20,656	1.29%
12	December 2020	26,747,022		24,606,907		27,020	1.30%
13	Average for the Year			24,008,317			1.69%

<u>Notes</u>

(1) The Interest Rate is calculated as follows: [Column (4) / # of days in month * 366] / Column (3).



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE WORKPAPERS SUPPORTING REVENUE REQUIREMENT 12 MONTHS ENDED DECEMBER 31, 2020

Northern Utilities, Inc. Gas Inc Stmt - NH - YTD R_NU_4_BF_NH

	2019 Base	2019 Flowthru	Total	2020 Base	2020 Flowthru	Total
OPERATING REVENUES Sales:						
Residential (480)	19,612,987	14,904,240	34,517,227	19,232,153	10,809,182	30,041,335
General Service (481)	11,028,771	17,278,063	28,306,834	10,623,702	11,698,198	22,321,900
Firm Transport Revenues (484, 489) (External Sup)	8,612,979	1,216,889	9,829,867	8,583,266	1,156,548	9,739,814
Sales for Resale (483)		2,870,979	2,870,979	-	1,107,459	1,107,459
Other Sales (495)	236,169	(3,751,608)	(3,515,439)	(201,864)	2,446,481	2,244,617
Total Sales	39,490,906	32,518,563	72,009,468	38,237,257	27,217,869	65,455,125
Other Operating Revenues:						
Late Charge (487)	76,773	-	76,773	36,761	-	36,761
Misc. Service Revenues (488)	875,755	-	875,755	852,304	-	852,304
Rent from Property (493 & 457)	200,952	-	200,952	218,628	-	218,628
Other Revenues	-	(311,587)	(311,587)	-	120,656	120,656
Total Other Operating Revenues	1,153,480	(311,587)	841,893	1,107,692	120,656	1,228,348
TOTAL OPERATING REVENUES	40,644,386	32,206,975	72,851,361	39,344,949	27,338,525	66,683,473
OPERATING EXPENSES						
Operation & Maint. Expenses:						
Production (710-813)	477,446	27,749,285	28,226,731	449,736	23,095,124	23,544,860
Transmission (850-857)	72,713	-	72,713	63,829	-	63,829
Distribution (870-894) (586)	3,509,448	-	3,509,448	3,733,377	-	3,733,377
Cust. Accounting (901-905)	2,580,251	188,507	2,768,758	2,508,645	99,544	2,608,189
Cust. Service & Info (906-910)	71,870	2,247,505	2,319,375	73,074	2,268,632	2,341,706
Sales Expenses (911-916)	64,467	-	64,467	69,178	-	69,178
Admin. & General (920-935)	7,607,751	71,540	7,679,291	6,682,552	58,225	6,740,777
Total O & M Expenses	14,383,947	30,256,837	44,640,784	13,580,391	25,521,524	39,101,915
Other Operating Expenses:						
Deprtn. & Amort. (403-407)	8,884,559	120,384	9,004,943	9,693,559	(0)	9,693,559
Taxes-Other Than Inc. (408)	4,306,298	-	4,306,298	4,867,774	-	4,867,774
Federal Income Tax (409)	52,380	-	52,380	(30,211)	-	(30,211)
State Franchise Tax (409)	(309,547)	-	(309,547)	(384,644)	-	(384,644)
Def. Income Taxes (410,411)	2,975,683	-	2,975,683	2,600,179	-	2,600,179
Total Other Operating Expenses	15,909,373	120,384	16,029,757	16,746,657	(0)	16,746,657
TOTAL OPERATING EXPENSES	30,293,320	30,377,221	60,670,541	30,327,047	25,521,524	55,848,571
NET UTILITY OPERATING INCOME	10,351,066	1,829,755	12,180,820	9,017,901	1,817,001	10,834,902
OTHER INCOME & DEDUCTIONS						
Other Income:						
AFUDC - Other Funds (41901)	-	-	-	-	-	
Other (415- 421)	280,289	(37,502)	242,787	231,700	(25,362)	206,339
Other Income Deduc. (425, 426)	232,636	-	232,636	151,744	-	151,744
Taxes Other than Income Taxes: Income Tax, Other Inc & Ded	2,752	-	2,752	14,786	-	14,786
Net Other Income (Deductions)	44,901	(37,502)	7,400	65,170	(25,362)	39,809

GROSS INCOME	10,395,967	1,792,253	12,188,220	9,083,072	1,791,639	10,874,711
Interest Charges (427 - 432)	4,670,265	3,717	4,673,982	4,777,155	1,286	4,778,441
NET INCOME	5,725,702	1,788,536	7,514,238	4,305,917	1,790,353	6,096,270



Northern Utilities, Inc.

