

VIA HAND DELIVERY

September 15, 2010

Debra A. Howland **Executive Director and Secretary** New Hampshire Public Utilities Commission 21 S. Fruit St., Suite 10 Concord, New Hampshire 03301

•
-

Re: Northern Utilities, Inc. -- DG 10- , 2010 / 2011 Winter Season Cost of Gas and Associated Charges Filing

Dear Ms. Howland:

Northern Utilities, Inc. ("Northern" or the "Company") hereby submits an original and seven copies of the Exhibits and Direct Testimony of James D. Simpson, Francis X. Wells and Joseph F. Conneely in support of the Company's 2010-2011 Winter Season Cost of Gas filing and other associated proposed tariff changes.

Northern respectfully requests approval for the following Tariffs:

Forty-seventh Revised Page 38 (CGA); Fifty-first Revised Page 39 (CGA); Fourteenth Revised Page 56 (LDAC); Forty-sixth Revised Page 94 (Rate Summary); Forty-sixth Revised Page 95 (Rate Summary); Fortieth Revised Page 96 (Rate Summary); Tenth Revised Page 154 (Appendix A); Ninth Revised Page 169 (Appendix C); and Third Revised Page 170-b (Appendix D).

The above listed tariffs are issued September 15, 2015 by Mark H. Collin, Treasurer. to be effective November 1, 2010.

Forty-seventh Revised Page 38 (CGA) is the statement of the Company's anticipated direct and indirect costs of gas.

Fifty-first Revised Page 39 (CGA) contains the calculations of the proposed Cost of Gas Adjustment Rates for Residential and General Service Firm Sales Customers.

Fourteenth Revised Page 56 (LDAC) contains proposed rates for the Company's RLIAP rate DSM rate and ERC Rate, all of which are components of the Company's Local Distribution Adjustment Clause rate. Support for the ERC Component was filed under separate cover on September 15, 2010.

Frederick J. Stewart Manager Regulatory Services

6 Liberty Lane West Hampton, NH 03842-1720

one: 603-773-6534 ax: 603-773-6734

Email: stewart@unitil.com

Forty-sixth Revised Pages 94, 95 & 96 (Rate Summaries) have been updated to reflect the proposed CGA and the proposed LDAC.

Tenth Revised Page 154 (Appendix A), Schedule of Administrative Fees and Charges: the Supplier Balancing Charge has been updated to reflect the Company's latest balancing resources and associated capacity costs, and the Peaking Service Demand Charge has been updated to reflect the Company's Peaking resources and associated costs, as discussed in the Testimony of James D. Simpson and shown in Schedule 10A.

Ninth Revised Page 169 (Appendix C) contains the proposed Capacity Allocators.

Third Revised Page 170-b (Appendix D) contains the Firm Sales Service Re-Entry Fee Bill Adjustment. Support for this charge was provided to the Commission in the Company's annual report filed under separate cover on September 15, 2010.

The proposed 2010 / 2011 Winter Season Cost of Gas Adjustment (CGA) for residential customers is \$1.1177 per therm, \$0.1041 per therm or 10.3 percent higher than the 2009 / 2010 Winter Season CGA. The typical bill for a residential heating customer for the 2010 / 2011 Winter Season is projected to be \$1,453.04; this is higher than the 2009 / 2010 Winter Season bill of \$1,341.35 by \$111.69 or 8.3 percent.

Also included in the filing behind Tab Schedule 15 is a revised reconciliation of the 2009 / 2010 Winter Season gas costs and recoveries. The revision was made necessary by changes to the Adjusted Target Volumes (ATV) reconciliation.

The Company will submit to the Commission its revised 2010 / 2011 Winter Season CGA reflecting then current costs a few weeks before the November 1, 2010 effective date.

Please be advised that Susan Geiger, Esq. of Orr & Reno has been engaged to represent Northern in this proceeding.

If you have any questions or need additional information, please contact me or Susan Geiger.

Very Truly Yours,

Frederick J. Stewart

Enclosures

CC: Edward Damon, Staff Counsel

Meredith Hatfield, OCA Kenneth Traum, OCA Susan Geiger, Orr & Reno James D. Simpson, CEA

NORTHERN UTILTIES, INC. - NEW HAMSHIRE DIVISION Winter Season 2010-2011 Cost of Gas Filing

Table of Contents

Tab	Title	Description
Summary	Summary	Summary
1	Schedule 1A	NH Allocated Demand Costs
	Schedule 1B	NH Allocated Commodity Costs
2	Schedule 2	Contracts Ranked on a Per-Unit Cost Basis
3	Schedule 3	COG (Over)/Under Cumulative Recovery Balances and Interest Calculation
4	Schedule 4	Reserved for future use
5	Schedule 5A	Demand Cost Forecast
	Attachment	Demand Cost Rate Support
	Schedule 5B	Capacity Assignment Revenues
	Schedule 5C	PNGTS Projected Transport Costs
	Schedule 5D	Expenses Incurred to Oppose Proposed PNGTS Rate Increase
6	Schedule 6A	Commodity Cost Forecast
	Schedule 6B	Detailed City Gate Cost Calculations
	Attachment	Commodity Cost Rate Support
7	Schedule 7	Hedging Program Gains and Losses
8	Schedule 8	Typical Bill Analyses
9	Schedule 9	Variance Analysis of the Cost of Gas Rate Components
10	Schedule 10A	Allocation of Capacity Costs to Firm Sales Rate Classes
	Schedule 10B	Forecast Firm Sales
	Attachment	Metered Distribution Deliveries and Meter Counts
	Attachment	Sales Service Deliveries Forecast by Rate Class
	Schedule 10C	Allocation of Commodity Costs to Firm Sales Rate Classes
11	Schedule 11A	Normal and Design Year Sendout Volumes - Normal Year
	Schedule 11B	Normal and Design Year Sendout Volumes - Design Year
	Schedule 11C	Capacity Utilization
	Schedule 11D	Forecast of Upcoming Winter Period Design Day Report
12	Schedule 12	Capacity Path Diagrams and Details by Supply Source
13	Schedule 13	Load Migration from Sales to Transportation
14	Schedule 14	Inventory Activity
15	Schedule 15	Winter Cost of Gas Reconciliation, as revised.
16	Schedule 16	Local Distribution Adjustment Charge Calculation
17	Schedule 17	Environmental Response Cost
18	Schedule 18	Supplier Balancing Charge and Peaking Demand Charge Calculations
19	Schedule 19	Capacity Allocators Calculation
20	Schedule 20	Reserved for annual Hedging Program
21	Schedule 21	Allocation of Demand Costs to ME & NH
22	Schedule 22	Allocation of Commodity Costs to ME & NH
23	Schedule 23	Supporting Detail to Proposed Tariff Sheets

N.H.P.U.C No.10 NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division

Period Covered: November 1, 2010 - April 30, 2011

	Column A	Column B	Column C
1 2	ANTICIPATED DIRECT COST OF GAS Purchased Gas for Sales Service:		
3	Demand Costs:	\$ 1,944,296	
4	Supply Costs:	\$ 5,408,538	
5 6 7	Storage & Peaking Gas for Sales Service: Demand, Capacity:	f 42 520 00C	
8 9	Commodity Costs:	\$ 13,538,806 \$ 7,629,178	
10 11	Hedging (Gain)/Loss	\$ 1,054,446	
12 13	Interruptible Sendout Cost	\$ -	
14 15	Inventory Finance Charge	\$ 10,094	
16 17	1	\$ (1,771,080)	
18 19		<u> </u>	
20 21	Total Anticipated Direct Cost of Gas		\$ 27,814,277
22	ANTICIPATED INDIRECT COST OF GAS Adjustments:		
24	Prior Period Under/(Over) Collection	¢ 2.527.402	
25	Prior Period Adjustment (ATV Reconciliation)	\$ 2,527,403	
26	Interest	\$ -	
27		\$ 99,945	
	Refunds	\$ -	
28	Interruptible Margins	\$ -	
29 30	Total Adjustments		\$ 2,627,348
31	Working Capital:		
32	Total Anticipated Direct Cost of Gas	\$ 27,814,277	
33	Working Capital Percentage	0.190%	
34	Working Capital Allowance	\$ 52,847	
35			
36	Plus: Working Capital Reconciliation (Acct 182.11)	\$ (83,069)	
37		4 15515	
38 39	Total Working Capital Allowance		\$ (30,222)
40	Bad Debt:		
41	Total Anticipated Direct Cost of Gas	¢ 27 01/ 277	
42	Plus: Prior Period Under/(Over) Collection	\$ 27,814,277 \$ 2,527,403	
43	Plus: Prior Period Adjustment (ATV Reconciliation)	\$ 2,527,405	
45	Plus: Total Working Capital	\$ (30,222)	
46	Subtotal		
47	Oublotai	\$ 30,311,459	
48	Bad Debt Percentage	0.450%	
49	Bad Debt Allowance	\$ 136,402	
50	Plus: Bad Debt Reconciliation (Acct 182.16)	\$ (2,655)	
51	Total Bad Debt Allowance		\$ 133,747
52			Ψ (00,14)
53 54	Local Production and Storage Capacity		\$ 686,673
55 56	Miscellaneous Overhead-79.11% Allocated to Winter Season		\$ 98,333
57 58	Total Anticipated Indirect Cost of Gas		\$ 3,515,879
59 60	Total Cost of Gas		\$ 31,330,157
61			
62			
02			

N.H.P.U.C No.10 NORTHERN UTILITIES, INC.

Summary

Anticipated Cost of Gas

New Hampshire Division

58 59

60 61 62 **Total Cost of Gas**

Period Covered: November 1, 2010 - April 30, 2011

Reference Column A

Column D ANTICIPATED DIRECT COST OF GAS Purchased Gas for Sales Service: 3 Demand Costs: Schedule 1A, LN 71 4 Supply Costs: Schedule 1B, LN 15 5 6 Storage & Peaking Gas for Sales Service: Demand, Capacity: Schedule 1A, LN 71 8 Commodity Costs: Schedule 1B, LN 16 + Schedule 1B, LN 17 9 10 Hedging (Gain)/Loss Schedule 1B, LN 15 12 Interruptible Sendout Cost -(Schedule 1B, LN 22) 13 Inventory Finance Charge 14 Schedule 22, LN 105 15 16 Capacity Release, Asset Management, PNGTS Cost, -(Schedule 1A, LN 76) **PNGTS Refund** 17 18 **Adjustment for Actual Costs** 19 20 **Total Anticipated Direct Cost of Gas** Sum (LN 3:LN 18) 21 22 ANTICIPATED INDIRECT COST OF GAS 23 Adjustments: 24 Prior Period Under/(Over) Collection Schedule 3, LN 105: April Prior Period Adjustment (ATV Reconciliation) 25 26 Interest LN 44 27 Refunds Company Analysis 28 Interruptible Margins -(Schedule 1A, LN 77) 29 Total Adjustments Sum (LN 24:LN 28) 30 31 Working Capital: 32 Total Anticipated Direct Cost of Gas LN 20 33 Working Capital Percentage NHPUC No. 10 Section 4.06.1 34 Working Capital Allowance LN 32 * LN 33 35 36 Plus: Working Capital Reconciliation (Acct 182.11) Company Analysis 37 38 Total Working Capital Allowance Sum (LN 34:LN 36) 39 40 **Bad Debt:** 41 Total Anticipated Direct Cost of Gas LN 20 42 Plus: Prior Period Under/(Over) Collection LN 24 Plus: Prior Period Adjustment (ATV Reconciliation) 43 LN 25 45 Plus: Total Working Capital 46 Subtotal Sum (LN 41: LN 45) 47 48 Bad Debt Percentage NHPUC No. 10 Section 4.06.1 49 **Bad Debt Allowance** LN 48 * LN 46 50 Plus: Bad Debt Reconciliation (Acct 182.16) Company Analysis 51 Total Bad Debt Allowance LN 49 + LN 50 52 53 **Local Production and Storage Capacity** Schedule 1B, LN 84 55 Miscellaneous Overhead-79.11% Allocated to Winter SSchedule 1B, LN 83 56 57 Total Anticipated Indirect Cost of Gas Sum (LN 29:LN 55)

LN 57 + LN 20

63	CALCULATION OF FIRM SALES COST OF GAS RATE					
64 65	Period Covered: November 1, 2010 - April 30, 2011					
66 67	Column A		Column B	Co	olumn C	
68	Total Anticipated Direct Cost of Gas		\$ 27,814,277			
69 70	Projected Prorated Sales (11/01/10 - 04/30/11) Direct Cost of Gas Rate		28,028,950	\$	0 9923	per therm
71	Shoot oost of our Nate			Ψ	0.5525	per aterm
72	Demand Cost of Gas Rate		\$ 13,712,022	\$		per therm
73 74	Commodity Cost of Gas Rate Total Direct Cost of Gas Rate		\$ 14,102,256 \$ 27,814,277	\$ \$		per therm per therm
75				•	0.0000	p =
76 77	Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/10 - 04/30/11)		\$ 3,515,879 28,028,950			
78	Indirect Cost of Gas			\$	0.1254	per therm
79 80						
81 82	TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE	11/01/2010		\$	1.1177	per therm
83	RESIDENTIAL COST OF GAS RATE - 11/01/10		COGwr	\$	1.1177	per therm
84		Maximum (CO	G+25%)	\$	1.3971	
85 86						
87	COM/IND LOW WINTER USE COST OF GAS RATE - 12	1/01/10	COGwl	\$	1.0019	per therm
88		Maximum (CO	G+25%)	\$	1.2524	
89 90	C&I HLF Demand Costs Allocated per SMBA	\$ 712,743				
91	PLUS: Residential Demand Reallocation to C&I HLF	\$ 12,540				
92	C&I HLF Total Adjusted Demand Costs	\$ 725,283				
93 94	C&I HLF Projected Prorated Sales (11/01/10 - 04/30/11) Demand Cost of Gas Rate	2,402,246 \$ 0.3019				
95		,				
96	C&I HLF Commodity Costs Allocated per SMBA	\$ 1,378,807				
97 98	PLUS: Residential Commodity Reallocation to C&I HLF C&I HLF Total Adjusted Commodity Costs	\$ 1,419 \$ 1,380,226				
99	C&I HLF Projected Prorated Sales (11/01/10 - 04/30/11)	2,402,246				
100	Commodity Cost of Gas Rate	\$ 0.5746				
101	In alter at O and at O a	* 0.4054				
102	Indirect Cost of Gas	\$ 0.1254				
103	Total C&I HLF Cost of Gas Rate	\$ 1.0019				
105						
106 107	COM/IND HIGH WINTER USE COST OF GAS RATE - 1	1/01/10	COGwh	\$	1.1398	per therm
108		Maximum (CO		\$	1.4248	
109	CRILLE Demand Costs Allegated nor CMPA	¢ c 405 400				
	C&I LLF Demand Costs Allocated per SMBA PLUS: Residential Demand Reallocation to C&I LLF	\$ 6,495,498 \$ 114,281				
	C&I LLF Total Adjusted Demand Costs	\$ 6,609,778				
	C&I LLF Projected Prorated Sales (11/01/10 - 04/30/11)	12,591,463				
114 115	Demand Cost of Gas Rate	\$ 0.5249				
116	C&I LLF Commodity Costs Allocated per SMBA	\$ 6,157,247				
	PLUS: Residential Commodity Reallocation to C&I LLF	\$ 6,338				
	C&I LLF Total Adjusted Commodity Costs C&I LLF Projected Prorated Sales (11/01/10 - 04/30/11)	\$ 6,163,585 12,591,463				
120	Commodity Cost of Gas Rate	\$ 0.4895				
121	Indirect Cost of Gas	£ 04054				
123	munect Cost of Gas	\$ 0.1254				
	Total C&I LLF Cost of Gas Rate	\$ 1.1398				

63 64 65	CALCULATION OF FIRM SALES COST OF GAS RATE Period Covered: November 1, 2010 - April 30, 2011	
66	Column A	Column D
67 68 69 70 71	Total Anticipated Direct Cost of Gas Projected Prorated Sales (11/01/10 - 04/30/11) Direct Cost of Gas Rate	LN 20 Company Analysis LN 68 / LN 69
72 73 74 75	Demand Cost of Gas Rate Commodity Cost of Gas Rate Total Direct Cost of Gas Rate	Column B : SUM (LN 3 , LN 7 , LN 16) Column B : SUM (LN 4 , LN 8 , LN 10 , LN 12 , LN 14) SUM (LN 72 : LN 73)
76 77 78 79	Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/10 - 04/30/11) Indirect Cost of Gas	LN 57 Company Analysis LN 76 / LN 77
80 81 82	TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE	E LN 74 + LN 78
83 84	RESIDENTIAL COST OF GAS RATE - 11/01/10	Company Analysis LN 83 * 1.25
85 86		
87 88	COM/IND LOW WINTER USE COST OF GAS RATE - 1	Company Analysis LN 87 * 1.25
89 90	C&I HLF Demand Costs Allocated per SMBA	Schedule 10A, LN 169
91	PLUS: Residential Demand Reallocation to C&I HLF	
92		Schedule 26, LN 16
93	C&I HLF Total Adjusted Demand Costs C&I HLF Projected Prorated Sales (11/01/10 - 04/30/11)	Sum (LN 90 : LN 91)
94	Demand Cost of Gas Rate	Company Analysis
	Demand Cost of Gas Rate	LN 92 / LN 93
95 06	COLULE Commodity Controllerated and CMBA	0.1.1.1.401.1.1.00
96	C&I HLF Commodity Costs Allocated per SMBA	Schedule 10A, LN 139
97	PLUS: Residential Commodity Reallocation to C&I HLF	Schedule 26, LN 26
98 99	C&I HLF Total Adjusted Commodity Costs C&I HLF Projected Prorated Sales (11/01/10 - 04/30/11)	Sum (LN 96 : LN 97)
	Commodity Cost of Gas Rate	Company Analysis LN 98 / LN 99
101	Commodity Cost of Gas Nate	FIN 30 / FIN 33
102	Indirect Cost of Gas	LN 78
103 104 105	Total C&I HLF Cost of Gas Rate	Sum (LN 94, LN 100, LN 102)
106 107	COM/IND HIGH WINTER USE COST OF GAS RATE - 1	
108	COMMON THEIR WINTER USE COST OF GAS RATE - I	LN 107 * 1.25
109		LIV 107 1.25
	C&I LLF Demand Costs Allocated per SMBA	Schedule 10A, LN 170
111		Schedule 26, LN 17
	C&I LLF Total Adjusted Demand Costs	Sum (LN 110 : LN 111)
	C&I LLF Projected Prorated Sales (11/01/10 - 04/30/11)	Company Analysis
	Demand Cost of Gas Rate	LN 112 / LN 113
115		er trectell IIV
	C&I LLF Commodity Costs Allocated per SMBA	Schedule 10A, LN 140
	PLUS: Residential Commodity Reallocation to C&I LLF	Schedule 26, LN 27
	C&I LLF Total Adjusted Commodity Costs	Sum (LN 116 : LN 117)
	C&I LLF Projected Prorated Sales (11/01/10 - 04/30/11)	Company Analysis
120	Commodity Cost of Gas Rate	LN 118 / LN 119
121	-	
	Indirect Cost of Gas	LN 78
123		
	Total C&I LLF Cost of Gas Rate	Sum (LN 114, LN 120, LN 122)

Northern Utilities, Inc.

New Hampshire Division

WINTER SEASON 2010-2011 PROPOSED COST OF GAS ADJUSTMENT

TO BE EFFECTIVE NOVEMBER 1, 2010

FILED SEPTEMBER 15, 2010



Prefiled Testimony of James D. Simpson



NORTHERN UTILITIES, INC. NEW HAMPSHIRE DIVISION **WINTER PERIOD 2010 / 2011** COST OF GAS ADJUSTMENT FILING PREFILED TESTIMONY OF JAMES D. SIMPSON

1	I.	INTRODUCTION		
2	O.	Please state your name	husiness address	an.

16

17

18

I.

2	Q.	Please state your name, business address, and position.
3	Α.	My name is James D. Simpson. I am a Vice President with Concentric Energy Advisors, 293
4		Boston Post Road West, Marlborough, Massachusetts 01752
5	Q.	Please describe your relevant work experience.
6	A.	I have over 30 years experience in the energy industry in a variety of roles and
7		responsibilities with an overall focus on economics, pricing, forecasting and regulatory
8		matters. I was employed by Bay State Gas Company ("Bay State") from 1982 until 2000; for
9		much of my time at Bay State, I was responsible for rates and regulatory affairs for Bay State
10		and Northern Utilities, Inc. ("Northern" or "Northern Utilities"). I have been with
11		Concentric Energy Advisors ("Concentric") since 2005. My professional qualifications and
12		experience are provided in Attachment NUI-JDS-1 of this testimony.
13	Q.	Have you previously testified before the New Hampshire Public Utilities Commission
14		("Commission")?
15	Α.	Yes, I testified on behalf of Northern Utilities in the 2009 / 2010 Winter Cost of Gas

("COG") proceeding, Docket No. DG 09-167, the 2009 Summer Cost of Gas proceeding,

Docket No. DG 09-052, and the 2010 Summer Cost of Gas proceeding, Docket No. DG

10-050. In addition, while I was employed by Bay State, I testified before the Commission

- on behalf of Northern Utilities in many proceedings on a variety of issues related to rates, growth-related projects and other economic and regulatory matters.
- 3 Q. Please explain the purpose of your prepared direct testimony in this proceeding.
- A. 4 Francis X. Wells, Senior Energy Trader for Unitil; Joseph F. Conneely, Senior Regulatory 5 Analyst for Unitil; and I are sharing the responsibility in this proceeding for describing and 6 explaining the proposed 2010 / 2011 Winter New Hampshire Division COG rate 7 adjustment that the Company is proposing to make effective November 1, 2010. Mr. Wells 8 will describe and explain the forecast of gas demand and the resulting forecasted gas sendout 9 and gas costs that he developed for the Maine and New Hampshire divisions. Mr. Wells will 10 also describe the impact of the Company's Hedging Program for the 2010 / 2011 Winter 11 period. Mr. Conneely will discuss the calculation of the 2010 / 2011 Environmental 12 Response Cost Rate Adjustment, and typical bill analyses for the proposed Winter New 13 Hampshire Division COG rates.
 - I will describe and explain the calculation of the COG that Northern Utilities proposes to bill from November 1, 2010 to April 30, 2011. I will also discuss the New Hampshire 2009 / 2010 Winter Cost-of-Gas Reconciliation Filing.
- 17 Q. Please provide a list of the attachments that you have prepared in support of your testimony.
- 18 A. The attachments that I have prepared in support of my testimony are listed below.