Gas Inc Stmt - NH - YTD R_NU_4_B_FTxM_NH

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	Commodity Demand COG	Working Capital	Bad Debt	Residential Low Income Assistance	Energy Efficiency	Environ Response Costs	Rate Case Exp	Recoup	Lost Revenue	On-Bill Financing	Total Flowthru	Total Base	Total New Hampshire Division	Cost of Gas Total	LDAC Flowthrough Total
OPERATING REVENUES															
Sales: Residential (480) General Service (481) Firm Transport Revenues (484, 489) (External Sup) Sales for Resale (483)	\$ 9,402,656 10,833,043 - 1,107,459	\$ 6,775 7,005 - -	\$ 66,784 75,810 -	\$ 15,479 77,272 114,130	\$ 977,734 542,605 802,535	\$ 103,733 \$ 119,301 175,875	0\$ (25) 25	(0) \$ 11 (11)	236,021 \$ 43,177 63,995	- S - - -	5 10,809,182 5 11,698,198 1,156,548 1,107,459	\$ 19,232,153 10,623,702 8,583,266	\$ 30,041,335 22,321,900 9,739,814 1,107,459	\$	782,341 1,156,548
Other Sales (495)	2,291,577	11,582	(43,051)	115,868	41,657	-	-	-	15,896	12,952	2,446,481	(201,864)	2,244,617	2,260,108	
Total Sales	23,634,735	25,362	99,544	322,748	2,364,531	398,908	(0)	-	359,089	12,952	27,217,869	38,237,257	65,455,125	23,759,640	3,458,228
Other Operating Revenues: Late Charge (487)	-		-			<u> </u>						36,761	36,761		
Misc. Service Revenues (488) Rent from Property (493 & 457)	-	-	-	-	-	-	-	-	-	-	-	852,304 218,628	852,304 218,628	-	-
Other Revenues	120,656	-	-	-	-	-	-	-	-	-	120,656	-	120,656	120,656	-
Total Other Operating Revenues	120,656	-	-	-	-	-	-	-	-	-	120,656	1,107,692	1,228,348	120,656	-
TOTAL OPERATING REVENUES	23,755,391	25,362	99,544	322,748	2,364,531	398,908	(0)	-	359,089	12,952	27,338,525	39,344,949	66,683,473	23,880,296	3,458,228
OPERATING EXPENSES Operation & Maint. Expenses:															
Production (710-813)	22,696,215	-	-	-	-	398,908	-	-	-	-	23,095,124	449,736	23,544,860	22,696,215	398,908
Transmission (850-857)	-	-	-	-	-	-	-	-	-	-	-	63,829	63,829	-	-
Distribution (870-894) (586) Cust. Accounting (901-905)	-	-	- 99,544	-	-	-	-	-	-	-	- 99,544	3,733,377 2,508,645	3,733,377 2,608,189	- 99,544	-
Cust. Service & Info (906-910)	-	-		-	2,255,679	-	-	-	-	12,952	2,268,632	73,074	2,341,706	(0	
Sales Expenses (911-916)	-	-	-	-	-	-	-	-	-	-	-	69,178	69,178	-	-
Admin. & General (920-935)	-	-	-	58,225	-	-	-	-	-	-	58,225	6,682,552	6,740,777	-	58,225
Total O & M Expenses	22,696,215	-	99,544	58,225	2,255,679	398,908	-	-	-	12,952	25,521,524	13,580,391	39,101,915	22,795,759	2,725,765
Other Operating Expenses:															(0)
Deprtn. & Amort. (403-407) Taxes-Other Than Inc. (408)	-	-	-	-	-	-	(0)	-	-	-	(0)	9,693,559 4,867,774	9,693,559 4,867,774	-	(0)
Federal Income Tax (409)	-	-	-	-	-	-	-	-	-	-	-	(30,211)	(30,211)	-	-
State Franchise Tax (409)	-	-	-	-	-	-	-	-	-	-	-	(384,644)	(384,644)	-	-
Def. Income Taxes (410,411)	-	-	-	-	-	-	-	-	-	-	-	2,600,179	2,600,179	-	-
Total Other Operating Expenses	-	-	-	-	-	-	(0)	-	-	-	(0)	16,746,657	16,746,657		(0)
TOTAL OPERATING EXPENSES	22,696,215	-	99,544	58,225	2,255,679	398,908	(0)	-	-	12,952	25,521,524	30,327,047	55,848,571	22,795,759	2,725,765
NET UTILITY OPERATING INCOME	1,059,176	25,362	-	264,523	108,852	-	-	-	359,089	-	1,817,001	9,017,901	10,834,902	1,084,537	732,463
OTHER INCOME & DEDUCTIONS Other Income:															
Other (415- 421) Other Income Dedue (425- 426)	-	(25,362)	-	-	-	-	-	-	-	-	(25,362)	231,700	206,339	(25,362	
Other Income Deduc. (425, 426) Taxes Other than Income Taxes:	-	-	-	-	-	-	-	-	-	-	-	151,744	151,744	-	-
Income Tax, Other Inc & Ded	-	-	-	-	-	-	-	-	-	-	-	14,786	14,786	-	-
Net Other Income (Deductions)	-	(25,362)	-	-	-	-	-	-	-	-	(25,362)	65,170	39,809	(25,362) -
GROSS INCOME	1,059,176	-	-	264,523	108,852	-	-	-	359,089	-	1,791,639	9,083,072	10,874,711	1,059,176	732,463
Interest Charges (427 - 432)	1,286	-	-	-	-	-	-	-	-	-	1,286	4,777,155	4,778,441	1,286	-
NET INCOME	\$ 1,057,890	\$-	\$-	\$ 264,523	\$ 108,852	\$ - \$	- \$	- \$	359,089 \$	- (5 1,790,353	\$ 4,305,917	\$ 6,096,270	\$ 1,057,890	\$ 732,463

Workpaper - Flowthrough Detail 4/20/2021 10:21:09 AM For Periods Ending December 31, 2020 <u>Table of Contents</u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE COST OF GAS OPERATING INCOME STATEMENT 12 MONTHS ENDED DECEMBER 31, 2020

	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	TEST YEAR COST OF GAS	LESS: INDIRECT PRODUCTION & O.H.	COST OF GAS EXCL. PROD. & O.H.
	OPERATING REVENUES			
1	TOTAL SALES	23,759,640	1,057,890	22,701,750
2	TOTAL OTHER OPERATING REVENUES	120,656	-	120,656
3	TOTAL OPERATING REVENUES	23,880,296	1,057,890	22,822,406
4	OPERATING EXPENSES:			
5	PRODUCTION	22,696,215	-	22,696,215
6	TRANSMISSION	-	-	-
7	DISTRIBUTION	-	-	-
8	CUSTOMER ACCOUNTING	99,544	-	99,544
9	CUSTOMER SERVICE	(0)	-	(0)
10	SALES EXPENSE	-	-	-
11	ADMINISTRATIVE & GENERAL	-	-	-
12	DEPRECIATION	-	-	-
13	AMORTIZATIONS	-	-	-
14	TAXES OTHER THAN INCOME	-	-	-
15	FEDERAL INCOME TAX	-	-	-
16	STATE INCOME TAX	-	-	-
17	DEFERRED FEDERAL & STATE INCOME TAXES	-	-	-
18	INTEREST ON CUSTOMER DEPOSITS		-	-
19	TOTAL OPERATING EXPENSES	22,795,759	-	22,795,759
20	NET OPERATING INCOME	1,084,537	1,057,890	26,647

Workpaper Allocators

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE SUMMARY OF ALLOCATORS 12 MONTHS ENDED DECEMBER 31, 2020

	Allocation Factor
USC Labor & OH Charged to NuNH (Payroll)	20.18%
USC Labor & OH Charged to NuNH (Benefits)	19.85%
Capitalization Rates	
NuNH Payroll	46.69%
NuNH Benefits	48.76%
USC Labor & OH Charged to Construction (Payroll)	32.52%
USC Labor & OH Charged to Construction (Benefits)	31.51%
Incentive Compensation - NuNH	84.00%

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Northern Utilities, Inc. Calculation of Temporary Rate Adjustment

Line No.	Description	 2020 Adjusted Base Year Revenue ⁽¹⁾	Allocated Temporary Rate Increase ⁽²⁾	2020 Adjusted Billing Determinant (therms) ⁽³⁾	Temporary Rate Factor \$ per therm
1	Residential	\$ 21,225,409	1,717,764	20,304,525	\$ 0.0846
2	Commercial & Industrial	18,571,431	1,502,979	53,847,584	\$ 0.0279
3	Total	\$ 39,796,840	\$ 3,220,742	74,152,109	

Notes:

(1) Reference Amen/Taylor Schedule RAJT-11, Pages 1 through 3, Col I

(2) Reference Schedule CGDN-3 for total temporary rate increase. Allocated proportionally by 2020 adjusted base year revenue

(3) Reference Amen/Taylor Schedule RAJT-11, Pages 1 through 3, Col H

DG 21-104 Schedule CGDN-4 Page 1 of 1

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DG 21-104 Schedule CGDN-5 Page 1 of 1

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DISCOUNTED CASH FLOW RESULTS 2018 GAS MAIN EXTENSIONS

		Orig	gina	d i	Rev	/ise	d
Line No.	Project Location	CIAC		NPV	 CIAC		NPV
1	201 Atlantic Ave, North Hampton NH *	\$ 112,542	\$	(49,707)	\$ 110,481	\$	(110,276)
2	113, 114, 115 & 117 Batchelder Rd, Seabrook NH *			55,245			105,971
3	104 Washington St, Dover NH [*]			214,880			289,431
4	10 Hampshire Rd, Salem NH			6,616			(38,502)
5	121 Corporate Drive, Portsmouth NH			13,247			104,187
6	140 Wakefield St, Rochester NH *	50,566		(2,086)	50,566		22,736
7	109 Towle Farm Rd, Hampton NH	29,416		-	29,146		(42,617)
8	0 Borthwick Ave, Portsmouth NH	38,125		-	38,125		(71,150)
9	101 International Drive, Portsmouth, NH			113,217			654,349
10			\$	351,411		\$	914,129

11 * Denotes residential or municipal projects that are analyzed based on a 20 year period. All other project results are based on a 10 year period.

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DG 21-104 Schedule CGDN-6 Page 1 of 1

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE EPPING FRANCHISE DCF VARIANCE ORIGINAL MODEL VS REVISED MODEL REDACTED

	Capital Cost			10-Year NPV		20-Year NPV		
Original	Revised	Variance	Original	Revised	Variance	Original	Revised	Variance

Notes:

Original Model results are referenced as Exhibit 8 in Order No. 26,220 of DG 18-094

Revised Model updated Original Model for actual incremental capital costs and actual customer additions

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Section

- 1. Purpose
- 2. Applicability
- 3. Energy Efficiency ("EE") Program Costs Allowable for Local Delivery Adjustment Charge ("LDAC") –Energy Efficiency ("EE")
- 4. Lost Revenue Allowable for LDAC -- ("LR")
- 5. Environmental Response Costs Allowable for LDAC -- ("ERC")
- 6. Interruptible Transportation Margin Credit Allowable for LDAC -- ("ITMC")
- 7. Gas Assistance Program ("GAP") Costs Allowable for LDAC
- 8. Expenses Related to Rate Case ("RCE")
- 9. Reconciliation of Permanent Changes in Delivery Rates ("RPC")
- 10. Regulatory Cost Adjustment Mechanism ("RCAM")
- 11. Effective Date of Local Delivery Adjustment Charge
- 12. Local Delivery Adjustment Charge (LDAC) Formula
- 13. Application of LDAC to Bills
- 14. Other Rules
- 15. Amendments to Uniform System of Accounts

1. <u>Purpose</u>

The purpose of this clause is to establish procedures that allow Northern Utilities ("Northern" or the "Company") subject to the jurisdiction of the State of New Hampshire Public Utilities Commission ("PUC" or "NHPUC"), to adjust, on an annual basis, its rates for firm gas Sales and firm Delivery Services in order to recover Energy Efficiency program costs , recover lost revenue related to the Energy Efficiency programs, recover environmental response costs, return interruptible transportation margin credits, recover revenue shortfall associated with customer participation in the Gas Assistance Program, recover the non-distribution portion of the annual NHPUC regulatory assessment, recover rate case expenses, recover and return the reconciliation of revenues related to permanent changes in delivery rates and recover property tax expense increases associated with RSA 72:8-d and -e, recover or return the actual delivery write offs compared to the level in distribution rates, recover or return the actual annual cost of the Arrearage Management Program ("AMP") compared to the level in distribution rates, recover or return the amount of special contract revenues as determined in Docket DG 21-104.