15

16

Attachment-1	James D. Simpson Professional Qualifications
Summary Schedule	Supporting Detail to the Tariff Sheets
•	Bad Debt, Working Capital
Schedule 1A	Allocation of New Hampshire Fixed Capacity Costs
	To Months and Seasons

Schedule 1B	New Hampshire Division Commodity Cost Analysis
Schedule 3	New Hampshire Division (Over) / Undercollection Balances and
	Interest Calculations
Schedule 9	Variance Analysis / Comparison to 2009 Off-Peak
Schedule 10A	Allocation of New Hampshire Demand Costs
	To New Hampshire Firm Sales Rate Classes
Schedule 10B	Division Sales and Sendout Forecast
Schedule 10C	Allocation of New Hampshire Variable Gas Costs
	To New Hampshire Firm Sales Rate Classes
Schedule 14	Northern Utilities Inventory Activity
Schedule 22	Allocation of Northern Commodity Costs
	To New Hampshire and Maine Divisions
Schedule 21	Allocation of Northern Fixed Capacity Costs
	To New Hampshire and Maine Divisions
Schedule 23	Supporting Detail to Proposed Tariff Sheets

II. COST OF GAS FACTOR

1

2

3

4

5

6

A. Allocation of Demand-Related Costs to Maine and New Hampshire Divisions

- Q. Please explain how the projected fixed capacity-related costs, i.e. (a) pipeline reservation and gas supply demand charges, (b) underground storage capacity costs and (c) peaking resource capacity costs are allocated between Northern's Maine and New Hampshire divisions.
- A. Total Northern capacity-related costs are allocated between the Maine and New Hampshire divisions by application of the Modified Proportional Responsibility ("MPR") methodology.

 The MPR methodology allocates fixed capacity-related gas costs to the Maine and New Hampshire divisions in a two-step process: (1) capacity-related costs, by resource type¹, are allocated to months by application of MPR allocation factors, and (2) the capacity related costs allocated to each month are allocated to the Maine and New Hampshire divisions

Pipeline, storage, and peaking

1		based on the relative shares of Design Year demand ² in that month. This MPR
2		methodology was orally approved by the Commission on December 30, 2005 to be effective
3		January 1, 2006. Subsequently, on June 1, 2006, the Commission issued Order No. 24, 627
4		in docket DG 05-080 granting written approval of the MPR methodology.
5		As I will explain in more detail in the following responses, I used the MPR methodology to
6		allocate total Northern annual demand costs to the Maine and New Hampshire divisions for
7		the 2010 / 2011 Winter period, i.e. November 2010 through April 2011, and for the 2011
8		Summer COG, i.e. May through October 2011.
9	Q.	Please give an overview of the process that you followed to allocate total Northern demand
10		costs for the period November 2010 through October 2011 to the Maine and New
11		Hampshire divisions.
12	A.	I have prepared Schedule 21 to explain how I calculated the MPR factors and then how I
13		used these factors to allocate total Northern annual demand costs for the period November
14		2010 through October 2011 ("COG Period") to the Maine and New Hampshire divisions.
15		Schedule 21 is arranged in three major sections: (1) Total fixed capacity costs, by type of
16		resource (pipeline, storage, and peaking) are summarized in Lines 1 through 10. (2) These
17		fixed capacity costs for each resource type are allocated to each month in the COG Period
18		according to MPR allocators that were developed specifically for each resource type as
19		shown on Lines 13 through 56 (Schedule 21, pages 1 and 3); the MPR allocators are based

For the MPR allocation process, Design Year demand is calculated as the actual demand to Maine and New Hampshire firm sales and assigned capacity / non-grandfathered transportation customers for the period May, 2009 through April 2010, adjusted to reflect design conditions from November through October.

on design year sendout volumes for each resource type. (3) The fixed capacity costs that are allocated to each month in Step 2 are then allocated to the Maine and New Hampshire divisions according to design year total firm sendout as shown in Lines 58 through 90. The last column of Pages 2 and 4 of Schedule 21 are descriptions of the sources of data and explanations of the calculations that I have included in Schedule 21 and other attachments to my testimony.

Please explain how you allocated total Northern Fixed Capacity Costs to the months in the COG Period.

Α.

Lines 3 through 6 of Schedule 21 show the total Northern annual projected demand costs for Pipeline, Storage, and Peaking resources; these forecasted demand costs were provided to me by Mr. Wells. Mr. Wells also provided estimates of Capacity Release revenues and Asset Management revenues, which I have summarized in Lines 8 and 9 of Schedule 21. As shown on Schedule 21, Line 7, Northern Utilities' share of litigation costs that have been incurred by the PNGTS Shippers Group ("PSG") in the PNGTS rate case, RP08-306 from September, 2009 to mid-August 2010 is \$326,567. For the purpose of incorporating the PNGTS Litigation Expense, which is discussed in Mr. Well's testimony, into the cost of gas rates, I have reflected these costs as an offset to Asset Management revenues throughout the attachments to my testimony. Mr. Wells has also provided an estimate refunds from the PNGTS rate cast RP08-306. I have added the sales customers' portion of the PNGTS refund to the Asset Management revenues, net of the PNGTS litigation costs.

The forecast of demand costs that Mr. Wells prepared is provided in Schedule 5.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

The development of the MPR factors and the application of these factors to allocate Pipeline, Storage and Peaking demand costs to each month are shown on Schedule 21, Lines 17 through 22, Lines 33 through 40 and Lines 44 though 49, respectively. In addition, Lines 26 through 29 show the calculation of the Injection Fees by month. Injection Fees are the capacity costs of that portion of Northern's pipeline capacity that is used to transport gas to the underground storage fields; these Injection Fees are added to the Storage demand costs, as shown on Line 39, and subtracted from the Pipeline demand costs, as shown on Line 53. Northern fixed capacity costs that have been allocated to each month are summarized and consolidated on Lines 50 through 56. Lines 50, 51 and 52 repeat the Pipeline, Storage, and Peaking capacity costs from Lines 22, 40, and 49. Line 53 shows the credit to Pipeline capacity costs that is related to the Injection Fees that have been added to the Storage capacity costs. In addition, (a) 1/5th of total Capacity Release revenues are allocated to each month from November through March, as shown on Line 54 and (b) 1/6th of total Asset Management revenues, net of Northern's share of PSG costs are allocated to each month from November through April, as shown on Line 55. Q. Finally, how are the total Demand Costs and the Capacity Release and Asset Management revenues net of Northern's share of PSG costs, which have been allocated to each month according to the process that you described above, allocated to the Maine and New Hampshire divisions? A. Total Northern Demand Costs and Capacity Release and Asset Management revenues allocated to each month are then allocated to the Maine and New Hampshire divisions

1		according to the design year total sendout for Maine and New Hampshire, which is shown in
2		lines 61 and 62 of Schedule 21; the calculated percentages are provided in lines 65 and 66.
3		The design year sendout quantities for the COG period as shown on lines 61 and 62 are the
4		sendout quantities required to serve Maine and New Hampshire firm sales and
5		transportation customers that are subject to the assigned capacity requirements under Design
6		conditions from May 2009 through April 2010.
7		As shown on Line 90 of Schedule 21, 48.95% of total Northern demand costs from
8		November 2010 through October 2011 will be allocated to New Hampshire and the
9		remaining 51.05%, as shown on Line 81, will be allocated to Maine.
10		B. Allocation of New Hampshire Demand-Related Costs to Seasons
11	Q.	Please explain how the projected annual demand-related costs that are allocated to New
12		Hampshire are then assigned to be recovered in the 2010 / 2011 Winter period and the 2011
13		Summer period.
14	A.	I have prepared Schedule 1A to show detailed support for the allocation of New Hampshire
15		Sales Customer demand costs to months, and then to seasons.
16		Lines 2 through 4 of Schedule 1A summarize the Pipeline and Storage and Peaking demand
17		costs that are allocated to the New Hampshire division, as determined in Schedule 21. Lines
18		13 through 23 of Schedule 1A show the calculation of Net Demand Costs for firm sales
19		customers, which is Total Demand Costs allocated to New Hampshire less the capacity
20		assignment revenues from New Hampshire transportation customers. The Winter and
21		Summer rates that will be charged to New Hampshire firm sales customers from November
22		2010 through October 2011 will recover: (1) the Net Pipeline Demand costs shown on Line

Lines 27 through 41 of Schedule 1A show the calculation of Pipeline demand costs for sales customers, separated into (1) Base Use demand costs and (2) Remaining Use demand costs.

The Base Use that is shown on Line 32 of Schedule 1A is the average projected daily use in July and August 2011⁶, for all firm sales classes; the Base Pipeline Demand cost that is shown on Line 40 of Schedule 1A is calculated by multiplying Base Use times the weighted average annual cost of pipeline capacity, as shown on Line 36 of Schedule 1A. Line 41 shows that Remaining Net Pipeline Demand costs for sales customers, which is the difference between total net pipeline demand costs and base use pipeline demand costs.

Lines 45 through 50 show the calculation of the PR factor that is used to allocate (a) Remaining Net Pipeline Demand costs and (b) Storage and Peaking costs related to Firm

20, (2) the Net Storage costs shown on Line 21 and (3) the Peaking demand costs on Line 22

Remaining Net Pipeline Demand costs and (b) Storage and Peaking costs related to Firm Sales customers to the twelve months, November 2010 through October 2011. Lines 52 through 57 show the calculation of the PR factor that is used to allocate (c) Capacity Release and Asset Management revenues and (d) Interruptible margins and Delivery-to-Sales revenues to the six Peak months, November 2010 through April 2011. These PR factors are summarized by type of capacity cost in lines 61 through 65. Line 61 of Schedule 1A shows that one twelfth of the Net annual base use pipeline demand costs are allocated to each

These direct demand costs are adjusted by Capacity Release and Asset Management revenues net of PNGTS litigation costs and the PNGTS refund (Line 76); Interruptible margins (Line 77); and Re-Entry Fee Credits (Line 78).

This separation is necessary because the SMBA allocation methodology allocates base use demand costs to seasons on a different basis than Remaining demand costs are allocated to seasons.

Average Projected Daily demand by class in July and August is shown in Schedule 10B, Line 48.

month and Lines 68 through 84 show the detailed allocation to months of all components
that are included in the Total Net Demand Costs, based on the "All Months" and "Peaking
Months Only" allocation factors.
The total demand costs to be recovered in the 2010 / 2011 W
The total demand costs to be recovered in the 2010 / 2011 Winter COG rates, \$13,712,022,
is shown on Line 80, Winter total column, of Schedule 1A.
C. Allocation of New Hampshire Winter Period Demand Costs to Customer Classes
Please explain how the New Hampshire Division sales service demand-related costs that
were allocated to the Winter period are then allocated to each sales rate class.
The New Hampshire Division sales service base demand-related costs for each month are
allocated to each sales service rate class based on that class' prorata share of total forecasted
firm sendout to sales customer under normal weather conditions in that month. The
remaining demand-related costs for a month are allocated to each sales service rate class
based on that class' prorata share of total forecasted firm sales design day temperature
sensitive demand.
I have prepared Schedule 10B to show the calculation of the factors that are used to allocate
New Hampshire Division sales service Winter period base demand-related costs for each
month to each sales service rate class. The firm sales forecast, shown on Lines 1 to 16; and
the firm sendout forecast by class, shown on Lines 18 to 33 are used to determine daily base
use, shown on Lines 35 to 48; base sendout, shown on Lines 49 to 64; and remaining
sendout, shown on Lines 66 to 80. These base and remaining sendout values for each class

Q.

A.

are used to allocate the Winter period demand costs to New Hampshire division firm sales classes.

I have prepared Schedule 10A to show the allocation of Winter period New Hampshire Net Demand costs to each firm Sales rate class, based on (a) the New Hampshire Net Demand costs that are allocated to each Winter period month as shown in Schedule 1A, Lines 69 through 80 and (b) the Rate Class allocators as shown Schedule 10B, Lines 49 to 80. The Base Sendout allocators, which are used to allocate base demand costs to firm sales rate classes, are shown on Lines 3 through 22 of Schedule 10A and the Remaining Design Day allocators, which are used to allocate all other demand-related costs and credits to firm sales rate classes, are shown on Lines 39 through 48.

The following table shows the location in Schedule 10A of the Net Demand-related costs and credits by component allocated to each firm sales rate class:

Demand Cost Component	Schedule 10A
Base Capacity	Lines 24 through 37
Remaining Pipeline Capacity	Lines 50 through 66
Peaking and Storage Demand	Lines 68 through 84
Capacity Release and Asset Management	Lines 86 through 102
Non-Firm Margins	Lines 104 through 120
Remaining Re-Entry Fee Credit	Lines 122 through 138
Total Non-Base Capacity Costs	Lines 140 through 154
Total Capacity Costs	Lines 156 through 174

D. Allocation of Variable Costs

Q. Please provide a description of Variable costs, and explain how Variable costs are allocated to Northern's Maine and New Hampshire divisions.

Variable costs include commodity costs and variable pipeline and storage costs⁷ for firm sales. Mr. Wells prepared a forecast of Northern variable gas costs by month, which is provided in Schedule 6A. These variable gas costs have been allocated between the Maine and New Hampshire divisions based on each division's percentage of monthly firm normal sendout. I have prepared Schedule 22 to show the allocation of the 2010 / 2011 Winter period variable gas costs between Maine and New Hampshire.

7 Q. Please explain Schedule 22 in detail.

A.

Α.

Lines 1 through 9 of Schedule 22 show the projected sendout volumes, by month and by resource type, which Mr. Wells provided to me. Mr. Wells also provided the projected variable costs by month and by type of gas supply resource that are shown on Lines 11, and 18 through 20 of Schedule 22. The pipeline commodity costs shown on Lines 11 and 18 are based on projected NYMEX prices as of July 22, 2010. Lines 23 through 30 show the estimated gains and losses based on the Company's time-triggered hedging program, and the projected NYMEX prices. The variable gas costs and hedging gains and losses for firm sales service that are summarized on Lines 30 and 40 are allocated to Maine and New Hampshire based on projected monthly firm sales sendout in each division; the allocators are shown on Lines 54, 55, 59 and 60. Gains and losses based on the price triggered hedging program are shown on Lines 31 through 37; these price-triggered hedging gains and losses are directly assigned to New Hampshire. Schedule 22 also shows the allocation of (a) Commodity costs (Maine: Lines 65, 67, 68, and 69; New Hampshire: Lines 74, 76, 77, and 78); and (b) hedging

Variable costs include Pipeline usage / commodity charges, Pipeline fuel retention, Storage commodity injection and withdrawal charges, and Storage Fuel retention.

1		gains and losses (Lines 66 and 75) to Maine and New Hampshire. Finally, Schedule 22
2		shows the inventory finance costs for underground storage and LNG resources (Lines 99 to
3		101); the allocation of these costs to Maine and New Hampshire (Lines 104 to 106) and the
4		allocation of New Hampshire's allocated share of annual inventory finance costs to the
5		Winter period, using the firm sales remaining sendout allocators (Lines 115 to 117).
6		I have prepared Schedule 1B to summarize the New Hampshire Division variable gas costs
7		that were determined in Schedule 22; this attachment also shows the calculation of base and
8		remaining commodity costs.
9	Q.	Please explain how you calculated the inventory finance costs for underground storage and
10		LNG resources that are included in Schedule 22, Lines 71, 80, and 89.
11	A.	The inventory finance charges that are shown on Lines 71, 80, and 89 of Schedule 22 are
12		derived from the inventory finance costs that are shown on Lines 99 and 100 of Schedule
13		228. These inventory finance costs were calculated based on forecasted inventory activity
14		calculations; I have prepared Schedule 14 to show these calculations.
15	Q.	Why are no inventory finance costs (or "carrying costs") shown for Washington 10 Storage
16		on Schedule 22 or calculated in Schedule 14?
17	A.	Under its current asset management arrangement, which runs through March 2010, the
18		Company does not incur inventory finance costs on the Washington 10 inventories, and the

Schedule 22 shows November through April commodity costs; inventory finance costs for May through October are included in the total annual costs (i.e. November through October) shown in Column N of Lines 99 through 101. Total 2010 / 2011 inventory finance costs allocated to New Hampshire, \$10,094 (Line 105) are recovered in the Peak period, as shown on Line 71 of Schedule 22.

- 1 Company anticipates contracting for similar terms beginning April 1, 2011. For this reason, 2 no inventory finance costs were calculated for Washington 10 Storage, or included in rates. 3 Q. Please explain how the New Hampshire Division variable gas costs for Sales customers are 4 allocated to each firm sales class. 5 Α. I have prepared Schedule 10C to show the allocation of New Hampshire Division variable 6 gas costs to each firm sales class. Lines 1 to 21 show the calculation of the Base Sendout 7 allocators, by rate class. Lines 22 to 49 show the allocation of the monthly New Hampshire 8 Division Base Commodity and Base Hedging costs9 to each rate class. Lines 51 to 70 show 9 the calculation of the Remaining Sendout allocators, by rate class. Lines 71 to 98 show the 10 allocation of the monthly New Hampshire Division Remaining Commodity and Remaining Hedging costs 10 to each rate class. A summary of all commodity costs allocated to New 11 12 Hampshire firm sales classes is shown on Lines 99 to 140. 13 E. Refunds 14 Q. Are there any refunds included in this filing? 15 Α. Yes, as I have previously described in this testimony, a refund from PNGTS has been 16 included in this filing. 17 F. 2009 - 2010 Winter Period Reconciliation 18 Q. Please explain the 2009 / 2010 Winter period over and under-collections.
 - New Hampshire Division Winter Period Base Commodity costs and Hedging costs by month are shown in Schedule 1B Lines 37 and 38.

New Hampshire Division Winter Period Remaining Commodity costs and Hedging costs by month are shown in Schedule 1B Lines 39 and 40.

1	A.	The 2009 / 2010 Winter Period Cost of Gas (COG) Adjustment Reconciliation (Form III),
2		which was filed with the Commission on July 30, 2010, provides a detailed explanation of
3		the Winter undercollection of \$2,527,403 a as of April 30, 2010
4		G. Miscellaneous Charges and Credits
5	Q.	Are you projecting that Northern will receive any Re-Entry Fee Credits from transportation
6		customers returning to sales service during the 2010 / 2011 Winter period?
7	A.	No. Northern is not projecting any Re-Entry Fee Credits in this period.
8		H. Cost of Gas Factor
9	Q.	Please explain the calculation of the proposed New Hampshire Division Cost of Gas factors
10		for the 2010 / 2011 Winter period.
11	A.	The Summary Schedule, which is a copy of COG tariff pages 38 and 39, has been prepared
12		to explain the calculation of the proposed 2010 / 2011 Winter COG factors. The text
13		descriptions in the added column: (1) explain the calculations on this tariff page; and (2)
14		provide references to other schedules for the sources of the data that appear on COG tariff
15		Pages 38 and 39. This Summary Schedule shows the calculation of the 2010 / 2011 Winter
16		period COG for each of Northern's three COG Rate Groups (1) Residential classes R-1 and
17		R-2, (2) C&I Low Winter period use classes G-50, G-51 and G-52; and (3) C&I High Winter
18		period use classes G-40, G-41 and G-42.
19		As shown on Summary Schedule for the 2010 / 2011 Winter period, the projected Average
20		Cost of Gas is \$1.1177 per therm (Line 83), which is the sum of the Average Direct Cost of

- Gas, \$0.9923 per therm (Line 74), and the Average Indirect Cost of Gas, \$0.1254 per therm
- 2 (Line 78).
- 3 Q. What are the major components of the 2010 / 2011 Winter Anticipated Direct Cost of Gas?
- 4 A. The table below identifies the major components of Anticipated Direct Gas Costs, as shown in the Summary Schedule.

			Summary
			Schedule,
			Line:
1	Purchased Gas Demand Costs	\$1,944,296	3
2	Purchased Gas Supply Costs	\$5,408,538	4
3	Storage and Peaking Capacity Costs	\$13,538,806	7
4	Storage and Peaking Commodity Costs	\$7,629,178	8
5	Hedging (Gain) / Loss	\$1,054,446	10
6	Interruptible Costs	\$0	12
7	Capacity Release, Asset Management,	\$(1,771,080)	16
	PNGTS Cost, PNGTS Refund	, , ,	
8	Total Anticipated Direct Cost of gas	\$27,814,277	20

- 7 Q. What are the major components of the 2010 / 2011 Winter Anticipated Indirect Cost of
- 8 Gas?

9 A. The table below identifies the major components of Anticipated Indirect Gas Costs, as
10 shown in the Summary Schedule.

			Summary Schedule,
			Line:
1	Prior Period (Over) / Undercollection	\$2,527,403	24
2	Interest	\$99,945	26
3	Refunds	\$0	27
4	Interruptible Margins	\$0	28
5	Working Capital Allowance	\$(30,222)	38

6	Bad Debt Allowance	\$133,747	51
7	Local Production and Storage	\$686,673	53
8	Miscellaneous Overhead	\$98,333	55
9	Total Anticipated Indirect Cost of Gas	\$3,515,879	57

10

- 2 Q. Please explain the calculation of the Working Capital allowance.
- The total Working Capital allowance, \$(30,222) shown on Line 38 of the Summary Schedule
- is the sum of the current period working capital allowance, \$52,847 (Line 34), plus the prior
- 5 period Working Capital reconciliation balance, \$(83,069) (Line 36).
- 6 Q. Please explain the calculation of the Bad Debt factor.
- 7 A. The Bad Debt allowance of \$133,747 (Line 51) is the sum of the current period bad debt
- 8 allowance, \$136,402 (Line 49), plus the prior period Working Capital reconciliation balance,
- 9 \$(2,655) (Line 50).