2. <u>Applicability</u>

This Local Delivery Adjustment Charge ("LDAC") shall be applicable in whole or part to all of Northern's firm Sales and firm Delivery Services customers as shown on the table below. The application of the clause may, for good cause shown, be modified by the NHPUC. See Part V, Section 13, "Other Rules."

Applicability	EE LR V.3. V.4	ERC V.5.	ITM V.6.	GAP V.7.	RCE V.8.	RPC V.9.	RCAM V.10.
Residential	X X	Х	Х	Х	Х	Х	X
Non-Heating							
Residential	X X	Х	Х	Х	Х	Х	X
Heating							
Small C&I	X X	Х	Х	Х	Х	Х	X
Medium C&I	XX	Х	Х	Х	Х	Х	X
Large C&I	X X	Х	Х	Х	Х	Х	X
No Previous	X X	Х	Х	Х	Х	Х	X
Sales Service							

Notes:

- 1 N/A Not applicable
- 2 X Applicable to all
- 3 Specific EEC and LR Rates for Residential Heating and Non-Heating
- 4 Specific EEC and LR Rates for All C&I classes

3. <u>Energy Efficiency Program Costs Allowable for LDAC</u>

3.1 <u>Purpose</u>

The purpose of this provision is to establish a procedure that allows Northern, subject to the jurisdiction of the NHPUC, to adjust on an annual basis, the Energy Efficiency Charge applicable to firm gas Sales and firm Delivery Services throughput in order to recover from firm ratepayers Energy Efficiency program costs and performance incentives.

3.2 <u>Applicability</u>

An Energy Efficiency Charge ("EEC") shall be applied to firm Sales and firm Delivery Services throughput of the Company as determined in accordance with the provisions of Part V, Section 3 of this clause. Such EEC shall be determined annually by the Company, separately for each Rate Category defined below, subject to review and approval by the NHPUC as provided for in this clause.

V. LOCAL DELIVERY ADJUSTMENT CHARGE

For purposes of applying the respective EEC each "Rate Category" shall be as follows:

Residential Rates R-5, R-6, R-10, Commercial/Industrial (including multi-family) Rates G-40, G-50, G-41, G-42, G-51, G-52

Special contract customers are exempt from the EEC.

3.3 <u>Reporting</u>

The Company shall submit monthly and annual reports by Rate Category to the Commission reconciling any difference between the actual Energy Efficiency costs and actual revenues collected under this rate schedule. The difference, whether positive or negative, will be carried forward, with interest, into the EEC for the next recovery period. Annual reports shall be filed with the Commission at least 45 days prior to the effective date of the next subsequent twelve-month period.

3.4 Effective Date of EEC

Forty-five ("45") days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the EEC applicable to each Rate Category during the next subsequent twelve-month period commencing with the calendar month of November.

3.5 <u>Calculation of the EEC</u>

The EEC for each Rate Category will be derived by dividing the projected annual EE costs, including performance incentives, plus the reconciliation balance, by forecast firm annual throughput. The reconciliation balance shall reflect both actual and projected data, as necessary, through October of the prior rate period.

3.6 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between EEC revenues collected and actual Energy Efficiency program costs and performance incentives, plus carrying charges calculated on the average monthly balance and then added or credited to the end-of-month balance. Interest shall be calculated based on the prime rate, with said prime rate to be fixed on a quarterly basis and to be established as reported in the Wall Street Journal on the first business day of the

V. LOCAL DELIVERY ADJUSTMENT CHARGE

month preceding the calendar quarter; if more than one rate is reported the average of the reported rates shall be used.

3.7 Application of EEC Rate to Bills

The EEC Rate (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

3.8 Information to be Filed with the NHPUC

An annual EEC filing will be required forty-five (45) days prior to the effective date of November 1, containing the calculation of the new annual EEC to become effective November 1. The calculation will reflect the forecast of EEC annual costs, the updated annual EEC reconciliation balance and throughput forecast for the upcoming period. Monthly and annual reconciliation reports will be filed in accordance with Section 3.3 above.

4. Lost Revenue Allowable for LDAC

4.1 <u>Purpose</u>

The purpose of this provision is to establish a procedure that allows Northern, subject to the jurisdiction of the NHPUC, to adjust on an annual basis, the Lost Revenue Rate applicable to firm gas Sales and firm Delivery Services throughput in order to recover from firm ratepayers lost revenue related to Energy Efficiency programs, pursuant to Order No. 25,932 in Docket DE 15-137, Energy Efficiency Resource Standard.

4.2 Applicability

Effective January 1, 2017, a Lost Revenue Rate ("LRR") shall be applied to firm Sales and firm Delivery Services throughput of the Company as determined in accordance with the provisions of Part V, Section 4 of this clause. Such LRR shall be determined annually by the Company, separately for each Rate Category defined below, subject to review and approval by the NHPUC as provided for in this clause.

For purposes of applying the respective LRR each "Rate Category" shall be as follows:

Residential

Rates R-5, R-6, R-10

V. LOCAL DELIVERY ADJUSTMENT CHARGE

Commercial/Industrial (including multi-family) Rates G-40, G-50, G-41, G-42, G-51, G-52

Special contract customers are exempt from the LRR.

4.3 <u>Effective Date of the LRR</u>

Forty-five ("45") days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the LRR applicable to each Rate Category during the next subsequent twelve-month period commencing with the calendar month of November.

4.4 <u>Calculation of the LRR</u>

The LRR for each Rate Category will be derived by dividing the projected annual lost revenue, plus the reconciliation balance and projected interest, by forecast firm annual throughput. The reconciliation balance shall reflect both actual and projected data, as necessary, through October of the prior rate period.

4.5 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between LRR revenues collected and actual costs, plus carrying charges calculated on the average monthly balance and then added or credited to the end-of-month balance. Interest shall be calculated based on the prime rate, with said prime rate to be fixed on a quarterly basis and to be established as reported in the Wall Street Journal on the first business day of the month preceding the calendar quarter; if more than one rate is reported the average of the reported rates shall be used.

4.6 <u>Application of LRR to Bills</u>

The LRR (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

4.7 Information to be Filed with the NHPUC

An annual LRR filing will be required forty-five (45) days prior to the effective date of November 1, containing the calculation of the new annual LRR to become effective November 1. The calculation will reflect the forecast of LRR annual costs, the updated annual LRR reconciliation balance and throughput forecast for

the upcoming period.

5. <u>Environmental Response Costs Allowable for LDAC</u>

5.1 <u>Purpose</u>

In order to recover Environmental Response Cost ("ERC") expenditures associated with former manufactured gas plants, there shall be an ERC Rate applied to all firm gas Sales and firm Delivery Services throughput billed under the Company's sales and delivery service rate schedules.

5.2 <u>Applicability</u>

An annual ERC Rate shall be calculated effective every November 1 for the annual period of November 1 through October 31. The annual ERC Rate shall be filed with the Company's Annual Cost of Gas Charge ("COGC") filing and be subject to review and approval by the Commission. The annual ERC Rate will be applied to firm Sales and to firm Delivery Services throughput as a separate surcharge. Special contract customers are exempt from the ERC.

5.3 Environmental Response Cost Allowable

All approved environmental response costs associated with manufactured gas plants shall be included in the ERC Rate.

The total annual charge to the Company's ratepayers for environmental response costs during any annual ERC recovery period shall not exceed five percent (5%) of the Company's total revenues from firm gas sales and Delivery Service throughput during the preceding twelve (12) month period ending June 30. The total annual charge shall represent the ERC expenditures to be in effect for the upcoming twelve month period, November 1 through October 31. If this recovery limitation results in the Company recovering less than the amount that would otherwise be recovered in a particular ERC Recovery Year, then the Company would defer this unrecovered amount, with interest, calculated monthly on the average monthly balance, until the next recovery period in which this amount could be recovered without violating the 5% limitation. The interest rate is to be adjusted each quarter using the prime interest rate as reported by the Wall Street Journal on the first date of the month preceding the first month of the quarter.

5.4 Effective Date

Forty-five ("45") days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a

change in the ERC applicable to all firm sales and firm delivery service throughput for the subsequent twelve month period commencing with the calendar month of November.

5.5 <u>Definitions</u>

Environmental Response Costs shall include all costs of investigation, testing, remediation, litigation expenses, and other liabilities relating to manufactured gas plant sites, disposal sites, or other sites onto which material may have migrated, as a result of the operating or decommissioning of New Hampshire gas manufacturing facilities. ERCs shall also include the expenses incurred by the Company in pursuing insurance and third-party claims and any recoveries or other benefits received by the company as a result of such claims.

5.6 <u>Reconciliation Adjustments</u>

Prior to the Annual COGC filing, the Company will calculate the difference between (a) the revenues derived by multiplying firm sales and Delivery Service throughput by the ERC Rate through October 31, and (b) the historical amortized costs approved for recoveries in the prior November's Annual ERC Recovery Period. This cumulative difference will be recorded in Account 173. The Company shall file the reconciliation along with its COG filing forty-five (45) days prior to the beginning of the annual period.

5.7 <u>Calculation of the ERC</u>

The ERC Rate calculated annually consists of one-seventh of actual response costs incurred by the Company in the twelve month period ending June 30 of each year until fully amortized (over seven years). Any insurance and third-party recoveries or other benefits for the twelve month period ending June 30 shall be applied to reduce the unamortized balance, shortening the amortization period. The sum of these amounts is then divided by the Company's forecast of total firm sales and Delivery Service throughput for the upcoming twelve months of November 1 through October 31.

5.8 Application of ERC to Bills

The annual ERC Rate shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm gas sales by being included in the determination of the semiannual COGC, and also will be applied to the

Issued:May 9, 2018Issued By:Effective:May 1, 2018Title:Authorized by NHPUC Order No. 26,129 in Docket No. DG 17-070, dated May 2, 2018.

V. LOCAL DELIVERY ADJUSTMENT CHARGE

monthly firm Delivery throughput of each firm Delivery customer's bill.

6. <u>Interruptible Transportation Margins Allowable for LDAC</u>

6.1 <u>Purpose</u>

The purpose of this provision is to establish a procedure that allows Northern subject to the jurisdiction of the NHPUC to adjust the Interruptible Transportation Margin Credit ("ITMC") applicable to firm gas Sales and firm Delivery Services throughput in order to return the Interruptible Transportation margins allocated to the local distribution firm ratepayers.

6.2 <u>Applicability</u>

An Interruptible Transportation Margin Credit ("ITMC") shall be applied to all firm Sales and firm Delivery Services throughput of the Company subject to the jurisdiction of the NHPUC as determined in accordance with the provisions of Part V, Section 6 of this clause. Such ITMC shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided for in this clause. The ITMC is not applied to the bills of special contract customers.

The application of this provision may, for good cause shown, be modified by the NHPUC. See Part V, Section 13, "Other Rules."

6.3 Effective Date of Interruptible Transportation Margin

The ITMC shall become effective on November 1 as designated by the Company.

6.4 Interruptible Transportation Margins

The ITMC shall be computed annually based on a forecast of Interruptible Transportation margins and firm sales and firm delivery service throughput volumes.

6.5 Annual ITM Credit Formula

The annual ITM Credit shall be calculated according to the following formulas:

$$ITMC = \underbrace{ITM}_{A:TPvol} + RF_{ITM}$$

and:

Issued:May 9, 2018Issued By:Effective:May 1, 2018Title:Senior Vice PresidentAuthorized by NHPUC Order No. 26,129 in Docket No. DG 17-070, dated May 2, 2018.Senior Vice President

 $RF_{ITM} = \underline{R_{ITM}}$. A:TP_{vol}

Where:

$A: TP_{vol}$	Forecast annual firm sales and firm delivery service throughput.
ITMC	Annual Interruptible Transportation Margin Credit.
ITM	Interruptible Transportation margins
RFITM	Annual Interruptible Transportation margin reconciliation adjustment
	factor applicable to total firm sales and firm delivery service throughput.
R _{ITM}	Reconciliation costs - interruptible Transportation margins, Account
	173 balance, inclusive of the associated Account 173 interest.