A. Summary Analyses

- 11 Q. How does the proposed 2010 / 2011 Winter period COG rate compare with the actual 2009
- 12 / 2010 Winter period gas costs?
- 13 A. I have prepared Schedule 9 to compare the proposed 2010 / 2011 Winter average COG rate
- with actual 2009 / 2010 Winter gas costs. Schedule 9 indicates that the projected 2010 /
- 15 2011 Winter period average COG rate (\$1.1177 per therm) is \$0.0599 per therm higher than
- the actual 2009 / 2010 Winter period Total Adjusted Cost (\$1.0579 per therm). The overall
- 17 change in the proposed 2010 / 2011 Winter rate compared to the actual 2009 / 2010 Winter
- average cost of gas is primarily due to (1) increases in demand costs, which are largely offset
- by (2) decreases in commodity costs. The difference between Winter 2009 / 2010 actual

1 average Direct Gas Costs and Winter 2010 /2011 projected average Direct Gas Costs, on 2 Line 15 is \$0.0557 per therm, which is the result of (a) an increase of \$0.1437 per therm in 3 pipeline and storage demand costs (Line 6); (b) a decrease of \$0.0261 in pipeline, storage and 4 peaking commodity costs (lines 8 and 10) and (c) a decrease of \$0.0665 per therm in hedging 5 losses (line 12). The small difference between Winter 2009 / 2010 actual average Indirect 6 Gas Costs and Winter 2010 /2011 projected average Indirect Gas Costs, on Line 31 is 7 \$0.0043 per therm. 8 III. ANCILLARY RATES 9 A. Supplier Balancing Charge Q. 10 Have you updated the Supplier Balancing Charge for the period November 1, 2010 through 11 October 31, 2011? 12 Α. Yes, I have. The proposed Supplier Balancing Charge to be effective November 1, 2010, 13 \$0.75 per MMBtu, is unchanged from the currently effective Supplier Balancing Charge. I 14 have prepared Schedule xx to support the updated Supplier Balancing Charge. IV. 15 FINAL MATTERS 16 Q. Will the Company propose to revise the COG if it receives any new or updated information 17 on supplier or transportation rates? 18 Α. Yes. The Company plans to file a revised calculation of its 2010 / 2011 Winter Period COG 19 to reflect updated gas cost projections and/or other information a few weeks prior to the 20 effective date of November 1, 2010. 21 Q. Does this conclude your testimony?

1 A. Yes it does.

Prefiled Testimony of Francis X. Wells



NORTHERN UTILITIES, INC. NEW HAMPSHIRE DIVISION 2010-2011 WINTER PERIOD COST OF GAS FILING PREFILED TESTIMONY OF FRANCIS X. WELLS

1		INIT	$D \cap \Gamma$	1110	TION
1	_	11/1/1	RUI	JU SU.	

- 2 Q. Please state your name, business address, and position.
- 3 A. My name is Francis X. Wells. I am Senior Energy Trader for Unitil Service Corp.
- 4 ("Unitil"). My business address is 6 Liberty Lane West, Hampton, NH.
- 5 Q. Please describe your relevant educational and work experience.
- 6 A. I received my Bachelor of Arts Degree in both Economics and History from the
- 7 University of Maine in 1995. I joined Unitil in September 1996, assisting in the
- 8 planning and operation of both electric power and natural gas supply portfolios.
- 9 Since January 2001, I have worked as a Senior Energy Trader in the Energy
- 10 Contracts Department. I have responsibilities in the areas of (1) energy supply
- 11 acquisition, including natural gas supply procurement, electric default service
- purchasing; (2) regulatory testimony and reporting; (3) budgeting for both natural
- gas and electric supply, and (4) long-term supply planning.
- 14 Q. Have you previously testified before the New Hampshire Public Utilities
- 15 Commission ("Commission")?

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 2 of 25

7	А.	Yes. I have testified as Northern's gas supply witness before the Commission in
2		Northern's Cost of Gas Factor ("COG") filings since Unitil Corporation acquired
3		Northern in December 2008. I have also testified numerous times before the
4		Commission on behalf of Northern's affiliate, Unitil Energy Systems, Inc. on
5		electric supply related matters.
6	Q.	Please explain the purpose of your prepared direct testimony in this proceeding.
7	A.	First, I will provide an overview of Northern's sales and sendout projections for
8		the 2010-2011 Winter Period.
9		Second, I will provide a summary of Northern's natural gas supply portfolio,
10		which will be used to meet these supply requirements.
11		Third, I will provide a detailed forecast of the gas supply cost forecast, based on
12		the sendout forecast and the natural gas supply portfolio. The gas supply cost
13		forecast includes the following items:
14		Fixed Demand Costs, including reservation and demand charges for
15		supply contracts, transportation contracts and storage contracts that
16		are part of Northern's wholesale portfolio of contracts and any
17		projected offsets due to Northern's capacity assignment program or the
18		optimization of Northern's portfolio through capacity release contracts
19		or asset management contracts. The Fixed Demand Cost forecast is
20		updated once annually, for COG rates effective November 1 each

21

year.

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 3 of 25

1		 Variable Commodity Costs, including any variable supply and
2		transportation or storage charges to be incurred to deliver natural gas
3		commodity to meet Northern's projected sendout requirements.
4		Gains or Losses of Northern's Hedging Program
5		Projected Storage Inventory costs and balances
6		Finally, I will also provide support to the Company's proposal to recover
7		approximately \$184,000 in external legal and consulting costs rising from
8		Northern's opposition to proposed rate increases by Portland Natural Gas
9		Transmission System under FERC Docket No. RP08-306 ("2008 PNGTS Rate
10		Case") and FERC Docket No. RP10-729 ("2010 PNGTS Rate Case").
11		I have provided these materials to James Simpson, Vice President of Concentric
12		Energy Advisors, who used them as inputs to calculate the proposed COG. He
13		also discusses the impact that the proposed COG will have on the bills of the
14		Company's typical customers.
15		
16	II.	SALES AND SENDOUT FORECAST
17	Q.	How does the Company forecast firm distribution deliveries?

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 4 of 25

To forecast metered distribution deliveries for the Company's residential, small 1 Α. 2 commercial and larger industrial/commercial classes, the Company has utilized 3 time-series techniques to develop two forecast models: use-per-meter and the 4 number of meters. The growth rates for customers (meters) and use-per-meter 5 from these models are applied to the most recent data normalized for weather; the forecast monthly billed deliveries for each customer class was calculated by 6 7 multiplying forecast customers times forecast use-per-customer. Forecast deliveries for the large commercial customers with special contracts were 8 developed separately for each of these customers.² 9

- 10 Q. Please provide the forecast distribution deliveries, meter counts and use-per-11 meter figures utilized in this COG filing and a comparison of this forecast to 12 weather normalized data for prior periods.
- 13 A. I have prepared Table 1, below, which provides a summary of the company's

 14 forecast of total billed distribution deliveries for the upcoming 2010-2011 Peak

 15 Period.

¹ In my testimony I use the term "deliveries" to refer to the volumes or quantities of gas that are distributed to the premises of sales customers and transportation customers. I use the term "sales customer" to refer to a gas customer that receives bundled distribution and gas supply service from Northern. Finally, I use the term "transportation customer" to refer to a gas customer that receives distribution service from Northern and gas supply service from a competitive retail supplier.

² When forecasting the Large General rate classes (G42 & T42, G52 & T52 and Special Contracts), the Company utilizes individual customer forecasts through the first full calendar year of the forecast. Thereafter, the Company relies on its forecast of use-per-meter and the number of meters for each rate class. Since this COG filing relies solely on forecast data within the first calendar year, the Large General forecast is based on the individual forecasts.

Table 3.	Table 3. 2010-2011 Winter New Hampshire Division Metered Usage Forecast Compared to Prior Years (All Units in Dth)						
Month	2010-11 Forecast ¹	2009-10 Actual ²	2010-11 minus 2009-10	Percent Change	2008-09 Actual ³	2010-11 minus 2008-09	Percent Change
Nov	542,536	525,777	16,759	3.19%	549,450	-6,913	-1.26%
Dec	770,259	785,751	-15,492	-1.97%	792,007	-21,748	-2.75%
Jan	1,015,419	1,050,941	-35,522	-3.38%	990,236	25,183	2.54%
Feb	1,015,501	974,983	40,518	4.16%	991,088	24,413	2.46%
Mar	878,056	868,777	9,279	1.07%	894,108	-16,052	-1.80%
Apr	677,756	697,010	-19,254	-2.76%	678,954	-1,198	-0.18%
Season	4,899,527	4,903,238	-3,712	-0.08%	4,895,842	3,685	0.08%

23 Note 1

Note 1: Company Forecast.

4 Note 2: Actual Weather-Normalized Data.

Note 3: Actual Weather-Normalized Data.

I provide a detailed review of Northern's forecast of metered distribution deliveries, meter counts and use-per-meter calculations for the 2010-2011 Gas Year in Attachment 1 to Schedule 10B. Page 1 of Attachment 1 to Schedule 10B provides total data for the New Hampshire Division. Pages 2, 3 and 4 provide data for non-heating residential rate classes, heating residential rate classes and commercial and industrial rate classes, respectively. The top section of each page provides the 2010-2011 Gas Year distribution deliveries forecast and a comparison of that forecast to actual, weather normalized data for the 2009-2010 and 2008-2009 Gas Years. The changes in the distribution deliveries from the prior period are explained in terms of changes in meter counts and changes in use-per-meter. The middle section of each page presents forecasts and a comparison to prior period actual meter counts. The bottom section of each page of Attachment 1 to Schedule 10B provides a calculation of the use-per-

meter, which have been calculated using the distribution deliveries and meter 1 2 count data presented in the top and middle sections of the page. 3 4 Q. Please provide an overview of the process for converting the forecast distribution 5 deliveries forecast to a sales service deliveries forecast. 6 Α. In order to prepare this COG filing, Northern reduced its total distribution 7 deliveries forecast to reflect only the distribution deliveries to those customers 8 taking sales service. My commodity cost forecast, which I present later, reflects 9 only the projected costs to serve Northern's sales service obligations. 10 Customers electing transportation-only service reflect a substantial portion of 11 Northern's total distribution deliveries and the cost of gas for these customers is 12 determined by the private contractual arrangements between the customers and 13 their retail marketer. 14 I estimated the percentage of total distribution deliveries supplied through Sales 15 Service ("Sales Service Percentage") for each rate class based upon the most 16 recent 12 months of historical distribution and sales service deliveries data 17 available at the time of the analysis. 18 I converted the billed distribution deliveries forecast to a calendar-month 19 distribution deliveries forecast by utilizing the same model used by the Company 20 to develop the billed distribution deliveries forecast. Using this model, I replaced 21 the projected bill cycle data for monthly days and effective degree days with 22 calendar month days and effective degree days. For each rate class, I multiplied

by projected Sales Service Percentage times the projected calendar-month distribution deliveries forecast to calculate the sales service deliveries forecast. Having converted the billed distribution service deliveries to calendar month Sales Service deliveries, I then calculated the city-gate supply required to serve the Sales Service deliveries. Attachment 2 to Schedule 10B provides my back-up calculations for this analysis. On Pages 1 and 2 of Attachment 2 to Schedule 10B, I present my calculation of the calendar month and billed sales service deliveries by rate class, using the methodology I discuss above. The Sales Service deliveries for each rate class were summed to determine the total Sales Service deliveries for the New Hampshire Division. I have also prepared Schedule 13, which provides annual summary data for sales service and transportation service deliveries by rate class. On Page 3 of Attachment 2 to Schedule 10B, I present my calculations of the city-gate receipts. First, I estimated Company Use by multiplying the forecast Total Deliveries and the estimated ratio of Company-Use to Total Deliveries. Then, I added Company Use to the total Calendar Sales Service Deliveries, calculated on Page 1 ("Sales Service plus Company Use"). Then, I added an estimate for Lost and Unaccounted for Gas. Each of the estimates used in these calculations was based on the recent history of actual data. Please summarize the Company's forecast of sales service deliveries and citygate receipts required to meet the projected sales service deliveries.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Q.

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 8 of 25

1 A. I have prepared Table 2, below, which provides a summary of the Company's
2 forecast of Total Deliveries, Sales Service Deliveries and City-Gate Receipts to
3 meet the Sales Service Deliveries³ for the upcoming Peak Period. The detailed
4 calculations can be found in Attachment 2 to Schedule 10B.

Table 2.	Table 2. Distribution and Sales Service Deliveries & Required City-Gate Receipts					
		Summary				
Month	Total Deliveries (Dth)	Sales Service	City-Gate Receipts			
MOTUT	Total Deliveries (Dtil)	Deliveries (Dth)	(Dth)			
Nov-10	586,642	304,710	312,051			
Dec-10	851,652	472,252	483,928			
Jan-11	1,045,034	638,023	652,778			
Feb-11	912,462	542,998	555,527			
Mar-11	892,658	525,753	537,934			
Apr-11	599,363	319,160	326,540			
Winter	4,887,810	2,802,895	2,868,758			

III. NORTHERN'S GAS SUPPLY PORTFOLIO

- Q. Please provide an overview of the gas supply portfolio that the Company uses to
 supply its sales customers.
- 9 A. I have prepared Table 3, below, which provides an overview of the sources of
 10 supply available to Northern through its portfolio of long-term contracts, including
 11 transportation contracts, storage contracts, peaking supply contracts and an
 12 exchange agreement with Bay State Gas Company.

5

6

³ When I use the term "City-Gate Receipts to meet the Sales Service Requirements", I refer to the volume of gas needed to be received by the distribution system in order to deliver the projected volumes of sales service. These volumes are measured at the Company's interconnections with Granite State Gas Transmission, an affiliated pipeline, Maritimes and Northeast, L.L.C and Tennessee Gas Pipeline and the Company's LNG facility.

Table 3. Northern Capacity by Source of Supply		
Supply Source:	Northern Deliverable Capacity (Dth per Day)	
Chicago (Interconnection of Alliance and Vector Pipelines)	6,433	
Pittsburgh, NH (Interconnection of TransCanada and PNGTS Pipelines)	1,095	
Niagara (Interconnection of TransCanada and Tennessee Pipelines)	3,280	
Tennessee Production Area	13,089	
Washington 10 Storage*	32,835	
Tennessee Firm Storage - Market Area	2,640	
Peaking Supply 1	4,975	
Peaking Supply 2*	52,735	
Lewiston LNG	10,000	
Total Deliverable Capacity	127,082	

2

3

4

* indicates that the capacity is deliverable only during the months of November through March on a firm basis.

I have prepared a capacity path diagram and capacity path detail for each of the supply sources listed above (except the Lewiston LNG, which feeds directly into Northern's distribution system), showing the transportation, storage and long-term supply contracts required to provide the Northern Deliverable Capacity listed each source of supply. This information is found in Schedule 12.

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 10 of 25

Northern's portfolio of transportation contracts includes contracts with Granite State Gas Transmission, Inc. ("GSGT" or "Granite"), Tennessee Gas Pipeline Company ("TGP" or "Tennessee"), Portland Natural Gas Transmission System ("PNGTS"), TransCanada Pipelines Limited, Transportation ("TransCanada"), Vector Pipeline L.P. ("Vector"), Algonquin Gas Transmission Company ("Algonquin"), Iroquois Gas Transmission System, L.P. ("Iroquois") and Texas Eastern Transmission System, L.P. ("Texas Eastern" or "TETCO"). The gas supply portfolio also includes long-term storage contracts with Washington 10 Storage Corporation ("Washington 10" or "W10"), Tennessee and Texas Eastern, as well as long-term peaking supply contracts. Distrigas of Massachusetts Corporation ("Peaking Supplier 1") and FPL Energy Power Marketing, Inc. ("Peaking Supplier 2"). Finally, as I mentioned previously, the gas supply portfolio consists of an exchange agreement with Bay State Gas Company ("BSG Exchange" or "Bay State Exchange Agreement"). Northern also owns and operates a Liquefied Natural Gas ("LNG") facility in Lewiston, ME, which is capable of producing approximately 10,000 Dth per day and storing approximately 12,000 Dth of LNG. I have prepared the capacity path diagrams and capacity path details in Schedule 12 in order to show how Northern has combined its transportation, storage and peaking supply contracts, along with the BSG Exchange, in order to move natural gas supplies from the sources of supply listed in Table 3 to Northern's distribution system. Each of these contractual arrangements represents a segment in one or more capacity paths. The capacity path diagrams show how each segment in the path is interconnected within the path.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

The capacity path details provide basic contract information, such as product (transportation, storage, peaking supply or exchange), vendor, contract ID number, contract rate schedule, contract end date, contract maximum daily quantity ("MDQ"), contract availability (year-round or winter-only), receipt and delivery points of the contract and interconnecting pipelines with the contract delivery point.

7 Q. Has the Company entered into any long-term releases of capacity?

A.

Yes. The Company has found that some of its Algonquin and Texas Eastern transportation contracts were not highly utilized by Northern, but were highly valued in the market-place. Northern has permanently released the Algonquin and Texas Eastern contracts contributing to the majority of costs for the capacity paths, listed in Table 4, below. These releases are at the maximum allowable rates, benefiting customers by fully recovering the costs of the released contracts. As a result, capacity from these supply sources is no longer deliverable. For completeness, Pages 9 and 10 of Schedule 12 also contains capacity path diagrams and capacity path details of these released capacity paths in order to provide a complete picture of the portfolio.

Table 4. Released Capacity	/
	Northern
Supply Source:	Deliverable
	Capacity (Dth per
	Day)

⁴ Northern has the right to a single recall of its permanent releases of Algonquin contract number 93201A1C and Texas Eastern contract number 800384.

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 12 of 25

Texas Eastern Production and Storage & Algonquin (Centerville, NJ)	286
Texas Eastern Zone M3	965
Total Released Capacity	1,251

- Q. What updates have been made to Northern's capacity portfolio since the last
 Winter COG filing?
- A. Northern has elected not to renew 1,196 GJ of TransCanada capacity from

 Empress, Alberta to the interconnection of TransCanada and PNGTS at East

 Hereford. At current TransCanada demand rates, the annual projected demand

 cost for this capacity is approximately \$750,000 per year.

Northern has recently entered into a new contract with Granite. Contract 10-010-FT-NN contains a renewal clause, allowing the contract to continue on a year-to-year basis. Each party shall have the right to terminate the agreement effective November 1 of each year with a one-year notice provision.

Northern has also entered into an amendment of the Bay State Exchange, which will become effective for the upcoming peak season. The effect of this amendment is to define the volume of natural gas to be exchanged as the lower of the volumes desired by each party to the Bay State Exchange (Northern and Bay State). The purpose of this amendment is to provide more flexibility and control of monthly and daily gas supply purchasing.

- Q. Please describe the Company's process for procuring its gas supply commodity
 supplies.
- 3 A. Northern's practice is to secure its gas supply commodity supplies through 4 annual requests-for-proposal ("RFP") for terms beginning April 1 and running 5 through March 31 each year. Northern concluded an RFP during the month of March 2010 for the supplies necessary to meet its projected requirements for the 6 7 period beginning April 2010 through March 2011. These supplies include 8 summer re-fill of underground storage and projected baseload supplies through 9 March 2011. The Company entered into asset management relationships with 10 most of its suppliers in order to optimize delivered supply costs for Northern's 11 customers.
- 12 Q. What steps has Northern taken since the 2010 Summer COG proceeding to
 13 better match the Adjusted Target Volumes ("ATV") for the non-daily metered
 14 transportation customers with the actual consumption for these customers?

15

16

17

18

19

20

A. Effective August 1, 2010 Northern has implemented revised consumption factors used to estimate the ATV for most of its non-daily metered transportation customers. ⁵ This project was completed by compiling a two-year history of bill cycle consumption and weather data for all customers eligible for non-daily metered transportation service. The raw bill cycle consumption data was reviewed to clean the data of errors, duplications and inconsistencies. The total

⁵ This includes T40, G41, T41, G50, T50, G51 and T51 customers for both the New Hampshire and Maine Divisions. This includes approximately 5,000 total customers, of which approximately 1,700 are New Hampshire Division customers.

Effective Degree Days ("EDD") were calculated for each bill cycle for each customer. Finally, weather-sensitive and non-weather sensitive coefficients were calculated for each customer based upon the bill cycle consumption and weather data. Following the calculation of the new factors, Northern communicated to the retail marketers with non-daily metered pools in order to ensure a smooth transition to the new ATV consumption factors. Since August 1, Northern has observed a significant reduction in the amount of gas it requires retail marketers serving non-daily metered to deliver. Northern also now monitors the monthly variance between the ATV deliveries and the aggregate consumption of non-daily metered transportation customers in order to ensure the accuracy of the ATV and to estimate the costs or revenues associated with the seasonal ATV reconciliation so that this item be accounted for in the determination of monthly COG recovery balances.

IV. GAS SUPPLY COST FORECAST

- 16 Q. Please provide an overview of the Company's estimated gas supply costs that 17 you provided to Mr. Simpson to calculate the 2010-2011 Winter COG.
- A. I have provided Mr. Simpson the following cost estimates for the period
 beginning November 2010 through October 2011, which he used to calculate the
 proposed COG.
 - Northern's fixed demand costs, including revenue offsets due to capacity release and asset management activities

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 15 of 25

1	t ugo to ott
1	Northern's commodity costs
2	Impact of Northern's financial hedging program
3	The allocation of Northern's fixed demand, commodity and hedging costs to the
4	New Hampshire Division was performed by Mr. Simpson. The figures I present
5	in my testimony relate to total company costs, inclusive of both the New
6	Hampshire and Maine Divisions.
7	
8	In addition, I also prepared the estimates of New Hampshire Division Capacity
9	Assignment program demand revenues.
10	

1 Q. Please provide Northern's demand cost forecast.

4

5

6

7

8

9

10

11

12

2 A. Please refer to Table 5, below, titled, "Summary of Estimated Fixed Demand Costs."

Table 5. Summary of Estimated Fixed Demand Costs						
	November 1, 2010 through October 31, 2011					
Line	Description		Amount	Reference		
1.	Pipeline Demand Costs	\$	6,979,327	Schedule 5A, Page 2 - Pipeline Allocated Cost		
2.	Storage Allocated Pipeline Demand Costs	\$	23,000,956	Schedule 5A, Page 2 - Storage Allocated Cost		
3.	Storage Demand Costs	\$	3,008,911	Schedule 5A, Page 3 - Annual Fixed Charges		
4.	Peaking Allocated Pipeline Demand Costs	\$	1,578,485	Schedule 5A, Page 2 - Peaking Allocated Cost		
5.	Peaking Contract Costs	\$	4,582,488	Schedule 5A, Page 4, Annual Fixed Charges		
6.	Asset Management and Capacity Release Revenue	\$	(2,931,530)	Schedule 5A, Page 5 - Total Asset Management and Capacity Release Revenue		
7.	Total Demand Costs	\$	36,218,638	Sum Lines 1 through 6.		

I present the detailed calculations of this demand cost forecast in Schedule 5A.

On page 1 of the Attachment, I have calculated the annual demand cost forecast for Northern's portfolio of transportation contracts. On page 2 of Schedule 5A, I designate each transportation contract as a pipeline, storage or peaking resource and allocate transportation costs based upon these designations. Pages 3 and 4 of Schedule 5A provide my calculations of demand costs for storage and peaking supply contracts, respectively. On page 5 of Schedule 5A, I forecast the capacity release and asset management revenue the Company expects to receive for the

<u>)</u> 1		2010-2011 Gas Year. Support for the pipeline, storage and supply contract rates
2		used in Schedule 5A can be found in the Attachment to Schedule 5A.
3	Q.	Please compare the Demand Cost estimates for the upcoming gas year (2010-
4		2011) to the Demand Cost estimates provided for the current gas year in Docket
5		No. DG 09-167.
6	A.	The Demand Cost estimates for the upcoming gas year are \$36.2 million
7		compared to estimated Demand Cost estimates of \$27.1 million provided in
8		Docket No. DG 09-167. These projected increase of \$9.1 million is explained by
9		the following.
10		1. \$3.4 million of the increase in estimated demand costs are due to
11		the PNGTS increase in tariff rates, proposed in the rate case, filed
12	16.75	in FERC Docket RP10-729.
13		2. \$2.1 million of the increase are due to increases in TransCanada
14		demand costs. Rates increased substantially on January 1, 2010.
15		This increase in TransCanada demand costs is net of the savings
16		to the Company by turning back the Empress, Alberta to East
17		Hereford capacity, discussed previously.
18		3. \$1.9 million of the increase in estimated demand costs are due to
19		the Granite increase in tariff rates, proposed in the rate case, filed
20		in FERC Docket RP10-896.
21		4. \$1.4 million of the increase in the estimated demand costs are due
22		to the decrease in projected asset management and capacity

1		release demand revenue due to the lower values offered by bidders
2		in the March 2010 RFP.
3		5. \$0.3 million of the increase is due to peaking supply contract
4		demand cost increases, stipulated by these long-term agreements.
5	Q.	Please provide the Northern's forecast of Capacity Assignment Demand
6		Revenues for the New Hampshire Division.
7	A.	When a retail marketer enrolls one of Northern's New Hampshire Division
8	v	customers, the retail marketer is assigned a portion of Northern's capacity. I
9		present the detailed calculations of this figure in Schedule 5B. On page 1 of
10		Schedule 5B, I present a summary of the Company's forecast of New Hampshire
11		Division capacity assignment demand revenues. On pages 2 through 6 of
12		Schedule 5B, I present the Company's detailed calculations for each component
13		of capacity assignment, itemized on page 1 of Schedule 5B. The 2010-2011
14		Capacity Assignment Demand Revenue for the New Hampshire Division is
15		projected to be \$2,600,137.
16	Q.	Please describe Northern's process for forecasting commodity costs.
17	A.	I base the Company's commodity cost forecast on Northern's projected city-gate
18		receipts for sales service customers, which I calculated in Attachment 2 to
19		Schedule 10B, and the supply sources available to Northern, which I presented
20		in Schedule 12. I forecast supply prices at each supply source, utilizing NYMEX
21		natural gas contract price data and a forecast of the adder to NYMEX for the
22		price of supply at each supply source available to Northern through its portfolio. I

- also forecast variable fuel retention factors and rates for Northern's transportation and storage contracts. Then, I utilized the Sendout® natural gas supply cost model to determine the optimal use of Northern's natural gas supply resources to meet its projected city-gate requirements.
- Q. Please present the Company's commodity cost forecast for the 2010-2011
 Winter Period.
- 7 A. I have summarized Northern's commodity cost forecast for the upcoming Winter
 8 Period in Table 6, below.

Table 6. Contracts Ranked on a Per-Unit Cost Basis				
November 1, 2010 through April 30, 2011				
Supply Source	Delivered City- Gate Costs	Delivered City- Gate Volumes (Dth)	Delivered Cost per Dth	
Peaking Supply 1	\$2,404,468	602,041	\$3.9939	
Washington 10 Storage	\$11,577,747	2,559,895	\$4.5227	
Tennessee Storage	\$707,503	147,681	\$4.7908	
Chicago	\$1,667,801	301,862	\$5.5251	
Niagara	\$1,035,386	184,693	\$5.6060	
Tennessee Production	\$7,768,412	1,375,093	\$5.6494	
LNG	\$111,223	18,872	\$5.8934	
Pittsburgh, NH	\$1,240,066	199,100	\$6.2284	
Peaking Supply 2	\$21,557	2,670	\$8.0723	
Total System	\$26,534,162	5,391,907	\$4.9211	

9

10

11

12

13

15

2

3

4

In summary, projected delivered commodity costs equal approximately \$26.5 million at an average delivered rate of approximately \$4.92 per Dth. This table can also be found in Schedule 2. In support of Table 6 and Schedule 2, I prepared Schedule 6A to show the monthly forecasted commodity cost by supply option. Page 1 of Schedule 6A provides forecasted delivered variable costs, including commodity charges, transportation fuel charges, and transportation

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 20 of 25

1 variable charges by supply option. Page 2 of the Schedule 6A provides monthly 2 delivered volumes (Dth) by supply source. Finally, Page 3 provides monthly 3 delivered cost per Dth by supply source. Each page provides summary data for all supply sources. 4 5 The detailed calculations of the delivered commodity cost are found in Schedule 6 7 6B. For each supply source. I have provided the detailed monthly calculations for supply cost, fuel losses and variable transportation charges, which will be 8 9 incurred by Northern in order to deliver its supplies to Northern's city-gates for ultimate consumption by our customers. Support of the supply prices and 10 11 variable transportation charges found in the Schedule 6B are found in the 12 Attachment to Schedule 6B. 13 14 I based my commodity cost forecast on NYMEX prices as of July 22, 2010. Mr. 15 Simpson has updated the commodity costs in the proposed COG rates to reflect 16 updated NYMEX prices as of September 2, 2010. 17 Please provide projected monthly supply volumes and capacity utilization 18 Q. 19 calculations for both Northern's normal weather and design weather scenarios for 20 the upcoming 2010-11 Winter period. 21 Α. Please refer to Schedules 11A, 11B and 11C. Schedule 11A provides monthly 22 supply volumes for Northern's normal weather scenario. The data in Schedule 23 11A is also found in Schedule 6A. Schedule 11B provides monthly supply

- volumes for Northern's design cold weather scenario. The volumes is Schedule

 11B were those used by Mr. Simpson to calculated the capacity cost allocators

 between New Hampshire and Maine. Schedule 11C calculates the capacity

 utilization of all supply resources in both normal and design cold weather

 scenarios.
- 6 Q. Please provide Northern's Design Day Report for the upcoming Winter Period.
- 7 A. Northern's Design Day Report is found in Schedule 11D.

8

11

12

13

14

15

16

17

18

19

20

- 9 Q. Please provide an overview of the changes in Northern's hedging program since10 the last Peak COG filing.
 - A. Northern has made four substantive changes to its hedging program: 1) the adoption of a portfolio approach to hedging whereby Northern would combine its physically hedged supplies with its financial hedges to begin each peak season with approximately 70 percent of the supply requirements available under a fixed-price. The remaining supply (approximately 30%) would be purchased at market prices throughout the peak period; 2) the introduction of a price ceiling calculated pursuant to a formula, above which purchases of futures contracts would be postponed; 3) elimination of the price-based component of the existing hedging program; and 4) the introduction of a process under which futures contracts that appreciate in value above a specified percentage would be sold. Northern has also made an administrative change to the hedging program in that seasonal

hedging plans are established and filed with the Commission as part of the
 Summer COG filings, rather than semi-annually.

Q. Please provide the results of the hedging program related to the Company'sproposed COG rates.

- I have also calculated the gains or losses of the NYMEX natural gas contracts 5 Α. purchased by the Company in accordance with its hedging program. Based 6 upon the July 22, 2010 NYMEX natural gas settlement price data, Northern 7 projects a hedging loss of approximately \$546,240 for time-based hedges for the 8 9 coming peak season. Time-based hedges are allocated between the New Hampshire and Maine Divisions on the basis of the projected commodity 10 allocators. I have also provided the Commission a projection of the hedging loss 11 due to price-based hedges of approximately \$396,920. Since the Maine Public 12 Utilities Commission suspended the price-triggered hedging strategy in its Order 13 in Docket No. 2008-93 dated September 23, 2009, Northern procured price-14 triagered hedging using only New Hampshire supply requirements. Thus, price-15 based hedges are 100% allocated to the New Hampshire Division. Please refer 16 17 to Schedule 7 for the monthly hedging calculations.
- 18 Q. Please provide the Company's monthly projections of storage inventory balances
 19 for the period November 2010 through October 2011.
- A. Please refer to Schedule 14. The results are based upon the Company's
 Sendout[®] analysis, which I provided to Mr. Simpson.
 - VI. PNGTS Rate Case Litigation Update & Proposed Cost Recovery

22

- Q. What is the current status of the litigation opposing proposed rate increases by
 Portland Natural Gas Transmission System ("PNGTS")?
- Α. The Initial Decision of the Administrative Law Judge in FERC Docket No. RP08-3 4 306-000 ("2008 Rate Case") was issued on December 24, 2009. Briefs on Exceptions to the Initial Decision and Briefs Opposing Exceptions have been filed 5 with the FERC. Although no specific timeframe for an order from FERC is 6 7 established, an order is expected approximately six months after the briefs were submitted, which would be in the October 2010 timeframe. PNGTS rates since 8 September 2008 have been billed subject to refund at the rate proposed in April 9 2008. The FERC order would establish the rates applicable to the refund period 10 as well as the prospective rates, at least until December 1, 2010 when rates from 11 12 RP10-729 go into effect.
- Q. What is the impact of the Initial Decision in FERC Docket No. RP08-306-000,
 should it be upheld by the FERC?
- 15 The Initial Decision was very favorable to Northern and the PNGTS Shipper A. Group ("PSG"), with PNGTS losing on most significant issues including treatment 16 17 of bankruptcy revenues, capacity for purposes of the at-risk condition (affirmed at 18 210,840 Dth), return on equity, treatment of interruptible transportation revenues, negative salvage rate, depreciation rates, and type of cost levelization model. 19 20 Should the final order from FERC uphold the Initial Decision in RP08-306, Northern estimates a refund of approximately \$1.2M dollars, \$628,298 of which 21 22 would be credited to the New Hampshire Division, would be due. Please refer to 23 Schedule 5C for the back-up calculations for this amount.

Q: Please identify the costs incurred to oppose PNGTS proposed rate increases 1 that Northern proposes to recover. 2 A: Northern proposes to recover costs of \$183,943, which is the New Hampshire 3 Division's share of the \$376,840 in external legal and consulting costs that 4 5 Northern has incurred opposing the 2008 and 2010 PNGTS rate cases and since 6 September 1, 2009. The proposed 2010-2011 fixed proportional responsibility 7 allocators were used to assign these costs by state for costs incurred from September 2009 through August 2010, which are presented to the Commission 8 9 with this filing. Please see Schedule 5D, which lists the legal and consulting fees 10 Northern seeks to recover. Northern has compiled the invoices, supporting these 11 amounts and will provide these materials to the Commission Staff. Northern is 12 not proposing to recover costs for expenses that were paid before December 1, 13 2008 or the costs of internal resources. In this Cost of Gas filing, Northern has 14 reflected these costs as a deduction from Asset Management revenues. 15 Q: In making this request for inclusion of these extraordinary legal and consulting 16 costs in the cost of gas rates for the coming winter season, does Northern intend 17 to establish any precedent for such future treatment? 18 A: No. With this request, Northern intends to recover the costs to oppose the 2008 19 PNGTS rate case that have been incurred since September 1, 2009 and does 20 not intend to establish any precedent with regard to the manner of recovery of

similar costs in the future. Northern would address the recovery of similar future

21

22

costs at such future time.

Prefiled Testimony of Francis X. Wells Winter Period 2010-2011 COG Filing Page 25 of 25

- 1 Q. Does Northern anticipate future litigation with PNGTS regarding firm 2 transportation rates?
- A. Yes. On May 12, 2010, PNGTS filed a new rate case which has been docketed RP10-729 ("2010 Rate Case"). The proposed new rates represent a 47 percent increase over current rates. Northern has intervened as a member of PSG and has begun incurring additional legal and consulting costs. On June 11, 2010, FERC ordered suspending the proposed new rates until December 1, 2010, when they go into effect subject to refund.
- 9 Q. Does this conclude your testimony?
- 10 A. Yes it does.

Prefiled Testimony of Joseph F. Conneely



NORTHERN UTILITIES, INC. NEW HAMPSHIRE DIVISION 2010 / 2011 WINTER SEASON PROPOSED COST OF GAS ADJUSTMENT PREFILED TESTIMONY OF JOSEPH F. CONNEELY

1	I.	INTRODUCTION
2	Q.	Please state your name, business address, and position.
3	A.	My name is Joseph F. Conneely. My business address is 6 Liberty Lane West,
4	q1	Hampton, New Hampshire.
5		
6	Q.	For whom do you work and in what capacity?
7	A.	I am a Senior Regulatory Analyst for Unitil Service Corp. ("Unitil Service"), a
8		subsidiary of Unitil Corporation that provides managerial, financial, regulatory
9		and engineering services to Unitil Corporation's principal subsidiaries Firchburg
10		Gas and Electric Light Company, d/b/a Unitil ("FG&E"), Granite State Gas
11		Transmission, Inc. ("Granite"), Northern Utilities, Inc. d/b/a Unitil ("Northern"),
12		and Unitil Energy Systems, Inc. ("UES") (together "Unitil"). In this capacity I
13		am responsible for managing and filing reporting requirements.
14		
15	Q.	Please summarize your professional and educational background.
16	A.	I graduated from Saint Anselm College, Manchester, New Hampshire in 1999
17		with a Bachelor of Arts degree in Financial Economics. Before joining Unitil, I
18		worked for the Royal Bank of Scotland- Sempra Energy Trading Corp. joint
19		venture ("RBS") in Greenwich, Connecticut as a senior electricity and natural gas
20		trader. Prior to working for RBS, I was employed as a mid-term electricity and

Prefiled Testimony of Joseph F. Conneely 2010 / 2011 Winter Season CGA Filing Page 2 of 5

1		natural gas trader at Morgan Stanley in New York City. Before this position at
2		Morgan Stanley, I ran an every trading book at Shell Gas and Energy Trading
3		North America in La Jolla, California. I joined Unitil in November 2008.
4		
5	Q.	Have you previously testified before the New Hampshire Public Utilities
6		Commission?
7	A.	No, this is my first time testifying before the New Hampshire Commission. I
8		have previously testified before the Maine Public Utilities Commission.
9		
10	II.	PURPOSE OF TESTIMONY
11	Q.	What is the purpose of your testimony in this proceeding?
12	A.	The purpose of my testimony is to introduce and describe Northern's proposed
13		changes to its Local Delivery Adjustment Clause tariff (Page No. 56). Northern is
14		proposing changes to its rates for effect November 1, 2010 for the following
15		items: Residential Low Income Assistance Program ("RLIAP") rate; Demand
16		Side Management ("DSM") rate and Environmental Response Cost ("ERC") rate.
17		I will also discuss the impact that the proposed Cost of Gas ("COG") would have
18		on bills on the Company's typical residential customer.
19		
20	Q.	Please describe the proposed change to the RLIAP rate.
21	A.	Northern is proposing to decrease the RLIAP rate from \$0.0055 to \$0.0043 per
22		therm effective November 1, 2010.

1		
2	Q.	Could you describe the reason for the proposed change to the RLIAP rate?
3	A.	Yes. The Residential Low-Income Assistance Program has been in effect since
4		2005. Northern is not proposing any program changes at this time; however,
5		Northern is proposing to change the RLIAP rate in order to eliminate a currently
6		projected over-collected balance as of October 31, 2010 of \$28,893, as shown on
7		Schedule 16 RLIAP A. Estimated program costs and recoveries are provided in
8		Schedule 16 RLIAP B, Schedule 2 and are based on actual results for the 12-
9		month period ending August 2010.
10		
11	Q.	What changes are being proposed for the DSM charges?
12	A.	The Company is proposing to increase the DSM charge for the residential classes
13		from \$0.0185 to \$0.0355 per therm, and increase the charge for the commercial
14		and industrial customer classes from \$0.0054 to \$0.0160 per therm effective
15		November 1, 2010.
16		
17	Q.	Please describe the reason for these proposed changes to the DSM rates.
18	A.	The proposed changes to the DSM rates are necessitated by the implementation of
19		Northern's current energy efficiency program budget. That budget is provided
20		in Schedule 16 DSM A. Information regarding the development of the proposed
71		DSM rate for the residential classes is provided in Schedule 16 DSM B

Schedule 16 DSM C provides the support for the proposed DSM rate for the commercial and industrial classes.

3

4

5

Q. Please describe the change to Northern's ERC rate that is proposed for effect November 1, 2010.

6 A. The current ERC rate is \$0.0057 per therm. Northern proposes to decrease this
7 charge to \$0.0056 per therm.

8

9

10

11

12

13

14

15

16

A.

Q. Please explain the calculation of the proposed ERC rate.

During the period July 1, 2009 through June 30, 2010, ERC expenses totaled \$189,634. Northern is allowed to recover one-seventh of the actual response costs incurred by the Company in a twelve-month period ending June 30 of each year until fully amortized, plus any insurance and third-party expenses for the year. Any insurance and third-party recoveries, or other benefits for the year, are used to reduce the unamortized balance. The \$367,188 shown on Schedule 1 in the Environmental Response Cost filing is comprised of the following:

1/7th ERC costs incurred July 2009 - June 2010	\$ 27,091
1/7th ERC costs incurred July 2008 - June 2009	\$ 18,247
1/7th ERC costs incurred July 2007 - June 2008	\$ 33,280
1/7th ERC costs incurred July 2006 - June 2007	\$ 26,686
1/7th ERC costs incurred July 2005 - June 2006	\$ 90,352
1/7th ERC costs incurred July 2004 - June 2005	\$ 129,871
1/7th ERC costs incurred July 2003 - June 2004	\$ 41,661
Total	\$367,188

Prefiled Testimony of Joseph F. Conneely 2010 / 2011 Winter Season CGA Filing Page 5 of 5

1		The prior period reconciliation of ERC costs, an over collection of \$36,705, is
2		included in the annual ERC costs resulting in net ERC costs to be recovered from
3		customers during the period of November 2010 through October 2011 of
4		\$330,483. Dividing these recoverable ERC costs by total annual sales of
5		58,898,383 therms yields an ERC rate of \$0.0056 per therm. This calculation is
6		illustrated in Schedule 16 ERC.
7		
8	Q.	Have you prepared typical bill analyses showing the impacts of the proposed
9		COG and LDAC rate changes for effect on November 1, 2010 for typical gas
10		customers?
11	A.	Yes, Schedule 8 provides the analyses.
12		
13	Q.	Does this conclude your testimony?
14	A.	Yes, it does.