6.6 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between annual, interruptible Transportation margins returned toward the local distribution function, as calculated by multiplying the interruptible Transportation margin credit (ITMC) times monthly firm sales and firm delivery service throughput during the year, and the actual margins for the year.

See Part V, Section 6.5 for Reconciliation formulas.

6.7 Application of ITMC to Bills

The ITMC (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm by period and will be applied to the monthly firm sales and firm delivery service throughput.

6.8 Information to be Filed with the NHPUC

Information pertaining to the Interruptible Transportation Margins will be filed with the NHPUC along with the gas cost information as required pursuant to the LDAC and COGC. Required filings include an annual report providing actual data and resulting updated projection of the end-of-period reconciliation balance, as well as an annual calculation of the ITM credit, which shall be included in an annual LDAC filing. Also, the annual ITM reconciliation balances shall be filed along with the other reconciliation balances included in the LDAC.

7. Gas Assistance Program ("GAP") Costs Allowable for LDAC

7.1 <u>Purpose:</u>

The purpose of this provision is to allow Northern Utilities, subject to the jurisdiction of the NHPUC, to recover the revenue shortfall (costs) associated with customers participating in the Gas Assistance Program, as well as the associated administrative costs, pursuant to DG 20-013. Such costs shall be recovered by applying the GAP Rate to all firm gas Sales and firm Delivery Services throughput billed under the Company's sales and delivery service rate schedules.

7.2 Applicability:

The GAP Rate shall be applied to all firm Sales and Delivery Services customers with the exception of special contract customers who are exempt from the LDAC. The GAP Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

7.3 Gas Assistance Program Costs ("GAPC") Allowable for LDAC

The amount of Gas Assistance Program costs is comprised of the revenue discounts given to customers enrolled under the Gas Assistance Program plus the associated administrative costs The revenue discount and administrative costs shall be the amount approved by the NHPUC.

7.4 <u>Effective Date of Gas Assistance Program Rate</u>

Issued: <u>AugustJune</u> 24, 2021 Effective: November 1, 2021 Issued By: Title: Robert B. Hevert Senior Vice President

Authorized by NHPUC Order No. in Docket No. DG 21-, dated

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the GAP Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

7.5 Definitions:

Gas Assistance Program Costs are the discounts in delivery and cost of gas service revenues (excluding LDAC revenues) generated from customers participating in the Gas Assistance Program. Participating customers receive a 45% discount on the regular Residential Low Income Heating R-10 rate schedule during the Winter period. Also, these costs include the associated administrative costs, which include associated Information Technology and start-up costs.

7.0		(OAI) Kate Formula.
7.6	Gas Assistance Program	("GAD") Pate Formula:

GAP Rate	=	<u>GAPC gap</u>
		A:TPvol

and:

GAPC = (Cust x DCust\$)+(Cust x Avgthm x Dbr)+(Cust x Avgthm x Dcog) +

Ad	minC	

Where:	
AdminC	Costs associated with administering the Gas Assistance
	Program, including IT and start-up costs.
Avgthm	Estimated average therm use per customer for period
	determined from most recent historical therm use under the
	Company's Gas Assistance Program, or Residential
	Heating, rate schedules.
Cust	Estimated number of customers participating in the

Issued: AugustJune 21, 2021 Effective: November 1, 2021

Issued By: Title:

Robert B. Hevert Senior Vice President

Authorized by NHPUC Order No. in Docket No. DG 21-, dated .

V. LOCAL DELIVERY ADJUSTMENT CHARGE

	Gas Assistance Program.
Dbr	Difference between the Residential Low Income Heating
	R-10 and discounted Residential Low Income Heating
	Service R-10 base rate charges.
Dcog	Difference between the Residential Low Income Heating
	R-10 and discounted Residential Low Income Heating
	Service R-10 cost of gas charges.
DCust\$	Difference between the Residential Low Income Heating
	R-10 and discounted Residential Low Income Heating
	Service R-10 monthly customer charge.
GAPC	Costs, comprised of the revenue discounts associated with
	customer participation in the Gas Assistance Program, plus
	associated administrative costs, as defined in section 7.5.
RAGAP	Reconciliation Adjustment associated with Gas Assistance
	Program Costs and revenues - Account 173 balance,
	inclusive of the associated interest, as outlined in Section
	7.7
A:TPvol	Forecast annual firm sales and firm delivery service
	throughput.

7.7 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between revenues toward Gas Assistance Program costs as calculated by multiplying the (GAP) Rate times monthly firm throughput volumes and actual GAPC, comprised of the revenue shortfall and administrative costs, allowed as defined in Section 7.5, plus carrying charges calculated on the average monthly balance using the Federal Reserve Statistical Release prime lending rate and then added to the end-of-month balance.

7.8 <u>Application of GAP Rate to Bills</u> The GAP Rate (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

7.9 <u>Information to be Filed with the NHPUC</u> Information pertaining to the Gas Assistance Program (GAP) costs and revenue shall be filed with the NHPUC consistent with the filing requirements of all costs and revenue information included in the LDAC. An annual GAP filing will be required forty-five

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(45) days prior to the effective date of November 1, containing the calculation of the new annual GAP Rate to become effective November 1. The calculation will reflect the forecast of GAP annual costs, the updated annual GAP reconciliation balance and throughput forecast for the upcoming annual period.

8. <u>Expenses Related to Rate Cases Allowable for LDAC</u>

8.1 <u>Purpose</u>

The purpose of this provision is to establish a procedure that allows Northern Utilities to adjust its rates for the recovery of NHPUC-approved rate case expenses.

8.2 <u>Applicability</u>

The Rate Case Expenses ("RCE") shall be applied to all firm tariffed customers with the exception of special contract customers. The RCE will be determined by the Company, as defined below.

8.3 Rate Case Expenses Allowable for LDAC

The total amount of the RCE will be equal to the amount approved by the Commission.

8.4 <u>Rate Case Expenses Allowable for LDAC</u>

The effective date of the RCE will be determined by the NHPUC in an individual rate proceeding.

8.5 <u>Definition</u>

The RCE includes all rate case-related expenses approved by the NHPUC. This includes legal expenses, costs for bill inserts, costs for legal notices, consulting fees, processing expenses, and other approved expenses.

8.6 <u>Rate Case Expense (RCE) Factor Formulas</u>

The RCE will be calculated according to the Commission Order issued in an individual proceeding to establish details including the number of years over which the RCE shall be amortized and the allocation of recovery among rate classes. In general, the RCE Factor will be derived by dividing the annual portion

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of the total RCE, plus the RCE Reconciliation Adjustment, by forecast firm annual throughput.

8.7 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between revenues toward Rate Case Expenses as calculated by multiplying the Rate Case Expense Factor (RCEF) times the appropriate monthly volumes and Rate Case Expense allowed.

At the end of the recovery period, any under or over recovery will be included in an active LDAC component, as approved by the Commission.

8.8 Application of RCE to Bills

The RCE (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales and firm delivery service throughput of tariffed customers.

8.9 Information to be Filed with the NHPUC

Information pertaining to the RCE will be filed with the NHPUC consistent with the filing requirements of all cost and revenue information included in the LDAC. The RCE filing will contain the calculation of the new RCE and will include the updated RCE reconciliation balance.

9. <u>Reconciliation of Permanent Changes in Distribution Rates</u>

9.1 <u>Purpose</u>

The purpose of this provision is to establish a procedure that allows Northern Utilities to adjust its rates for the reconciliation of revenues related to a permanent change in the Company's distribution service rates implemented subsequent to the effective date of such change. This provision includes the reconciliation for the difference in revenues charged under temporary versus permanent rates.

9.2 Applicability

The factor to reconcile the revenues resulting from a permanent rate change ("RPC") shall be applied to all firm tariffed customers. The Company will determine the RPC, as defined in this section.

9.3 Amount of RPC Allowable for LDAC

The amount of the RPC will be equal to the amount approved by the Commission.

9.4 <u>Effective Date of RPC Charge</u>

The effective date of the RPC Charge will be determined by the NHPUC on a case by case basis.

9.5 <u>Definition</u>

The RPC is a surcharge mechanism, which allows Northern Utilities to adjust its rates for the reconciliation of revenues generated under delivery service rates that have been permanently changed.

9.6 Formulas to Reconcile Revenues Resulting From a Permanent Rate Change

The RPC will be calculated according to the Commission Order issued in an individual proceeding.

9.7 <u>Reconciliation Adjustment Account</u>

Account 173 shall contain the accumulated difference between revenues toward reconciliation expenses as calculated by multiplying the reconciliation of the permanent changes in delivery rate charge (RPC) times the appropriate monthly volumes and reconciliation amount allowed.

9.8 Application of RPC Charge to Bills

The RPC charge (\$ per therm) shall be calculated to the nearest one onehundredth of a cent per therm and will be applied to the monthly firm sales and firm delivery service throughput of tariffed customers.

9.9 Information to be Filed with the NHPUC

Information pertaining to the RPC will be filed with the NHPUC consistent with the filing requirements of all cost and revenue information included in the LDAC. The RPC filing will contain the calculation of the new RPC charge and will include the updated RPC reconciliation balance.

10. <u>Regulatory Cost Adjustment Mechanism ("RCAM")</u>

10.1 Purpose

The purpose of this provision is to establish a procedure that allows Northern Utilities to recover the increase in local property tax expense associated with HB 700 and RSA 72:8-d and -e. This rate shall also recovery the change in the Company's annual NHPUC regulatory assessment. <u>Also, as approved in Docket</u> DG 21-104, the RCAM shall include the over- or under- collection of the following costs compared to the level included in distribution rates: (1) actual delivery write offs compared to the level in distribution rates (2) the annual cost of the AMP (3) special contract revenues. Finally, the rate shall recover waived late payment revenues as determined in Docket DG. 21-104.

10.2 Applicability

The RCAM Rate shall be applied to all Firm Sales and Delivery Service customers with the exception of special contract customers who are exempt from the LDAC. The RCAM Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

10.3 Regulatory Costs Adjustment Mechanism Costs ("RCAM") Allowable for LDAC

The amount of Property_Tax Expense costs is the increase in local property tax expense related to HB 700 beginning in 2020 above the amount of local property tax expense recovery in base rates of \$3,492,961 established in <u>Docket</u> DG 17-070 and two subsequent Step increases.

Effective <u>OctoberJuly 15</u>, 20<u>21</u>17, the amount of the NH PUC regulatory assessment to be charged, or credited, through this clause shall be calculated by taking the total assessment minus the amount in base rates of $\frac{485,194368,964}{2117-104070}$.

The amount of delivery write offs to be charged, or credited, through this clause shall be calculated by taking the amount of actual delivery write offs minus the amount in base rates of \$336,170 established in Docket DG 21-104.

The amount of AMP costs to be charged, or credited, through this clause shall be calculated by taking the annual AMP costs for the 12 months ended July 31 minus the amount in base rates of \$92,480 established in Docket DG. 21-104.

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The amount of waived late payment revenues to be charged, through this clause shall be \$104,863 as established in Docket DG 21-104.

Effective October 1, 2021, the amount of special contract revenues to be charged, or credited, through this clause shall be calculated by taking the actual annual special contract revenues minus the amount in base rates of \$1,197,813 established in Docket DG. 21-104.