Tariff Pages



Compliance Tariff Sheets

Forty-seventh Revised Page No. 38 Statement of anticipated Cost of Gas

Fifty-first Revised Page No. 39 Calculation of proposed Cost of Gas Adjustment

> Fourteenth Revised Page No. 56 Company's proposed LDAC Rates

Forty-sixth Revised Page No. 94
Rate Summary

Forty-sixth Revised Page No. 95
Rate Summary

Fortieth Revised Page No. 96 Rate Summary

Tenth Revised Page 154 Appendix A

Ninth Revised Page 169 Appendix C

Third Revised Page 170-b Appendix D

The title page and pages i-171 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

Pages	Revision	Proposed
Pages Title i ii iii iiv v 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20.1 21 21.1 22 23	Original Original Third Revised Second Revised Second Revised Second Revised Original First Revised Original Original Original First Revised Third Revised Third Revised Fourth Revised Fourth Revised Original Third Revised Original Third Revised Original Second Revised	Proposed
21.1 22	Original Second Revised	
23 24	Second Revised	
25	Second Revised Second Revised	
26	Second Revised	
27	Second Revised	
28	Second Revised	
29	Second Revised	
30	Second Revised	
31 32	Second Revised Fourth Revised	
33	Second Revised	
34	Second Revised	
35	Second Revised	
36	Second Revised	
37	Third Revised	
37.1	Second Revised	
37.2	First Revised	Factor and the Book of the St.
38 39	Forty-sixth Revised Fiftieth Revised	Forty-seventh Revised Fifty-first Revised

Issued: September 15, 2010

The title page and pages i-171 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

1.0		
<u>Pages</u>	Revision	Proposed
40	Twenty-fourth Revised	
41	First Revised	
42	First Revised	
43	Second Revised	
44	Third Revised	
45	Second Revised	
46	First Revised	
47	First Revised	
48	First Revised	
49	First Revised	
50	First Revised	
51.	First Revised	
52	First Revised	
53	Second Revised	
54	Second Revised	
55	Second Revised	
55-a	First Revised	
55-b	First Revised	
55-c	Original	
55-d	Original	
55-e	Original	
56	Thirteenth Revised	Fourteenth Revised
57	Second Revised	
58	Original	
59	Third Revised	•
60	Second Revised	
60-a	Original	
61	Third Revised	
62	First Revised	
63	Third Revised	
64	First Revised	
65	Original	
66	Original	
67	Original	
68	Original	
69	Original	
70 71	Second Revised	
72	Original	
73	Second Revised	
73 74	Original	
75	Second Revised	
76 76	Original Second Revised	
77	Original	
78	Second Revised	
79	Original	
80	Second Revised	
81	Original	
82	Second Revised	
	COCOTTO I TOPIOCO	

Issued: September 15, 2010 Page 2 of 4

The title page and pages i-171 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

<u>Pages</u>	<u>Revision</u>	Proposed
83	Original	<u>1 1080300</u>
84	Second Revised	
85 86	Original Second Revised	
87	Original	
88	Second Revised	
89	Original	
90	Second Revised	
91	Original	
92	Second Revised	
93	Original	
94	Forty-fifth Revised	Forty-sixth Revised
95	Forty-fifth Revised	Forty-sixth Revised
96	Thirteenth Revised	Fortieth Revised
97	First Revised	
98	First Revised	
99	Eleventh Revised	
99-a 100	Eighteenth Revised	
101	Original Original	
102	Original	
103	Original	
104	First Revised	
105	Original	
106	Original	
107	Original	
108	Original	
109	Original	
110	Original	
111 112	Original	
113	Original Original	
114	Original	
115	Original	
116	Original	
117	Original	
118	Original	
119	Original	
120	Original	
121	First Revised	
122	First Revised	
122-a	Original	
123 124	Original First Revised	
125	First Revised First Revised	
126	First Revised	
127	First Revised	
128	First Revised	
129	First Revised	

Issued: September 15, 2010 Page 3 of 4

The title page and pages i-171 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

<u>Pages</u>	Revision	Proposed
130	First Revised	
131	First Revised	
132	First Revised	
133	First Revised	
134	First Revised	
135	First Revised	
136	First Revised	
137	First Revised	
138	First Revised	
139	First Revised	
140	First Revised	
141 142	First Revised	
143	First Revised	
144	First Revised First Revised	
145	First Revised	
146	First Revised	
147	First Revised	
148	First Revised	
149	First Revised	
150	First Revised	
151	First Revised	
152	First Revised	
152-a	Original	
153	Second Revised	
154	Ninth Revised	Tenth Revised
155	Original	
156	Original	
157 158	Original	
159	Original	
160	Original	
161	Original Original	
162	Original	
163	Original	
164	Original	
165	Original	
166	Original	
167	Original	
168	Original	
169	Eighth Revised	Ninth Revised
170	Original	
170-a	Original	
170-b	Second Revised	Third Revised
171	First Revised	

Issued:

September 15, 2010

Anticipated Cost of Gas

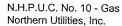
New Hampshire Division Period Covered: November 1,2010 - April 30, 2011

Feriod Covered; Nove	mber 1,2010 - April 30,	2011
(Col 1)	(Col 2)	(Col 3)
ANTICIPATED DIRECT COST OF GAS		
Purchased Gas:		
Demand Costs:	\$1,944,296	
Supply Costs:	\$5,408,538	
Storage & Peaking Gas:		
Demand, Capacity:	\$13,538,806	
Commodity Costs:	\$7,629,178	
	\$7,029,170	
Hedging (Gain)/Loss	\$1,054,446	
Interruptible Included Above	\$0	
Inventory Finance Charge	\$10,094	
Capacity Release, Asset Management, PNGTS Cost	(\$1,771,080)	
PNGTS Refund	(ψ1,771,000)	
Total Anticipated Direct Cost of Gas		<u>\$27,814,277</u>
ANTIQUEATER MINISTER CO.		
ANTICIPATED INDIRECT COST OF GAS		
Adjustments:		
Prior Period Under/(Over) Collection Prior Period Adjustment (ATV Reconciliation)	\$2,527,403	
Interest	\$0 \$00.045	
Refunds	\$99,945	
Interruptible Margins	\$0 \$0	
Total Adjustments	ΨΟ	\$2,627,348
Working Capital:		Ψ2,027,040
Total Anticipated Direct Cost of Gas	\$27,814,277	
Working Capital Percentage	0.19%	
Working Capital Allowance	\$52,847	
Plus: Working Capital Reconciliation (Acct 182.11)	(\$83,069)	
Total Working Capital Allowance		(\$30,222)
Bad Debt:		
Total Anticipated Direct Cost of Gas	\$27,814,277	
Plus: Prior Period Under/(Over) Collection	\$2,527,403	
Plus: Interest	\$0	
Plus: Total Working Capital	(\$30,222)	
Subtotal	\$30,311,459	
Bad Debt Percentage	0.45%	
Bad Debt Allowance	\$136,402	
Plus: Bad Debt Reconciliation (Acct 182.16)	(\$2,655)	
Total Bad Debt Allowance		\$133,747
Local Production and Storage Capacity		\$686,673
Miscellaneous Overhead-25.15% Allocated to Winter Season		\$98,333
Total Anticipated Indirect Cost of Gas		\$3,515,879
Total Cost of Gas		\$31,330,157
	•	
Issued: September 15, 2010	,	1. 200 -
Effective Date: November 1, 2010	Issued By:	IN HOUSE
,		Treasurer
Authorized by NHPUC Order No in Docket No. DG 10	, dated, 2	010.

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: November 1, 2010 - April 30, 2011

(Col 1)	(Col 2)	(Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (11/01/10-04/30/11) Direct Cost of Gas Rate	\$27,814,277 28,028,950	\$0.9923	per therm
Demand Cost of Gas Rate Commodity Cost of Gas Rate Total Direct Cost of Gas Rate	\$13,712,022 \$ <u>14,102,256</u> \$27,814,278	\$0.4892 \$0.5031 \$0.9923	per therm per therm per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/10-04/30/11) Indirect Cost of Gas	\$3,515,879 28,028,950	\$0.1254	per therm
TOTAL PERIOD AVERAGE COST OF GAS		\$1.1177	per therm
RESIDENTIAL COST OF GAS RATE - 11/01/10	COGwr	\$1.1177	per therm
	Maximum (COG+25%)	\$1.3971	
COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/10	COGwl	\$1.0019	per therm
	Maximum (COG+25%)	\$1.2524	
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C7I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (11/1/10-04/30/11) DEMAND COST OF GAS RATE	\$712,743 \$12,540 \$725,283 2,402,246 \$0.3019		
C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY COSTS C&I HLF TOTAL ADJUSTED COMMODITY COSTS C&I HLF PROJECTED PRORATED SALES (11/01/10-04/30/11) COMMODITY COST OF GAS RATE	\$1,378,807 \$1,419 \$1,380,226 2,402,246 \$0.5746		
INDIRECT COST OF GAS	\$0.1254		
TOTAL C&I HLF COST OF GAS RATE	\$1.0019		
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/10	COGwh	\$1.1398	per therm
	Maximum (COG+25%)	\$1.4248	
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF C&I LLF TOTAL ADJUSTED DEMAND COSTS C&I LLF PROJECTED PRORATED SALES (11/01/10-04/30/11) DEMAND COST OF GAS RATE	\$6,495,498 \$114,281 \$6,609,779 12,591,463 \$0.5249		
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF C&I LLF TOTAL ADJUSTED COMMODITY COSTS C&I LLF PROJECTED PRORATED SALES (11/1/10-04/30/11) COMMODITY COST OF GAS RATE	\$6,157,247 \$6,338 \$6,163,585 12,591,463 \$0.4895		
INDIRECT COST OF GAS	\$0.1254		
TOTAL C&I LLF COST OF GAS RATE	\$1.1398		
Issued: September 15, 2010 Effective Date: November 1, 2010	Issued By:	MZ H Z	
Authorized by NHPUC Order No, in Docket No. DG 10, dated, 2010.			



Fourteenth Revised Page 56 Superseding Thirteenth Revised Page 56

Local Delivery Adjustment Clause

Rate Schedule	RLIAP	DSM	ERC	ITM	WLNG	CCE	RCE	LDAC
Residential Heating	\$0.0043	\$0.0355	\$0.0056	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0454
Residential Non-Heating	\$0.0043	\$0.0355	\$0.0056	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0454
Small C&I	\$0.0043	\$0.0160	\$0.0056	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0259
Medium C&I	\$0.0043	\$0.0160	\$0.0056	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0259
Large C&I	\$0.0043	\$0.0160	\$0.0056	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0259
No Previous Sales Service						•		, = : = = = =

Issued: September 15, 2010

Effective: With Service Rendered On and After November 1, 2010

Authorized by NHPUC Order No. _____ in Docket N. DG 10-___, dated _____, 2010

Issued by:

Title:

Treasurer

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

	Winter Season	T	Total	Total Billed Rates
	November 2010- April 2011	Tariff	Delivery Rates	Tariff Rates, LDAC
	,	Rates	(Includes LDAC)	Plus Cost of Gas
Residential Heating	Tariff Rate R 5:		(1 140 0001 01 045
	Monthly Customer Charge	\$9.50	\$9.50	\$9.50
	First 50 therms	\$0.4102	\$0.4556	\$1.5733
	All usage over 50 therms	\$0.2990	\$0.3444	\$1.4621
	LDAC	\$0.0454		V1.4021
	Gas Cost Adjustment:			
]	Cost of Gas	\$1.1177		
			I	L
Residential Heating	Tariff Rate R 10:			
Low Income	Monthly Customer Charge	\$3.80	\$3.80	\$3.80
	First 50 therms	\$0.1641	\$0.2095	\$1.3272
	All usage over 50 therms	\$0.1196	\$0.1650	\$1.2827
	LDAC	\$0.0454	***************************************	¥
	Gas Cost Adjustment:	, , , , , , ,		
	Cost of Gas	\$1.1177		
			L	L
Residential Non-Heating	Tariff Rate R 6:			
	Bi-monthly Customer Charge	\$19.00	\$19.00	\$19.00
	First 20 therms	\$0.4067	\$0.4521	\$1.5698
	All usage over 20 therms	\$0.3082	\$0.3536	\$1.4713
				·
	Monthly Customer Charge	\$9.50	\$9.50	\$9.50
	First 10 therms	\$0.4067	\$0.4521	\$1.5698
	All usage over 10 therms	\$0.3082	\$0.3536	\$1.4713
	LDAC	\$0.0454		
	Gas Cost Adjustment:			
	Cost of Gas	\$1.1177		
Residential Non-Heating	Tariff Rate R 11:			
Low Income	Bi-monthly Customer Charge	\$13.80	\$13.80	\$13.80
	First 20 therms	\$0.3084	\$0.3538	\$1.4715
	All usage over 20 therms	\$0.2335	\$0.2789	\$1.3966
	Monthly Customer Charge	\$6.90	\$6.90	\$6.90
	First 10 therms	\$0.3084	\$0.3538	\$1.4715
	All usage over 10 therms	\$0.2335	\$0.2789	\$1.3966
	LDAC	\$0.0454		
	Gas Cost Adjustment:			
	Cost of Gas	\$1.1177		

Issued: September 15, 2010	Issued by:	
Effective: With Service Rendered On and After November 1, 2010	Title:	Treasurer
Authorized by NHPUC Order No, in Docket No. DG 10, dated	, 2010	

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON C&I RATES

	Winter Season		Total	Total Billed Rates
1	November 2010-April 2011	Tariff	Delivery Rates	Tariff Rates, LDA
0011		Rates	(Includes LDAC)	Plus Cost of Gas
C&I Low Annual/High Winter	Tariff Rate G 40:		, , , , , , , , , , , , , , , , , , , ,	1100 0031 01 003
	Monthly Customer Charge	\$18.70	\$18.70	\$18.70
•	First 75 therms	\$0.3077	\$0.3336	\$1.4734
	All usage over 75 therms	\$0.2007	\$0.2266	\$1.3664
	LDAC	\$0.0259	Ψ0.22.00	\$1.3002
	Gas Cost Adjustment:	¥4.02.00		
	Cost of Gas	\$1,1398		
C&I Low Annual/Low Winter	T	7.11000		
Odi 20W Allidai/20W Willel	Tariff Rate G 50:			
	Monthly Customer Charge	\$18.70	\$18.70	\$18.70
	First 75 therms	\$0.3018	\$0.3277	\$1.3296
	All usage over 75 therms	\$0.1969	\$0.2228	\$1.2247
	LDAC	\$0.0259		,
	Gas Cost Adjustment:			
	Cost of Gas	\$1.0019		
C&I Medium Annual/High Winter	Tariff Rate G 41:			· · · · · · · · · · · · · · · · · · ·
•	Monthly Customer Charge	\$60.30	***	
	The state of the s	\$60.30	\$60.30	\$60.30
	All usage	\$0.1942	00.0004	
	LDAC	\$0.1942	\$0.2201	\$1.3599
	Gas Cost Adjustment:	φυ.υ259		
	Cost of Gas	\$1.1398		
C&I Medium Annual/Low Winter		Ψ1.1390		
Sai Medium Annual/Low Winter	Tariff Rate G 51:			· · · · · · · · · · · · · · · · · · ·
	Monthly Customer Charge	\$60.30	\$60.30	\$60.30
	First 1300 therms	\$0.1862	\$0.2121	\$1,2140
	All usage over 1300 therms	\$0.1467	\$0.1726	\$1.1745
	LDAC	\$0.0259		¥
	Gas Cost Adjustment:			
	Cost of Gas	\$1.0019	ļ	
&I High Annual/High Winter	Tariff Rate G 42:			
o manaring (v mile)	Monthly Customer Charge	mo=1 00		
	Montally Customer Charge	\$254.00	\$254.00	\$254.00
	All usage	******		
	LDAC	\$0.1725	\$0.1984	\$1.3382
	Gas Cost Adjustment:	\$0.0259		
	Cost of Gas			
		\$1.1398		
&I High Annual/Low Winter	Tariff Rate G 52:			
	Monthly Customer Charge	\$254.00	\$254.00	\$254.00
	-	\$204.00	Ψ204.00	\$254.00
	All usage	\$0.1262	\$0.1521	* 64 4 5 4 4
	LDAC	\$0.0259	ΨU.1321	\$1.1540
	Gas Cost Adjustment:	Ψ0.02.03		
	Cost of Gas	\$1.0019		
		Ψ1.0019		

Issued: September 15, 2010 Effective: With Service Rendered On and After November 1, 2010 Authorized by NHPUC Order No, in Docket No. DG 10, dated, 2010	Issued by: Title:	Treasurer
--	----------------------	-----------

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION WINTER SEASON DELIVERY RATES

	Winter Season		Total
	November 2010-April 2011	Tariff	Delivery Rates
		Rates	(Includes LDAC)
C&I Low Annual/High Winter	Tariff Rate T 40:		
	Monthly Customer Charge	\$18.70	\$18.70
	First 75 therms	\$0.3077	\$0.3336
	All usage over 75 therms	\$0.2007	\$0.2266
	LDAC	\$0.0259	
C&I Low Annual/Low Winter	Tariff Rate T 50:	T	
	Monthly Customer Charge	\$18.70	\$18.70
	First 75 therms	\$0.3018	\$0.3277
	All usage over 75 therms	\$0.1969	\$0.3277 \$0.2228
	_		•
	LDAC	\$0.0259	
C&I Medium Annual/High Winter	Tariff Rate T 41:		
	Monthly Customer Charge	\$60.30	\$60.30
	All usage	\$0.1942	\$0.2201
}	LDAC	\$0.0259	
C&I Medium Annual/Low Winter	Tariff Rate T 51:		
	Monthly Customer Charge	\$60.30	\$60.30
	First 1300 therms	\$0.1862	\$0,2121
	All usage over 1300 therms	\$0.1467	\$0.1726
	LDAC	\$0.0259	
C&I High Annual/High Winter	Tariff Rate T 42:	V	74F-94-4
	Monthly Customer Charge	\$254.00	\$254.00
	All usage	\$0.1725	\$0.1984
	LDAC	\$0.0259	
C&I High Annual/Low Winter	Tariff Rate T 52:		
	Monthly Customer Charge	\$254.00	\$254.00
	All usage	\$0.1262	\$0.1521
	LDAC	\$0.0259	
C&I Interruptible Transportation	Tariff Rate IT:		
	Monthly Customer Charge	\$170.21	\$170.21
	First 20,000 therms	\$0.0407	\$0.0407
	All usage over 20,000 therms	\$0.0347	\$0.0347

Issued: September 15, 2010				Issued by:	
Effective: With Service Rendered On	and After-November 1, 2	2010		Title:	Treasurer
Authorized by NHPHC Order No.	in Docket No. DG 10-	datad	2040		

VII. DELIVERY SERVICE TERMS AND CONDITIONS

APPENDIX A

Schedule of Administrative Fees and Charges

<u>I. Supplier Balancing Charge:</u> <u>\$0.75 per MMBtu</u> of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

II. Peaking Service Demand Charge: \$13.84 per MMBtu per MDPQ per month for November 2010 through April 2011.

• Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

III. Supplier Services and Associated Fees:

<u>SERVICE</u>	PRICING
Pool Administration (required)	• \$0.10/month/customer billed @ marketer level
Non-Daily Metered Pools only	
Standard Passthrough Billing (required)	• \$0.60/customer/month billed @ marketer level
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	\$1.50/customer/month billed @ marketer level
Customer Administration (required)	\$10/customer/switch billed @ marketer level

Issued:	September 15, 2010	Issued by:	Whales
Effective:	November 1, 2010		Treasurer
Authorized	by NHPUC Order No	in Docket No. DG 10, dated	•

APPENDIX C

Capacity Allocators

Capacity Allocators shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Capacity Allocators shall be applicable for capacity assignments during the period of November 1, 2010 through October 31, 2011.

Commercial and Industrial

	High Winter Use	Low Winter Use
Pipeline:	6.89%	64.97%
Storage:	33.75%	12.70%
Peaking:	59.37%	22.34%

Issued:	September 15, 2010		Issued by:	WLACRES
Effective:	November 1, 2010			Treasurer
Authorized	by NHPUC Order No	in Docket No. DG10-	, dated	•

APPENDIX D

Firm Sales Service Re-Entry Fee Bill Adjustment (continued)

The Re-Entry Fee shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Firm Sales Service Re-Entry Fee Unit Charge shall be applicable for the period of November 1, 2010 through October 31, 2011.

Effective Dates:	November 1, 2010 – October 31, 2011
Annual Average Unit Cost:	\$ 311.63
25% - Annual Charge for Re-Entry Fee:	\$ 77.91
Monthly Unit Charge for Re-Entry Fee:	\$ 6.49

Issued:	September 15, 2010	Issued by	: Wetcles
Effective:	November 1, 2010		Treasurer
Authorized	by NHPUC Order No	in Docket No. DG 10, dated	•

Anticipated Cost of Gas

New Hampshire Division

Period Covered: May 1, 2010 - Oc	stober 31, 2010 N	ovember 1, 2010	- April 30, 2011	
(Col 1)	(Col 2)		(Col 3)	•
ANTICIPATED DIRECT COST OF GAS			, ,	
Purchased Gas:				
Demand Costs:	\$ 474,873	\$ 1,944,296		
Supply Costs:	\$4,171,67 7	\$ 5,408,538		
Storage & Peaking Gas:				
Demand, Capacity:	\$ 583,148	\$ 13,538,806		
Commodity Costs:	\$ 26,514	\$ 7,629,178		
Hedging (Gain)/Loss	\$ 343,585	\$ 1,054,446		
Interruptible Included Above	\$	<u> </u>		
Inventory Finance Charge	\$	\$ 10,094		
Capacity Release, Asset Management, PNGTS Cost	\$	\$ (1,771,080)	1	
PNGTS Refund	***************************************		•	
Total Anticipated Direct Cost of Gas			\$ 5,599,797	27,814,277
ANTICIDATED INDIDECT COST OF CAS				
ANTICIPATED INDIRECT COST OF GAS Adjustments:				
Prior Period Under/(Over) Collection	\$ (536,749)	\$ 2,527,403		
Prior Period Adjustment (ATV Reconciliation)	\$ 433,436	Ψ 2,327,403		
Interest	\$ (17,510)	\$ 99,945		
Refunds	\$			
Capacity Reserve Charge Revenue	\$ (90,228)			
Interruptible Margins Total Adjustments	<u> </u>		. (100.000)	• • • • • • • • • • • • • • • • • • • •
			\$ (120,823)	\$ 2,627,348
Working Capital:				
Total Anticipated Direct Cost of Gas Working Capital Percentage	\$ 5,599,797	\$ 27,814,277		
Working Capital Allowance	0.190% \$ 10,640	\$ 52,847		
	•			
Plus: Working Capital Reconciliation (Acct 182.11)	\$ (8,299)	\$ (83,069)		
Total Working Capital Allowance			\$2,341	\$ (30,222)
Bad Debt:				
Total Anticipated Direct Cost of Gas	\$ 5,599,797	\$ 27,814,277		
Less: Capacity Reserve Charge Revenue	\$			
Plus: Prior Period Under/(Over) Collection	\$(536,749)	\$ 2,527,403		
Plus: Interest	\$ 433,436			
Plus: Total Working Capital Subtotal	\$ 2,341	\$ (30,222)		
Subtotal	\$5,498,825	\$ 30,311,459		
Bad Debt Percentage	0.450%			
Bad Debt Allowance	\$ 24,745			
Plus: Bad Debt Reconciliation (Acct 182.16)	\$ (4,888)	\$ (2,655)		
Total Bad Debt Allowance			\$19,857	\$ 133,747
Local Production and Storage Capacity			\$ -	
Miscellaneous Overhead-25.15% Allocated to Winter Season	1		\$ 31,261	<u>\$98,333</u>
Total Anticipated Indirect Cost of Gas			\$ (67,365)	\$3,515,879
Total Cost of Gas			\$ 5,532,433	\$ 31,330,157
Issued: April 30, 2010 September 15, 2010		,	1. >	
Effective Date: May November 1, 2010		issued By:	Net	<u> </u>
				reasurer
Authorized by NHPUC Order No, in Docket No. DG 09-1	IU dated	, 2009 20	<u>110.</u>	

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: May 1, 2010 - October 31, 2010 November 1, 2010 - April 30, 2011

(Col 1)	(Col 2)		(Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (95/01/10 - 10/31/10 - 11/1/10 - 04/30/11)	\$ 5,599,798 	\$27,814,277 28,028,950	_	
Direct Cost of Gas Rate			\$ 0.6625	\$0.9923 per therm
Demand Cost of Gas Rate	\$ 1,058,022	\$13,712,022	\$ 0.1252	\$0.4892 per therm
Commodity Cost of Gas Rate Total Direct Cost of Gas Rate	\$ 4,541,776 \$ 5,599,798	\$14,102,256 \$27,814,277	· \$ 0.5373	\$0.5031 per therm
	5,099,798	327,014,277	\$0.6625	\$0.9923 per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (05/01/10 - 10/31/10 - 11/1/10 - 04/30/11)	\$ (67,365) 	\$3,515,879		
Indirect Cost of Gas	8,432,084	28,028,950	\$ (0.0080)	\$0.1254 per therm
				,
TOTAL PERIOD AVERAGE COST OF GAS			\$0.6545	\$1.1177 per therm
Period Ending Over-collection as determined on 5/25/10 ⁴	\$ (457,966)			
PROJECTED SALES (05/01/10 - 10/31/10)	7,949,035			
PER UNIT CHANGE IN COST OF GAS (06/01/10 - 10/31/10)	\$ (0.0576)			
Period Ending Under-collection as determined on 6/24/40 ²	\$ 551,768			
PROJECTED SALES (07/01/10 - 10/31/10)	4,209,415			
PER UNIT CHANGE IN COST OF GAS (07/01/10 - 10/31/10)	\$ 0.1311			
Over-collection w/o rate adjustment as contained in NUI's COG Report dated May 25, 20				
Under-collection w/o rate adjustment as contained in NUI's COG Report dated June 24, 2	010			

ESIDENTIAL COST OF GAS RATE - 07/01/101/10	COGwr	\$0.7280	\$1.1177 per thern
RESIDENTIAL COST OF GAS RATE - 05/01/10 CHANGE IN PER UNIT COST RESIDENTIAL COST OF GAS RATE - 06/01/10 CHANGE IN PER UNIT COST RESIDENTIAL COST OF GAS RATE - 07/01/10	Maximum (COG+25%)	\$ 0.8181 \$ 0.6545 \$ (0.0576) \$ 0.5969 \$ 0.1311 \$ 9.7280	<u>\$1.3971</u>
M/IND LOW WINTER USE COST OF GAS RATE - 07/01/101/101	COGwl	\$ 0.6810	\$1.0019 per thern
GOM/IND-LOW-WINTER-USE-COST-OF-GAS-RATE-05/01/10 CHANGE-IN-PER-UNIT-COST COM/IND-LOW-WINTER-USE-COST-OF-GAS-RATE-06/01/10 CHANGE-IN-PER-UNIT-COST COM/IND-LOW-WINTER-USE-COST-OF-GAS-RATE-07/01/10 C&I-HLF Demand Costs Allocated per SMBA PLUS: Residential Demand Relocation to C&I-HLF C&I-HLF Total Adjusted Demand Costs C&I-HLF Total Adjusted Demand Costs C&I-HLF Projected Prorated Sales (11/01/10-04/20/11) Demand Cost of Gas Rate C&I-HLF Commodity Costs Allocated per SMBA PLUS: Residential Commodity Reallocation to C&I-HLF C&I-HLF Total Adjusted Commodity Costs C&I-HLF Total Adjusted Commodity Costs C&I-HLF Projected Prorated Sales (11/01/10-04/30/11) Commodity Cost of Gas Rate	\$712,743 \$12,540 \$725,283 2,402,246 \$0.3019 \$1,378,807 \$1,419 \$1,330,226 2,402,246 \$0.5746	\$ 0.7594 \$ 0.6075 \$ (0.6576) \$ 0.5490 \$ 0.1311 \$ 0.6810	<u>\$1.2524</u>
Total C&I HLF Cost of Gas Rate	\$1.0019		
M/IND HIGH WINTER USE COST OF GAS RATE - 07/01/101/10	COGwh	\$ 0.7640	\$1.1398 per thern
COMIND HIGH WINTER-USE COST OF GAS RATE - 05/01/10 CHANGE IN PER UNIT COST COMIND HIGH WINTER USE COST OF GAS RATE - 05/01/10 CHANGE IN PER UNIT COST COMIND HIGH WINTER USE COST OF GAS RATE - 07/01/10 CAILLE Demand Costs Allocated per SMBA PLUS: Residential Demand Resilocation to C&I LLF C&ILLE Total Adjusted Demand Costs C&ILLF Projected Prorated Sales (11/01/10-04/30/11) Demand Cost of Gas Rate C&ILLF Commodity Costs Allocated per SMBA PLUS: Residential Commodity Reallocation to C&I LLF C&ILLF Total Adjusted Commodity Costs C&ILLF Projected Prorated Sales (11/01/10-04/30/11) Commodity Cost of Gas Rate Indirect Cost of Gas Total C&I LLF Cost of Gas Rate	\$6,495,498 \$114,281 \$6,609,779 12,591,463 \$0,5249 \$6,157,247 \$6,338 \$6,163,585 12,591,463 \$0,4895 \$0,1254	\$ 0.8631 \$ 0.6905 \$ (0.9576) \$ 0.6339 \$ 0.1311 \$ 0.7640	\$1.4248
ed: -June-25,-2010 September 15, 2010		ssued By:	cole-

N.H.P.U.C. No. 10 - Gas Northern Utilities, Inc.

Thirteenth Fourteenth Revised Page No. 56 Superseding Twelfth Thirteenth Revised Page No. 56

Local Delivery Adjustment Clause

Rate Schedule	RLIAP	DSM	ERC	ITM	WLNG	CCE	RCE	LDAC
Residential Heating Residential Non-Heating Small C&I Medium C&I Large C&I No Previous Sales Service	\$0.0055 \$0.0043 \$0.0055 \$0.0043 \$0.0055 \$0.0043 \$0.0055 \$0.0043 \$0.0055 \$0.0043	\$0.0201 \$0.0355 \$0.0201 \$0.0355 \$0.0201 \$0.0160 \$0.0201 \$0.0160 \$0.0201 \$0.0160	\$0.0057 \$0.0056 \$0.0057 \$0.0056 \$0.0057 \$0.0056 \$0.0057 \$0.0056 \$0.0057 \$0.0056	\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000	\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000	\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000	\$0.0000	\$0.0297 \$0.0454 \$0.0297 \$0.0454 \$0.0166 \$0.0259 \$0.0166 \$0.0259 \$0.0166 \$0.0259

Issued: October 15, 2009 September 15, 2010

Effective: With Service Rendered On and After November 1, 2009 2010

Authorized by NHPUC Order No. _____ in Docket N. DG-09-10-___, dated _____, 2009 2010

Issued M24 Color

Treasurer

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION SUMMER WINTER SEASON RESIDENTIAL RATES

	Summer Winter Season	T T		
May 2010 - October 2010 November 2010 - April 2011		Tariff	Total	Total Billed Rates
May 2010 October	10 10 10 10 10 10 10 10 10 10 10 10 10 1		Delivery Rates	Tariff Rates, LDAC
Residential Heating	Tariff Data D.F.	Rates	(Includes LDAC)	Plus Cost of Gas
Nesiderillar Healing	Tariff Rate R 5:			
	Monthly Customer Charge	\$9.50	\$9.50	\$9.50
	First 50 therms	\$0.4102	\$ 0.4399 \$ <u>0.4556</u>	\$1.1679 <u>\$1.5733</u>
	All usage over 50 therms	\$0.2990	\$0.3287 \$ <u>0.3444</u>	\$1.0567 <u>\$1.4621</u>
	LDAC	\$0.0297 \$0.0454		
	Gas Cost Adjustment:			
	Cost of Gas	\$ 0.7280 \$1.1177		
Decid with w		·		
Residential Heating	Tariff Rate R 10:			
Low Income	Monthly Customer Charge	\$3.80	\$3.80	\$3.80
	First 50 therms	\$0.1641	\$ 0.193 8 <u>\$0.2095</u>	\$0.9218 <u>\$1.3272</u>
	All usage over 50 therms	\$0.1196	\$0.1493 <u>\$0.1650</u>	\$0.8773 \$1.2827
	LDAC	\$ 0.0297 <u>\$0.0454</u>		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.7280- <u>\$1.1177</u>		
Residential Non-Heating	Tariff Rate R 6:			
	Bi-monthly Customer Charge	\$19.00	\$19.00	\$19.00
	First 20 therms	\$0.4067	\$0.4364 <u>\$0.4521</u>	\$1.1644 <u>\$1.5698</u>
	All usage over 20 therms	\$0.3082	\$ 0.3379 <u>\$0.3536</u>	\$1.0659 <u>\$1.4713</u>
	Monthly Customer Charge	\$9.50	\$9.50	\$9.50
	First 10 therms	\$0.4067	\$0.4364 <u>\$0.4521</u>	\$1.1644 \$1.5698
	All usage over 10 therms	\$0.3082	\$0.3379 \$0.3536	\$1.0659 \$1.4713
	LDAC	\$0.0297 \$0.0454	711111	\$ 11.0000 <u>\$ 11.11 10</u>
	Gas Cost Adjustment:			
	Cost of Gas	\$ 0.7280 _\$1.1177		
Decidential Nov. 11 th.	T18 D-4- D-44			
Residential Non-Heating Low Income	Tariff Rate R 11:	040.00		
LOW INCOME	Bi-monthly Customer Charge	\$13.80	\$13.80	\$13.80
	First 20 therms	\$0.3084	\$0.3381 <u>\$0.3538</u>	\$1.0661 <u>\$1.4715</u>
	All usage over 20 therms	\$0.2335	\$ 0.2632 _\$0.2789	\$ 0.9912 <u>\$1.3966</u>
	Monthly Customer Charge	\$6.90	\$6.90	\$6.90
	First 10 therms	\$0.3084	\$ 0.3381 \$0.3538	\$1.0661 \$1.4715
				\$0.9912 \$1.3966
	All usage over 10 therms	\$0.2335 1	₽₩.2022 ₽₩.2709	
	All usage over 10 therms	\$0.2335 \$0.0297 \$0.0454	\$0.2632 <u>\$0.2789</u>	\$0.8812 <u>\$1.3800</u>
		\$0.2335 \$0.0297 \$0.0454	\$0.2032 <u>\$0.2789</u>	\$0.0812 <u>\$1.3900</u>

lssued: June 25, <u>September 15</u>, 2010	Issued by:	
Effective: With Service Rendered On and After July November 1, 2010		Treasurer
Authorized by NHPUC Order No. 25,097 , in Docket No. DG 10- 050	_, dated April 29 ,	2010

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION $\frac{\text{SUMMER}}{\text{SUMMER}} \underbrace{\text{WINTER}}_{\text{SEASON C&I}} \text{ RATES}$

	SummerWinter Season		T	r	T
May 2010 - October 20:	10 November 2010-April 2011	1	,,	Total	Total Billed Rates
may 2010 October 20	November 2010-April 2011		Tariff	Delivery Rates	Tariff Rates, LDAC
C&I Low Annual/High Winter	T. 17 D. 1. 0.10		Rates	(Includes LDAC)	Plus Cost of Gas
Col Low Annual/High Winter	Tariff Rate G 40:	İ			
	Monthly Customer Charge		\$18.70	\$18.70	\$18.70
	First 75 therms		\$0.3077	\$ 0.3243 <u>\$0.3336</u>	\$1.0883- <u>\$1.4734</u>
	All usage over 75 therms	l	\$0.2007	\$0.2173 <u>\$ 0.2266</u>	\$0.9813 \$1.3664
	LDAC		\$0.0166 <u>\$0.0259</u>		
	Gas Cost Adjustment:				
	Cost of Gas		\$0.764 <u>\$1.1398</u>		
C&I Low Annual/Low Winter	Tariff Rate G 50:				
	Monthly Customer Charge		\$18.70	¢40.70	440 770
	First 75 therms			\$18.70	\$18.70
	All usage over 75 therms		\$0.3018	\$0.3184 <u>\$0.3277</u>	\$0.9994 <u>\$1.3296</u>
	LDAC		\$0.1969	\$0.2135 <u>\$0.2228</u>	\$0.8945 <u>\$1.2247</u>
			\$0.0166 <u>\$0.0259</u>		
	Gas Cost Adjustment:		** ***		
	Cost of Gas	Ш	\$0.681 <u>\$1.0019</u>		
C&I Medium Annual/High Winter	Tariff Rate G 41:	П			
	Monthly Customer Charge		\$60.30	\$60.30	\$60.30
	,	ll	, , , , , ,	***************************************	ψ00.50
	All usage		\$0.1124 \$0.1942	\$ 0.1290	\$0.8930 <u>\$1.3599</u>
İ	LDAC	11	\$0.0166 \$0.0259	***************************************	7 <u>7</u>
	Gas Cost Adjustment:				
	Cost of Gas		\$0.764 \$1.1398		
C&I Medium Annual/Low Winter	Tariff Rate G 51:	1 1			
The state of the s	Monthly Customer Charge	П	000.00		
	First 1000 1300 therms	l	\$60.30	\$60.30	\$60.30
			\$0.1112 <u>\$0.1862</u>	\$0.127 8 <u>\$0.2121</u>	\$0.8088 <u>\$1.2140</u>
	All usage over 1000 1300 therms		\$0.078 <u>\$0.1467</u>	\$0.0946 <u>\$0.1726</u>	\$0.7756 <u>\$1.1745</u>
			\$0.0166 <u>\$0.0259</u>		
	Gas Cost Adjustment:	Н			
Lau	Cost of Gas	Ц	\$0.681 <u>\$1.0019</u>		
C&I High Annual/High Winter	Tariff Rate G 42:	П			
	Monthly Customer Charge		\$254.00	\$254.00	\$254.00
	·		¥2000	¥204.00	Ψ254.00
	All usage		\$0.0964 \$0.1725	\$0.1130 \$0.1984	\$ 0.8770 \$1.3382
	LDAC		\$0.0166 <u>\$0.0259</u>	+3.1.100 <u>\$0.1004</u>	\$4.0110 \$1.000Z
	Gas Cost Adjustment:		**************************************		
	Cost of Gas		\$0.764 \$1.1398		
C&I High Annual/Low Winter					
Odi i ligii Aliliual/Low Winter	Tariff Rate G 52:			-	
	Monthly Customer Charge		\$254.00	\$254.00	\$254.00
	All usage		10 00E2 60 4200	\$0.0040 to 4551	*****
	LDAC		\$0.0653 <u>\$0.1262</u>	\$0.0819 <u>\$0.1521</u>	\$ 0.7629 <u>\$1.1540</u>
		- [3	\$ 0.0166 <u>\$0.0259</u>	İ	:
	Gas Cost Adjustment:			1	
	Cost of Gas	\perp	\$0.681 <u>\$1.0019</u>		

Issued: June 25-September 15, 2010	Issued by:	
Effective: With Service Rendered On and After July November 1, 2010		Treasurer
Authorized by NHPUC Order No. 25,097 in Docket No. DG 40-050	dated April 20 2010	

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION $\frac{\text{SUMMER}}{\text{WINTER}} \underbrace{\text{SEASON DELIVERY RATES}}$

	Summer Winter Season		Total
May 2010 - October 201	November 2010-April 2011	Tariff	Delivery Rates
		Rates	(Includes LDAC)
C&I Low Annual/High Winter	Tariff Rate T 40:		
	Monthly Customer Charge	\$18.70	\$18.70
	First 75 therms	\$0.3077	\$ 0.3243 <u>\$0.3336</u>
	All usage over 75 therms	\$0.2007	\$0.2173 <u>\$0.2266</u>
	LDAC	\$ 0.0166 <u>\$0.0259</u>	
C&I Low Annual/Low Winter	Tariff Rate T 50:		
	Monthly Customer Charge	\$18.70	\$18.70
	First 75 therms	\$0.3018	\$0.3184 \$0.3277
	All usage over 75 therms	\$0.1969	\$ 0.2135 \$ <u>0.2228</u>
	7 th dadge over 70 therms	φ0.1909	\$0.2.100 \$0.2220
	LDAC	\$0.0166 <u>\$0.0259</u>	
C&I Medium Annual/High Winter	Tariff Rate T 41:		
	Monthly Customer Charge	\$60.30	\$60.30
	All usage	\$ 0.112 4 <u></u> \$0.1942	\$.1290 <u>\$0.2201</u>
	LDAC	\$0.0166 \$0.0259	
C&I Medium Annual/Low Winter	Tariff Rate T 51:		
	Monthly Customer Charge	\$60.30	\$60.30
	First 1000 1300 therms	\$0.1112 \$0.1862	\$0.1278 \$0.2121
	All usage over 1000 1300 therms	\$ 0.078 <u>\$0.1467</u>	\$0.0946 \$0.1726
	LDAC	\$0.0166 \$0.0259	
C&I High Annual/High Winter	Tariff Rate T 42:		
	Monthly Customer Charge	\$254.00	\$254.00
	All usage	\$0.0964 <u>\$0.1725</u>	\$ 0.1130_\$0.1984
	LDAC	\$ 0.0166 \$0.0259	
C&I High Annual/Low Winter	Tariff Rate T 52:		
	Monthly Customer Charge	\$254.00	\$254.00
	All usage	\$0.0653 <u>\$0.1262</u>	\$0.0819 <u>\$0.1521</u>
	LDAC	\$ 0.0166 \$0.0259	
C&I Interruptible Transportation	Tariff Rate IT:		
	Monthly Customer Charge	\$170.21	\$170.21
	First 20,000 therms	\$0.0407	\$0.0407
	All usage over 20,000 therms	\$0.0347	\$0.0347

Issued: -April-30, September 15, 2010			Issued by:	
Effective: With Service Rendered On and After M	lay November 1, 2010		Title:	Treasurer
Authorized by NHPUC Order No. 25.097 in Do	ocket No. DG 40-050	dated April 29	2010	

APPENDIX A

Schedule of Administrative Fees and Charges I. Supplier Balancing Charge: \$0.75 per MMBtu of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

II. Peaking Service Demand Charge: \$16.4913.84 per MMBtu per MDPQ per month for November 2009 2010 through April-2010 2011.

• Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

III. Supplier Services and Associated Fees:

SERVICE Pool Administration (required) Non-Daily Metered Pools only	• \$0.10/month/customer billed @ marketer level
Standard Passthrough Billing (required)	• \$0.60/customer/month billed @ marketer level
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	• \$1.50/customer/month billed @ marketer level
Customer Administration (required)	\$10/customer/switch billed @ marketer level

Issued:	November, 2009 September 15, 2010	Issued by:	WZHCDes
Effective:	November 1, 2009 <u>2010</u>		Treasurer
Authorized 1	by NHPUC Order No	in Docket No. DG -09-167 _10, date	ed

APPENDIX C

Capacity Allocators

Capacity Allocators shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Capacity Allocators shall be applicable for capacity assignments during the period of November 1, 092010 through October 31, 20102011.

Commercial and Industrial

	High Winter Use	Low Winter Use
Pipeline:	<u>6.09_6.89</u> %	53.98 <u>64.97</u> %
Storage:	32.91 <u>33.75</u> %	16.13 <u>12.70</u> %
Peaking:	60.99 <u>59.37</u> %	29.89 <u>22.34</u> %

Issued:	November September 15,	Issued by	Έ 1	
	2009 <u>2010</u>	·	K	12HCDes
Effective:	November 1, <u>2009</u> <u>2010</u>			Treasurer
Authorized	by NHPUC Order No.	in Docket No. DG-09-16710-	. dated	

APPENDIX D

Firm Sales Service Re-Entry Fee Bill Adjustment (continued)

The Re-Entry Fee shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Firm Sales Service Re-Entry Fee Unit Charge shall be applicable for the period of November 1, 2009-2010 through October 31, 20102011.

Effective Dates:	November 1, 2009 - <u>2010</u> – October 31, 2010 <u>2011</u>				
Annual Average Unit Cost:	\$ 231.48 311.63				
25% - Annual Charge for Re-Entry Fee:	\$ 57.87 <u>77.91</u>				
Monthly Unit Charge for Re-Entry Fee:	\$ 4.823 <u>6.49</u>				

Issued:	November September 15 —, 2009 2010	Issued by:	WZHCRO
Effective:	November 1, 2009 <u>2010</u>		Treasurer
Authorized	by NHPUC Order No.	in Docket No. DG -09-167 10- , d	ated .