10.4 Effective Date of RCAMegulatory Cost Adjustment Mechanism Rate

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the RCAM Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

10.5 Regulatory Cost Adjustment Mechanism ("RCAM") Formula:

I Rate = $RCAMC + RA_{RCAM}$	
A:TP _{vol}	
<u>A:T</u>	P _{vol}

and:

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RCAMC = Property Tax Expense + Regulatory Assessment<u>Costs as defined</u>in Section 10.3

Where:

RCAMC Costs, comprised of the property tax expense as defined in <u>S</u>section 10.3, and the non-distribution portion of the annual NHPUC regulatory assessment.
RARCAM Reconciliation Adjustment associated with Property Tax Expense and Regulatory Assessment Costs and revenues - Account 173 balance, inclusive of the associated interest, as outlined in Section 10.6
A:TPvol Forecast annual firm sales and firm delivery service throughput.

10.6 <u>Reconciliation Adjustments</u>

Account 173 shall contain the accumulated difference between revenues toward Property Tax Expense and Regulatory Assessment costs, as defined in Section 10.3, as calculated by multiplying the RCAM Rate times monthly firm throughput volumes and actual RCAMC, comprised of the property tax expense, costs allowed, as defined in Section 10.3, plus the non-distribution portion of the annual NHPUC regulatory assessment, plus carrying charges calculated on the average monthly balance using the Federal Reserve Statistical Release prime lending rate and then added to the end-of-month balance.

10.7 Application of RCAM Rate to Bills

The RCAM Rate (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

10.8 Information to be Filed with the NHPUC

Information pertaining to the Regulatory Cost Adjustment Mechanism (RCAM) costs and revenue shall be filed with the NHPUC consistent with the filing requirements of all costs and revenue information included in the LDAC. An annual RCAM filing will be required forty-five (45) days prior to the effective date of November 1, containing the calculation of the new annual RCAM Rate to become effective November 1. The calculation will reflect the incremental property tax expense for the prior calendar year and forecasted regulatory assessment annual costs, the updated annual RCAM reconciliation balance and throughput forecast for the upcoming annual period.

11. Effective Date of LDAC

The LDAC shall be filed annually and become effective on November 1 of each

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year pursuant to NHPUC approval. In order to minimize the magnitude of future reconciliation adjustments, the Company may request interim revisions to the LDAC rates, subject to review and approval of the NHPUC.

12. LDAC Formulas

The LDAC shall be calculated on an annual basis, by summing up the various factors included in the LDAC, where applicable.

LDAC Formula

 $LDAC^{X} = EEC^{X} + LBR^{X} + ERC - ITMC + GAPRA + RCEF^{X} + RPC^{X} + RCAM$

Where:

EEC ^x	Annualized class specific Energy Efficiency Charge
LR ^x	Annualized class specific Lost Revenue Rate
LDAC ^x	Annualized class specific Local Delivery Adjustment Clause
ITMC	Annualized Interruptible Transportation Margin Credit
ERC	Total firm annualized Environmental Response Charge
RCEF ^x	Annualized class specific Rate Case Expense Factor
GAP	Gas Assistance ProgramRate
RPC ^x	Reconciliation of Permanent Changes in Delivery Rates
RCAM	Regulatory Cost Adjustment Mechanism Rate

13. Application of LDAC to Bills

The component costs comprising the LDAC (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm Sales and firm Delivery Services throughput in accordance with the table shown in Part V, Section 2.

14. Other Rules

(1) The NHPUC may, where appropriate, on petition or on its own motion, grant an exception from the provisions of these regulations, upon such terms that it may

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determine to be in the public interest.

- (2) Such amendments may include the addition or deletion of component cost categories, subject to the review and approval of the NHPUC.
- (3) The Company may implement an amended LDAC with the NHPUC approval at any time.
- (4) The NHPUC may, at any time, require the Company to file an amended LDAC.
- (5) The operation of the LDAC is subject to all powers of suspension and investigation vested in the NHPUC.

15. <u>Amendments to Uniform System of Accounts</u>

173 Interruptible Transportation Margin Reconciliation Adjustment for LDAC

This account shall be used to record the cumulative difference between annual Interruptible Transportation margin returns and annual Interruptible Transportation margins. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 6.

173 Energy Efficiency Reconciliation Adjustment

This account shall be used to record the cumulative difference between the sum of Energy Efficiency program costs and performance incentives and the revenues collected from customers pursuant to this clause with respect to a given Rate Category. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 3.

173 Environmental Response Costs Reconciliation Adjustment

This account shall be used to record the cumulative difference between the revenues toward environmental response costs as calculated by multiplying the ERC times monthly firm sales volumes and delivery service throughput and environmental response costs allowable per formula. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 5.

173 Rate Case Expense Reconciliation Adjustment This account shall be used to record the cumulative difference between the recovery and actual amounts of third party incremental expenses associated with

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recovery and actual amounts of third party incremental expense associated with the Company's Rate Case initiatives. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 8.

- 173 Reconciliation of Permanent Changes in Delivery Rates This account shall be used to record the cumulative differences between the recovery or refund and actual amount of the reconciliation of permanent changes in delivery rates. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 9.
- 173 Gas Assistance Program Reconciliation Adjustment

This account shall be used to record the cumulative difference between the recovery and actual Gas Assistance Program and Regulatory Assessment Costs. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 7.

173 Lost Revenue Reconciliation Adjustment

This account shall be used to record the cumulative difference between the lost revenue of the Company and the revenue collected from customers pursuant to this clause with respect to a given Rate Category. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 4.

173 Regulatory Cost Adjustment Mechanism Reconciliation Adjustment

This account shall be used to record the cumulative difference between the recovery and actual Property Tax Expense and Regulatory Assessment <u>cCosts as</u> <u>defined in Section 10.3 above</u>. Entries to this account shall be determined as outlined in the Local Delivery Adjustment Charge, Part V, Section 7.

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