NH Division Total Annual Demand Cost Allocation

	THE DIVISION TOTAL ANNUAL DEMIAND COST ANOCATION		
1	Resource		Costs
2	Pipeline & Product Demand	\$	2,740,726
3	Storage	\$	13,405,151
4	Peaking	\$	3,015,206
5	Total Gross Demand Cost	\$	19,161,083
6		<u> </u>	10,101,000
7	Capacity Assignment Demand Revenue Estimate	\$	2,600,137
8	NH Total Pipeline, Storage & Peaking Demand Cost	\$	19,161,083
9	Capacity Assignment as % of Total Gross Demand Cost		13.57%
10			
11	NH Non-Grandfathered Transportation Allocated Capacity		
	Assignment Costs		
12			Costs
13	Pipeline & Product Demand	\$	371,913
14	Storage	\$	1,819,064
15	Peaking	\$	409,160
16	Total Capacity Assignment Credit	\$	2,600,137
17	NILLA IS 10 10 10	Ì	
18	NH Net Annual Demand Cost (Less Capacity Assignment)		
19		1	Costs
20	Pipeline & Product Demand	\$	2,368,813
21	Storage	\$	11,586,088
22	Peaking	\$	2,606,046
23	Total Net Demand Cost (Less Capacity Assignment)	\$	16,560,946
24			

25 DEVELOPMENT OF BASE AND REMAINING PIPELINE DEMAND COSTS

	The state of the s	INFIND COCIO
26		MMBtu/day
27	Pipeline MDQ	11,564
28	Less 13.57% NH Transp. Capacity Assignment	(1,569)
29	Net Pipeline MDQ	9,995
30		
31	Net Pipeline MDQ	9,995
32	Less: Firm Sales Base Use	2,932
33	Remaining Pipeline MDQ	7.063
34		
35		Unit Cost
36	Pipeline Unit Cost	\$237.00
37		
38		Costs
39	Pipeline & Product Demand	\$ 2,368,813
40	Less: Base Pipeline Use	\$ 694,919
41	Remaining Pipeline Use	\$ 1,673,893

Northern Utilities, Inc. New Hampshire Division Schedule 1A Page 1 of 6

Resc	ource	
Pipel	line & Product Demand	Schedule 25, LN 84 + Schedule 25, LN 87
Stora	age	Schedule 25, LN 85
Peak	-	Schedule 25, LN 86
-	I Gross Demand Cost	Sum (LN 2 : LN 4)
1000	TOTOGO DOMANO GOOK	Outri (Civ2. Civ7)
Capa	acity Assignment Demand Revenue Estimate	Attachment NUI-FXW-5
1 '	Fotal Pipeline, Storage & Peaking Demand Cost	LN 5
i	acity Assignment as % of Total Gross Demand Cost	LN 7 / LN 8
-	Total Close Delitaria God	LIVITLIVO
NH N	Non-Grandfathered Transportation Allocated Capacity	
	gnment Costs	
. 100.5	girinonic Oddio	
Pipel	line & Product Demand	LN 2 * LN 9
Stora		LN 3 * LN 9
Peak	•	LN 4 * LN 9
Total	Capacity Assignment Credit	Sum (LN 13 : LN 15)
NH N	Net Annual Demand Cost (Less Capacity Assignment)	
Pipel	line & Product Demand	LN 2 - LN 13
Stora	age	LN 3 - LN 14
Peak	king	LN 4 - LN 15
Total	Net Demand Cost (Less Capacity Assignment)	LN 5 - LN 16
DEV	ELOPMENT OF BASE AND REMAINING PIPELINE D	E
	line MDQ	Company Analysis
Less	13.57% NH Transp. Capacity Assignment	-(LN 27) * LN 9
Net F	Pipeline MDQ	Sum (LN 27 : LN 28)
Not P	Dinalina MDO	LN 00
	Pipeline MDQ	LN 29
	: Firm Sales Base Use aining Pipeline MDQ	Schedule 10B, LN 48 / 10 LN 31 - LN 32
Livelille	anning ripenne MDQ	LIN 31 - LIN 32
Pineli	line Unit Cost	LN 20 / LN 31
, ipen	into othic oost	LIT 20 / LIT 01
ŀ		
Pipeli	line & Product Demand	LN 20
1	: Base Pipeline Use	LN 36 * LN 32
	aining Pipeline Use	LN 39 - LN 40

42 NH DIVISION MONTHLY PROPORTIONAL RESPONSIBILITY (PR ALLOCATORS)

43 (Based on NH Firm Sales Sendout for Remaining Temperature Sensitive Load) 44

45 All Months Nov Dec Jan Feb Mar Apr 46 Remaining Load for All Months 2,254,019 3,941,629 5,629,208 4,743,608 4,482,254 2,398,238 47 Rank 48 % Max Month 40.04% 70.02% 100.00% 84.27% 79.62% 42.60% 49 PR 3.91% 6.85% 15.73% 2.32% 3.20% 0.51% 50 CumPR 5.91% 13.27% 34.53% 18.80% 16.47% 6.42% 51

ÐΙ							
52	Peak Months Only	Nov	Dec	Jan	Feb	Mar	Apr
53	Remaining Load for Peak Months Only	2,254,019	3,941,629	5,629,208	4,743,608	4,482,254	2,398,238
54	Rank	6	4	1	2	3	5
55	% Max Month	40.04%	70.02%	100.00%	84.27%	79.62%	42.60%
56	PR	6.67%	6.85%	15.73%	2.32%	3.20%	0.51%
57	CumPR	6.67%	14.04%	35.30%	19.56%	17.24%	7.19%
58							

DEMAND COST PR ALLOCATORS

60		Nov	Dec	Jan	Feb	Mar	Apr
61	Pipeline - Base	8.33%	8.33%	8.33%	8,33%	8.33%	8.33%
62	Pipeline - Remaining	5.91%	13.27%	34.53%	18.80%	16.47%	6.42%
63	Storage & Peaking	5.91%	13.27%	34.53%	18.80%	16.47%	6.42%
64	Capacity Release	6.67%	14.04%	35.30%	19.56%	17.24%	7.19%
65	Interr. Margins & Off Sys Sales	6.67%	14.04%	35.30%	19.56%	17.24%	7.19%
66					*		

67 DEMAND COSTS ALLOCATED TO MONTHS

68			Nov	Dec		Jan		Feb		Mar		Apr
69	Pipeline - Base	\$	57,910	\$ 57,910	\$	57,910	\$	57,910	\$	57,910	\$	57,910
70	Pipeline - Remaining	\$	98,866	\$ 222,178	\$	577,963	\$	314,622	\$	275,764	\$	107,443
71	Total Pipeline	\$	156,776	\$ 280,088	\$	635,873	\$	372,532	\$	333,674	\$	165,353
72												
73	Storage & Peaking	\$	838,236	\$ 1,883,740	\$.	4,900,270	\$ 2	2,667,531	\$ 2	2,338,074	\$	910,955
74												
75	Less Credits to Demand Cost	Г								***************************************		
76	Cap Rel Margins & Asset Mgt Credit net of PNGTS expense	\$	118,194	\$ 248,666	\$	625,108	\$	346,478	\$	305.364	\$	127.269
77	Interruptible Margins	\$	· -	\$ · -	\$		\$		\$	· -	\$	-
78	Re-Entry Fee Credits	\$	-	\$ -	\$		\$	-	\$	_	\$	_
79		'							ľ		Ť	
80	Total Direct Demand Costs	\$	876,817	\$ 1,915,161	\$	4,911,035	\$ 2	2,693,586	\$ 2	2,366,384	\$	949,039
81				 				-t				

32	Indirect	Demand	Costs/(Credits))

83 Miscellaneous Overhead

84 Local Production & Storage

85 Subtotal

59

Northern Utilities, Inc. New Hampshire Division Schedule 1A Page 3 of 6

All Months	Ma	v		Jun	Г	Jul		Aug		Sep	Oct	Total	Winter	Summer	1	
Remaining Load for All Months	774			192,941	_	28,476	╁─	91.816		286,081	932,290	25,754,739	23,448,955	2,305,784		
Rank	1	8		102,011		12		11		9	7	20,704,700	20,440,000	2,000,704		
% Max Month	13	.75%		3.43%		0.51%		1.63%		5.08%	16.56%					
PR		.08%		0.18%		0.04%	İ	0.10%		0.18%	0.40%	34.53%			İ	
CumPR		.59%		0.32%	-	0.04%	 	0.14%		0.51%	1.99%	100.00%	95.40%	4.60%	İ	
	<u>' </u>	.00 /0]	L	0.0270		0,0170	L	0.1170	L	0.01701	1.0070	100.0070	00.4070	4.0070	J	
Peak Months Only	T											Total	Winter	Summer	1	
Remaining Load for Peak Months Only												23,448,955			1	
Rank												20,440,000				
% Max Month																
PR												35.30%				
CumPR	1											100.00%		0.00%		
												100.0070	100.0070	0.0070	1	
DEMAND COST PR ALLOCATORS																
	Ma	v		Jun		Jul	Ι	Aug		Sep	Oct	Total	Winter	Summer	1	
Pipeline - Base		.33%		8.33%		8.33%		8.33%		8.33%	8.33%	100.00%		50.00%		
Pipeline - Remaining	1	.59%		0.32%		0.04%		0.14%		0.51%	1.99%	100.00%		4.60%		
Storage & Peaking		.59%		0.32%	ŀ	0.04%		0.14%		0.51%	1.99%	100.00%	95.40%	4.60%		
Capacity Release		.00%		0.00%		0.00%		0.00%		0.00%	0.00%	100.00%		0.00%		
Interr. Margins & Off Sys Sales		.00%		0.00%		0.00%		0.00%		0.00%	0.00%	100.00%		0.00%		
		.00,01	L	0.0070		0.0070		0.0070		0.0070	0.0070	100.0070	100.0070	0.0070	l	
DEMAND COSTS ALLOCATED TO MONTHS																
	Ma	v		Jun		Jul		Aug		Sep	Oct	Total	Winter	Summer	Winter	S
Pipeline - Base		910	\$	57,910	\$	57,910	\$	57,910			\$ 57,910			\$ 347,460	50.00%	
Pipeline - Remaining		645		5,425	\$	706		2,418						\$ 77,057	95.40%	1
Total Pipeline		555		63,335	\$	58,616					\$ 91,271	\$ 2,368,813	\$ 1,944,296	\$ 424,516	82.08%	
	1	,500	-	00,000	Ť	00,010	Ť	00,020	<u> </u>	00,112	V V 1,271	\$ 2,000,0.0	\$ 1,011,200	4 121,010	02.0070	
Storage & Peaking	\$ 225	908	\$	45,995	\$	5,983	\$	20,500	\$	72 087	\$ 282 854	\$ 14 192 133	\$13,538,806	\$ 653,327	95.40%	
	V 220	1	Ψ_	10,000		0,000	-	20,000		72,001	\$ 202,00 1	ψ : 1,102,100	ψ .υ,υυυ,υυυ	ψ 000,0 <u>2</u> .	00.1070	
Less Credits to Demand Cost							 									Т
Cap Rel Margins & Asset Mgt Credit net of PNGTS expense	\$.	\$	_	\$	_	\$	_	\$	_]	\$ -	\$1,771,080	\$ 1,771,080	\$ -	100.00%	
Interruptible Margins	\$	_	\$		\$	_	\$	_	\$	_	\$ -	\$ -	\$ -	\$ -	100.0070	
Re-Entry Fee Credits	\$	_	\$	_	\$	_	ŝ	_	\$	_ [\$ -	\$ -	\$ -	\$ -		
The Entry 1 de Greate	J **	-	Ψ	_	۳	_	"	-	Ψ	- 1	*	Ψ -	Ψ	Ψ -		
Total Direct Demand Costs	\$ 210	463	Œ	109,330	\$	64,598	4	80 838	¢ 1	38 400	¢ 27/ 125	\$ 1 <i>1</i> 780 865	\$13,712,022	¢ 1 077 9/3	92.71%	\vdash
Total Direct Demand Costs	<u>j a 310</u> ,	403	Φ	109,330	Φ_	04,590	ΙΦ_	00,020	ФІ	30,499	\$ 314,125	\$ 14,709,000	\$ 13,7 12,022	\$ 1,077,043	92.7170	<u> </u>
Indirect Demand Costs/(Credits)											1					Т
monect Demand Costs/(Credits)																₩
Missallanasus Overhead											1	¢ 404007	Φ ∩0 221 1		70 440/	
Miscellaneous Overhead Local Production & Storage												\$ 124,297 \$ 686,673		\$ 25,964 \$ -	79.11% 100.00%	

42 43	NH DIVISION MONTHLY PROPORTIONAL RESPONSIBILITY (Based on NH Firm Sales Sendout for Remaining Temperatur	
44		
45	,	
46	Remaining Load for All Months	Schedule 10B, LN 80
47	Rank	Rank LN 46
48	% Max Month	LN 46 / MAX Month LN 46
49	PR	The difference between LN 48 for the month and LN 48 for next highest rank
50	CumPR	Cumulative Values, LN 49
51		
52	Peak Months Only	
53	Remaining Load for Peak Months Only	LN 46
54	Rank	Rank LN 53
55	% Max Month	
56	PR	LN 53 / MAX Month LN 53
57	CumPR	The difference between LN 55 for the month and LN 55 for next highest rank
58	Culler	Cumulative Values, LN 56
	DEMAND COCT DD ALL COATODO	
59	DEMAND COST PR ALLOCATORS	
60		
61	Pipeline - Base	1/12
62	Pipeline - Remaining	LN 50
63	Storage & Peaking	LN 50
64	Capacity Release	LN 57
65	Interr. Margins & Off Sys Sales	LN 57
66		
67	DEMAND COSTS ALLOCATED TO MONTHS	
68		
69	Pipeline - Base	LN 40 * LN 61
70	Pipeline - Remaining	
71	Total Pipeline	LN 41 * LN 62
72	rotar Pipeline	LN 69 + LN 70
73	Storage & Peaking	LN 63 * (Sum LN 21 : LN 22)
74		
75	Less Credits to Demand Cost	
76	Cap Rel Margins & Asset Mgt Credit net of PNGTS expense	LN 64 * Sum (Schedule 25 LN 88, Schedule 25 LN 89)
77	Interruptible Margins	
78	Re-Entry Fee Credits	
79		
80	Total Direct Demand Costs	LN 71 + LN 73 - (Sum LN 76 ; LN 78)
81		1 13411
	Indirect Demand Costs/(Credits)	
	Miscellaneous Overhead	Company Analysis
	Local Production & Storage	Company Analysis
	Subtotal	LN 83 + LN 84
00	Connectal	LIN 00 T LIN 04

Northern Utilities, Inc. New Hampshire Division Schedule 1A Page 5 of 6

Northern Utilities, Inc. New Hampshire Division Schedule 1A Page 6 of 6

New Hampshire PNGTS Refund, Litigation Costs and Asset Management

			Capacity	
		Total	Assigned	Sales
1	Asset Management	(\$1,223,716)	(\$71,945)	(\$1,151,771)
	-		,	,
2	PNGTS Litigation	\$183,943	\$13,187	\$170,756
3	PNGTS Refund	(\$628,298)	(\$45,043)	(\$583,255)
4	PNGTS litigation net of Refund	(\$444,355)	(\$31,856)	(\$412,499)
			,	
5	Asset Management plus PNGT:	S		(\$1,564,270)

6 Capacity Release Revenues

(\$206,811)

7 Total NH Cap Rel and Asset Management

(\$1,771,080)

Notes

- 1 Capacity Assigned values from Schedule 5B page 1
- 2 Total PNGTS Litigation and Refund valuee from Schedule 5B page 6
- 3 Total Asset Management revenues from Schedule 25, line 9 x line 89

Northern Utilities, Inc. New Hampshire Division Schedule 1B Page 1 of 2

Northern Utilities - NEW HAMPSHIRE DIVISION COMMODITY COSTS

	321.1 333.3								
		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	TOTAL	WINTER
	Supply Volumes - Therms								William
1	New Hampshire Sales Pipeline	2,630,286	1,300,278	1,054,110	882,830	2,011,250	3,096,575	18,510,394	10,975,329
2	New Hampshire Sales Storage	0	2,892,662	4,786,814	4,052,994	2,656,366	13,697	14,402,533	14,402,533
3	New Hampshire Sales Peaking	490,224	646,340	686,856	619,446	711,724	155,128	3,355,263	3,309,718
4	Total New Hampshire Firm Sales Sendout	3,120,510	4,839,280	6,527,780	5,555,270	5,379,340	3,265,400	36,268,190	28,687,580
5					0,000,210	0,070,010	0,200,400	30,200,130	20,007,300
6	New Hampshire Interruptible Sendout (Pipeline)	0	0	0	0	0	0	0	0
7							<u> </u>		U U
8	Total Firm Sendout	3,120,510	4,839,280	6,527,780	5,555,270	5,379,340	3,265,400	36,268,190	28,687,580
9	Total Firm Sales	3,047,100	4,722,517	6,380,229	5,429,979	5,257,529	3,191,596	35,429,591	28,028,950
10	Difference (LAUF & Company Use)	73,410	116,763	147,551	125,291	121,811	73,804	838,599	658,630
11	Percent Difference	2.35%	2.41%	2.26%		2.26%	2.26%	2.31%	
12									
13	Variable Costs								
14	New Hampshire Sales Pipeline Commodity	\$ 1,222,161	\$ 649,388	\$ 550,433	\$ 463,086	\$ 1,029,074	\$ 1,494,396	\$ 9,134,158	\$ 5,408,538
15	New Hampshire Hedging (Gains) Losses	\$ 221,115	\$ 206,683	\$ 125,504	\$ 155,583	\$ 151,036		\$ 1,089,835	
16	New Hampshire Total Storage	\$ -	\$ 1,258,945	\$ 2,089,644	\$ 1,767,251	\$ 1,160,872		\$ 6,283,128	
17	New Hampshire Total Peaking	\$ 197,883	\$ 260,037	\$ 276,274		\$ 299,647		\$ 1,370,306	\$ 1,346,050
18	New Hampshire Inventory Finance Charge	\$ 970	\$ 1,697	\$ 2,423	\$ 2,042	\$ 1,929	\$ 1,032	\$ 10,094	\$ 10,094
19	Total New Hampshire Sales Variable Costs	\$ 1,642,129	\$ 2,376,749	\$ 3,044,278	\$ 2,636,902	\$ 2,642,557	\$ 1,759,640	\$ 17,887,520	\$ 14,102,256
20	Total New Hampshire Sales Variable Costs Excld Hedges	\$ 1,421,015	\$ 2,170,067	\$ 2,918,774	\$ 2,481,319	\$ 2,491,522		\$ 16,797,685	
21	<u>. </u>							\$ -	\$ -
22	New Hampshire Interruptible Commodity Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	Total New Hampshire Commodity Costs	\$ 1,642,129	\$ 2,376,749	\$ 3,044,278	\$ 2,636,902	\$ 2,642,557	\$ 1,759,640	\$ 17,887,520	\$ 14,102,256
24									
25	Supply Cost/Therm								
26	New Hampshire Sales Pipeline Commodity Excld Hedges	0.4646	0.4994	0.5222	0.5245	0.5117	0.4826	\$ 0.4935	\$ 0.4928
27	New Hampshire Hedging (Gains) Losses	0.0841	0.1590	0.1191	0.1762	0.0751	0.0628		
28	New Hampshire Storage Excld Inventory Finance Costs	0.0000	0.4352	0.4365	0.4360	0.4370	0.4685	\$ 0.4363	\$ 0.4363
29	New Hampshire Peaking Excld Inventory Finance Costs	0.4037	0.4023	0.4022	0.4019	0.4210	0.4079		\$ 0.4067
	New Hampshire Inventory Finance Costs per Dth Stor and Peak	0.0020	0.0005	0.0004	0.0004	0.0006	0.0061	\$ 0.0006	\$ 0.0006
31	Weighted Average Cost per Dth Sendout	0.5262	0.4911	0.4664	0.4747	0.4912	0.5389	\$ 0.4932	\$ 0.4916
32									
33	New Hampshire Interruptible Cost / Therm	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	\$ -	\$ -
34								***	
35	Commodity Costs								
	Base Commodity, therms	866,491	897,651	898,572	811,662	897,086	867,162	10,513,451	5,238,625
37	Base Commodity Cost Excld Hedging	\$ 402,615	\$ 448,307		\$ 425,755		\$ 418,489	\$ 5,226,141	
38	Base Hedging Commodity Cost	\$ 72,841	\$ 142,684			\$ 67,367	\$ 54,475	\$ 605,987	
39	Remaining Commodity Excld Hedging		\$ 1,721,760		\$ 2,055,564	\$ 2,032,520		\$ 11,571,544	\$ 10,424,427
	Remaining Hedging Commodity		\$ 63,999			\$ 83,669	\$ 140,051	\$ 483,848	\$ 467,052
41	Total Commodity Excld Hedging	\$ 1,421,015						\$ 16,797,685	\$ 13,047,810
	Total Hedging		\$ 206,683			\$ 151,036		\$ 1,089,835	\$ 1,054,446
43	Total Commodity (Incl Hedging)	\$ 1,642,129	\$ 2,376,749	\$ 3,044,278	\$ 2,636,902	\$ 2,642,557	\$ 1,759,640	\$ 17,887,5 <u>20</u>	\$ 14,102,256

Northern Utilities - NEW HAMPSHIRE DIVISION COMMODITY COSTS

	Supply Volumes Thems	
	Supply Volumes - Therms	
1	New Hampshire Sales Pipeline	Schedule 22, LN 9 * LN 60 * 10
2	New Hampshire Sales Storage	Schedule 22, LN 3 * LN 60 * 10
3	New Hampshire Sales Peaking	Schedule 22, LN 4 * LN 60 * 10
4	Total New Hampshire Firm Sales Sendout	Sum LN 1: LN 3
5		
6	New Hampshire Interruptible Sendout (Pipeline)	Schedule 22, LN 7 * 10
7		
8	Total Firm Sendout	LN 4
9	Total Firm Sales	Schedule 10B, LN 11
10	Difference (LAUF & Company Use)	LN 8 - LN 9
11	Percent Difference	LN 10 / LN 8
12		
13	Variable Costs	
14		Schedule 22, LN 74 * 10
15	New Hampshire Hedging (Gains) Losses	Schedule 22, LN 75 * 10
	New Hampshire Total Storage	Schedule 22, LN 76 * 10
	New Hampshire Total Peaking	Schedule 22, LN 77 * 10
18	New Hampshire Inventory Finance Charge	Schedule 22, LN 80 * 10
	Total New Hampshire Sales Variable Costs	Sum LN 14 : LN 18
20	Total New Hampshire Sales Variable Costs Excld Hedges	LN 19 - LN 15
21		
	New Hampshire Interruptible Commodity Costs	Schedule 22, LN 78
23	Total New Hampshire Commodity Costs	LN 19
24		
25	Supply Cost/Therm	
26	New Hampshire Sales Pipeline Commodity Excld Hedges	LN 14 / LN 1
27	New Hampshire Hedging (Gains) Losses	LN 15 / LN 1
28	New Hampshire Storage Excld Inventory Finance Costs	LN 16 / LN 2
	New Hampshire Peaking Excld Inventory Finance Costs	LN 17 / LN 3
	New Hampshire Inventory Finance Costs per Dth Stor and Peak	LN 18 / Sum (LN 2 : LN 3)
	Weighted Average Cost per Dth Sendout	LN 19 / LN 8
32	0	2.4.107.214.0
	New Hampshire Interruptible Cost / Therm	LN 22 / LN 6
34	The state of the s	LIV ZZ / LIV O
	Commodity Costs	
	Base Commodity, therms	Schedule 10B, LN 64
	Base Commodity Cost Excld Hedging	
	Base Hedging Commodity Cost	Min (LN 26 * LN 36), LN 19
	Remaining Commodity Excld Hedging	Min (LN 27 * LN 36), (LN 19 - LN 37) LN 20 - LN 37
		1
	Remaining Hedging Commodity Total Commodity Excld Hedging	LN 15 - LN 38
	Total Hedging	LN 37 + LN 39
		LN 38 + LN 40
43	Total Commodity (Incl Hedging)	LN 41 + LN 42

Table (Table 6. Estimated Delivered City-Gate Commodity Costs and Volumes												
	November 1, 2010 th	rough April 30, 2011											
Supply Source	Delivered City-Gate Costs	Delivered City-Gate Volumes	Delivered Cost per Dth										
Peaking Supply 1	\$2,404,468	602,041	\$3.9939										
Washington 10 Storage	\$11,577,747	2,559,895	\$4.5227										
Tennessee Storage	\$707,503	147,681	\$4.7908										
Chicago	\$1,667,801	301,862	\$5.5251										
Niagara	\$1,035,386	184,693	\$5.6060										
Tennessee Production	\$7,768,412	1,375,093	\$5.6494										
LNG	\$111,223	18,872	\$5.8934										
Pittsburgh, NH	\$1,240,066	199,100	\$6.2284										
Peaking Supply 2	\$21,557	2,670	\$8.0723										
Total System	\$26,534,162	5,391,907	\$4.9211										

Peak Period

Northern Utilities

NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

_			Summer						Winter						
Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	1	
Volumes	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Total	
Residential Heat & Non Heat								1,414,484	2,062,233	2,986,351	2,524,748	2,503,078	1,544,347	13,035,24	
Sales HLF Classes								350,675	424,947	465,570	408,229	429,473	323,352	2,402,24	
Sales LLF Classes								1,281,941	2,235,337	2,928,309	2,497,002	2,324,978	1,323,897	12,591,46	
Total								3,047,100	4,722,517	6,380,229	5,429,979	5,257,529	3,191,596	28,028,95	
Rates															
Residential Heat & Non Heat CGA								\$1.1177	\$1.1177	\$1,1177	\$1.1177	\$1.1177	\$1,1177		
Sales HLF Classes CGA								\$1.1177	\$1.1177	\$1.1177	\$1.1177	\$1.1177	\$1.1177		
Sales LLF Classes CGA								\$1.1177	\$1.1177	\$1,1177	\$1.1177	\$1.1177	\$1.1177		
Revenues															
Residential Heat & Non Heat							İ	\$ (1.580.968)	\$ (2,304,958)	\$ (3.337,844)	\$ (2.821.911)	\$ (2,797,690)	\$(1,726,117)	\$ (14,569,48	
Sales HLF Classes								\$ (391,950)	\$ (474,963)	\$ (520,367)	\$ (456,278)	\$ (480,022)	\$ (361,410)	\$ (2.684.99	
Sales LLF Classes								\$ (1.432.825)	\$ (2,498,436)	\$ (3,272,971)	\$ (2,790,899)	\$ (2.598,627)	\$(1,479,720)	\$ (14.073.47	
Total Sales Revenues								\$ (3,405,743)	\$ (5,278,357)	\$ (7,131,182)	\$ (6.069.087)	\$ (5.876,340)	\$(3.567.247)	\$ (31,327.95	
L			1	L	l	·	L	L-1. X-1 1 1 1.	1		1	1	1	1 - 1 - 1 - 1 - 1	
				Sun	mer					Wi	nter			1	
Gas Costs and Credits		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	1	
		May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Total	
Net Demand Costs (Net of Injection Fees & Cap	. Assign.)														
Pipeline	,	\$ 165,006	\$ 165,006	\$ 165,006	\$ 165,006	\$ 165,006	\$ 165,006	\$ 144,690	\$ 149,541	\$ 165.006	\$ 165,006	\$ 165,006	\$ 165,006	\$ 1,944,29	
Storage									\$ 1,537,673						
Peaking									\$ 272,618						
Total Demand Costs									\$ 1,959,832					\$ 15,467,67	
NUI Commodity Costs			1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1		1			1	
NUI Total Pipeline Volumes	İ							499,368	256,695	197,401	162,786	371,174	573,323	2.060.74	
Pipeline Costs Modeled in Sendout™									\$ 1,490,684			\$ 2,173,072		\$ 11,711,66	
NYMEX Price Used for Forecast			l					\$ 4.9050		\$ 5.3370					
NYMEX Price Used for Update			1				l	\$ 4.0250							
Increase/(Decrease) NYMEX Price								\$ (1)		\$ (1)					
Increase/(Decrease) in Pipeline Costs				i					\$ (208,693)	\$ (156 737)	\$ (125.020)				
Updated Pipeline Costs			1					\$ 2,320,313				\$ 1,899,146			
Interruptible Volumes - NH							1	0 2,020,010	1 1,201,001	0 1,000,707	000,000	1,000,	0 2,7 00,000		
Average Supply Cost (\$/MMBtu)								\$ 4.65	·	\$ 5.22	1	\$ 5.12	\$ 4.83		
Interruptible Cost - NH								\$ 7.00	s	\$ 0.22	\$ -	\$ 0.12	\$ 7.00		
Total Updated Pipeline Costs					ŀ			6 2 220 212	\$ 1,281,991	\$ 1 020 787		\$ 1,899,146	\$ 2766 833		
New Hampshire Allocated Percentage				Į.				52,520,513					54.01%		
New Hampshire Allocated Percentage NH Updated Pipeline Costs			 					\$ 1,222,161				\$ 1,029,074			
			<u> </u>	ļ	ļ			\$ 1,222,101	3 049,300	3 330,433	3 403,000	\$ 1,029,074	\$ 1,454,550	\$ 5,400,50	
Hedging (Gain)/Loss Estimate Time Triggered NYMEX Contracts (Allocated to	nohunga ME an	d NIU\		 		 							 	 	
NYMEX NG Futures Contracts (Allocated I	Jetween ivi⊏ ar	iu ivn)	1	1		1		7	8	4		5		1	
Average Purchase Price			1	l				\$ 6.3850			\$ 6.9020		\$ 6.1778	1	
NYMEX Price Used for Forecast			1	1				\$ 4.9050					\$ 5.0180		
				1				\$ 4.9050						1	
		1	1	1	1	i .	ı							J	
NYMEX Price Used for Update			1	1	1	1	i	(0.8800)	1 (0.9130)	(0.70/0)	d (0.7680\	1 (0.7390)	/n 619n)		
Increase/(Decrease) NYMEX Price								(0.8800)	(0.8130)						
								(0.8800) \$ 165,200 52.67%			\$ 118,200	\$ 112,050		\$ 835,65	

Peak Period

Northern Utilities

NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

Summer

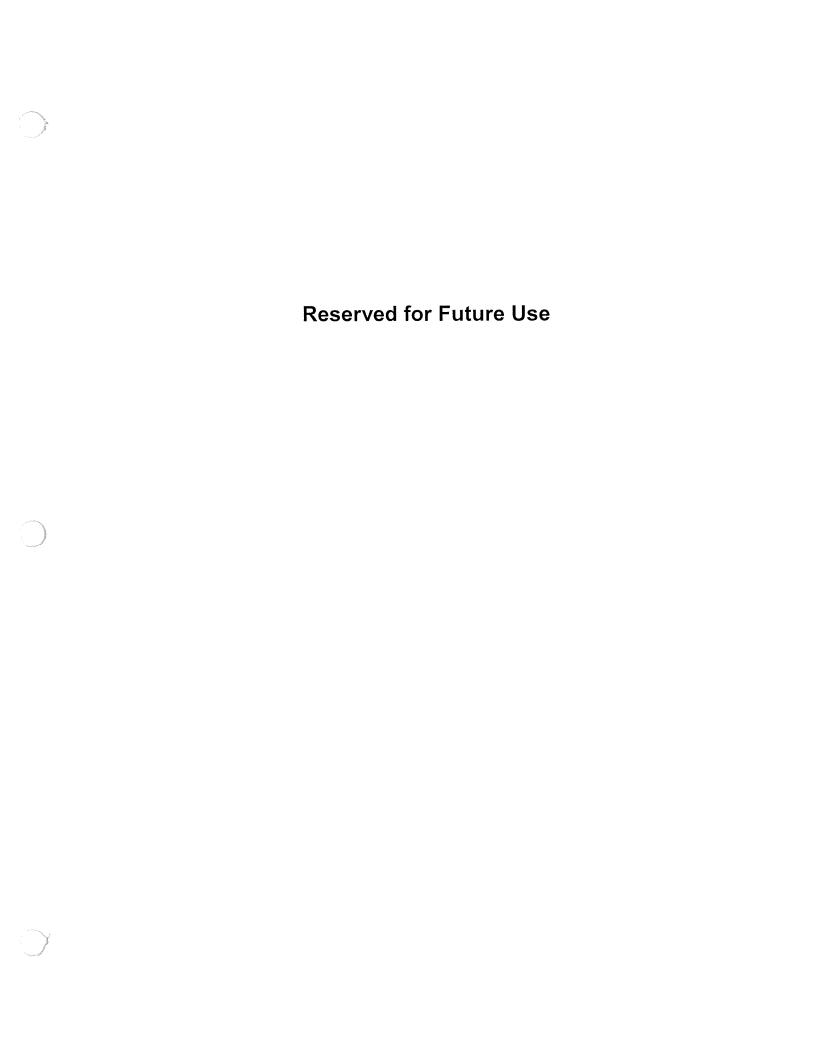
					Sum	mer					Win	iter			
	Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	
1		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Total
48	Price Triggered NYMEX Contracts (NH Only)														
49	NYMEX NG Futures Contracts								6	5	3	4	4	6	
50	Average Purchase Price			ļ					\$ 6.2600	\$ 6.6470	\$ 6.9833	\$ 6.8250	\$ 6.7300	\$ 6.2000	}
51	NYMEX Price Used for Forecast								\$ 4.9050			\$ 5.3060			1
52	NYMEX Price Used for Update								\$ 4.0250		\$ 4.5430	\$ 4.5380			
53	Increase/(Decrease) NYMEX Price	j							(0.8800)		(0.7940)				
54	NUI Futures Hedging (Gain)/Loss - Allocate								\$ 134,100						
55	New Hampshire Allocated Percentage								100.00%		100.00%	100.00%			
56	NH Futures Hedging (Gain)/Loss, Price Triggere	ed							\$ 134,100						\$ 611,570
57	NH Commodity Costs														<u> </u>
58	Pipeline Excl Hedging								\$ 1,222,161	\$ 649,388	\$ 550,433	\$ 463.086	\$ 1.029.074	\$ 1,494,396	\$ 5,408,538
59	Hedging (Gain)/Loss Estimate								\$ 221,115	\$ 206,683	\$ 125,504		\$ 151,036		
60	Storage								\$ -	\$ 1,258,945					
61	Peaking								\$ 197,883						
62	Total Commodity Costs								\$ 1,641,159	\$ 2,375,052	\$ 3,041,855	\$ 2,634,860			
63	Inventory Finance Charge		\$ 628	\$ 915	\$ 1,129	\$ 1,034	\$ 1,005	\$ 976							
64	Asset Management and Capacity Release														
65	NUI AMA Revenue		\$ (206,417)	\$ (206,417)	\$ (206,417)	\$ (206,417)	\$ (206,417)	\$ (206,417)	\$ (212,417)	\$ (212,417)	\$ (212,417)	\$ (212,417)	\$ (212,417)	\$ (206,417)	\$ (2,507,000)
66	PNGTS Litigation Cost		\$ 31,403												
67	NUI Capacity Release		\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (35,377)	\$ (424,530)
68	NUI AMA Rev & Cap. Release Subtotal		\$ (210,391)	\$ (210,391)	\$ (210,391)	\$ (210,391)	\$ (210,391)	\$ (210,391)							\$ (2,554,690)
69	NH AMA Revenue		\$ (80,531)												
70	NH Capacity Release		\$ (17,234)	1 ' ' '	, , ,	\$ (17,234)					, , ,			, , ,	
	NH PNGTS Refund		,	, , , , , , , ,	, , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	. ,	. (,,	(.,,==,,	' ',',,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. ()/	(\$583,255)		. (. (===0,0 / 1/)
71	NH Total Asset Management and Capacity Release	e	\$ (97,765)	\$ (97,765)	\$ (97,765)	\$ (97,765)	\$ (97,765)	\$ (97,765)	\$ (100,694)	\$ (100,694)	\$ (100,694)			\$ (97,765)	\$ (1,771,080)

Peak Period

Northern Utilities

NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

				Sun				Winter						
Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	i
1 Volumes	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Total
72														
73 Total Anticipated Direct Cost of Gas		\$ 728,382	\$ 728,669	\$ 728,883	\$ 728,788	\$ 728,759	\$ 728,730	\$ 3,170,988	\$ 4,235,168	\$ 4,975,271	\$ 3,984,803	\$ 4,573,630	\$ 2,486,777	\$ 27,798,851
77 Working Capital														
78 Total Anticipated Direct Cost of Gas		\$ 728,382	\$ 728,669	\$ 728,883	\$ 728,788	\$ 728,759	\$ 728,730	\$ 3,170,988	\$ 4,235,168	\$ 4,975,271	\$ 3,984,803	\$ 4,573,630	\$ 2,486,777	\$ 27,798,851
79 Working Capital Percentage		0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%		0.19%		0.19%		1
80 Working Capital Allowance		\$ 1,384	\$ 1,384	\$ 1,385	\$ 1,385	\$ 1,385	\$ 1,385	\$ 6,025	\$ 8,047	\$ 9,453	\$ 7,571	\$ 8,690	\$ 4,725	\$ 52,818
81 Beginning Period Working Capital Balance		\$ (83,069)	\$ (81,846)	\$ (80,621)	\$ (79,392)	\$ (78,162)	\$ (76,929)	\$ (75,693)	\$ (69,811)	\$ (61,893)	\$ (52,552)	\$ (45,076)	\$ (36,466)	
82 End of Period Working Capital Allowance		\$ (81,685)	\$ (80,462)	\$ (79,236)	\$ (78,008)	\$ (76,777)	\$ (75,544)			\$ (52,440)				ĺ
83 Interest		\$ (161)	\$ (159)	\$ (156)	\$ (154)	\$ (152)	\$ (149)	\$ (142)	\$ (129)			\$ (80)	\$ (67)	\$ (1,556
84 End of period with Interest	\$ (83,069)	\$ (81,846)	\$ (80,621)	\$ (79,392)	\$ (78,162)	\$ (76,929)	\$ (75,693)							(
85 Bad Debt							i							
86 Total Anticipated Direct Cost of Gas		\$ 728,382	\$ 728,669	\$ 728,883	\$ 728,788	\$ 728,759	\$ 728,730	\$ 3,170,988	\$ 4,235,168	\$ 4,975,271	\$ 3,984,803	\$ 4,573,630	\$ 2,486,777	\$ 27,798,851
87 Prior Period Over/Under Collection (Incld A	\$ 2,527,403	\$	\$ -	\$ -	\$ -	\$	\$ -	\$ -	s -	\$ -	\$ -	\$ -	s -	\$ 2,527,403
88 Working Capital Allowance		\$ (81,685)	\$ (80,301)	\$ (78,916)	\$ (77,531)	\$ (76,146)	\$ (74,762)	\$ (68,737)	\$ (60,690)	\$ (51,237)	\$ (43,666)	\$ (34,976)	\$ (30,251)	\$ (758,898
89 Subtotal	\$ 2,527,403			\$ 649,968				\$ 3,102,251			\$ 3,941,138			\$ 29,567,356
90 Bad Debt Percentage	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0,45%	0.45%	0.45%	0.45%	1
91 Bad Debt Allowance	\$ 11,373	\$ 2,910	\$ 2,918	\$ 2,925	\$ 2,931	\$ 2,937	\$ 2,943	\$ 13,960	\$ 18,785	\$ 22,158	\$ 17,735	\$ 20,424	\$ 11,054	\$ 133,053
92 Beginning Period Bad Debt Balance		\$ (2,655)	\$ 253	\$ 3,174	\$ 6,108	\$ 9,053	\$ 12,011	\$ 14,980	\$ 28,983	\$ 47,843	\$ 70,117	\$ 88,006	\$ 108,623	1
93 End of Period Bad Debt Balance		\$ 255	\$ 3,170	\$ 6.099	\$ 9,038	\$ 11,990	\$ 14,953	\$ 28,940	\$ 47,768	\$ 70,001	\$ 87.852	\$ 108,430	\$ 119,677	l
94 Interest		\$ (2)	\$ 3	\$ 9	\$ 15	\$ 21		\$ 43		\$ 115				\$ 876
95 End of Period Bad Debt Balance with Interest	\$ (2,655)	\$ 253	\$ 3,174	\$ 6,108	\$ 9,053	\$ 12,011	\$ 14,980	\$ 28,983	\$ 47,843	\$ 70,117	\$ 88,006	\$ 108,623	\$ 119,900	i
96 Local Production and Storage Capacity								\$ 114,446	\$ 114,446	\$ 114,446	\$ 114,446	\$ 114,446	\$ 114,446	\$ 686,673
97 Miscellaneous Overhead	İ							\$ 16,389	\$ 16,389	\$ 16,389	\$ 16,389	\$ 16,389	\$ 16,389	\$ 98,333
98 Gas Cost Other than Bad Debt and Working Ca	pital Over/Unde	er Collection												1
99 Beginning Balance Over/Under Collection		\$2,527,403	\$3,261,446	\$3,997,212	\$4,734,634	\$5,473,404	\$6,213,590	\$ 6,955,197	\$ 6,864,789	\$ 5,964,979	\$ 3,949,597	\$ 2,001,967	\$ 832,863	i
100 Net Costs - Revenues			\$ 728,669								\$ (1,953,449)			į.
101 Ending Balance before Interest		\$3,255,786	\$3,990,115	\$4,726,096	\$5,463,422	\$6,202,163	\$6,942,321	\$ 6,851,275	\$ 5,952,434	\$ 3,939,902	\$ 1,996,147	\$ 830,091		ĺ
102 Average Balance		\$2,891,594	\$3,625,780	\$4,361,654	\$5,099,028	\$5,837,783	\$6,577,955	\$ 6,903,236	\$ 6,408,611	\$ 4,952,441	\$ 2,972,872	\$ 1,416,029		i
103 Interest Rate		2.35%	2.35%	2.35%	2.35%	2.35%	2.35%	2.35%	2.35%	2.35%		2.35%		i
104 Interest Expense		\$ 5,660	\$ 7,097	\$ 8,538	\$ 9,981	\$ 11,427	\$ 12,876	\$ 13,513	\$ 12,545	\$ 9,694	\$ 5,819	\$ 2,772	\$ 701	\$ 100,625
105 Ending Balance Incl Interest Expense	\$ 2,527,403	\$3,261,446	\$3,997,212	\$4,734,634	\$5,473,404	\$6,213,590	\$6,955,197	\$ 6,864,789	\$ 5,964,979	\$ 3,949,597	\$ 2,001,967	\$ 832,863	\$ (116,071)	
106 Total Over/Under Collection Ending Balance	9	\$3,179,852	\$3,919,765	\$4,661,349	\$5,404,295	\$6,148,672	\$6,894,483	\$ 6,823,961	\$ 5,950,929	\$ 3,967,162	\$ 2,044,897	\$ 905,020	\$ (27,978)	i
107 ATV Reconciliation														\$
108														i
109 Total Indirect Cost of Gas	\$ 2,453,053	\$ 9,791	\$ 11,244	\$ 12,700	\$ 14,157	\$ 15,618	\$ 17,081	\$ 164,233	\$ 170,158	\$ 172,143	\$ 162,019	\$ 162,833	\$ 147,471	\$ 3,512,50
110														
111 Total Cost of Gas	\$ 2,453,053	\$ 738,173	\$ 739,913	\$ 741,584	\$ 742,946	\$ 744,377	\$ 745,811	\$ 3,335,221	\$ 4,405,326	\$ 5,147,415	\$ 4,146,823	\$ 4,736,463	\$ 2,634,248	\$ 31,311,352
112				2.001		11.000	10.754	10 10 111	10 10 101	0.000	6 5070	6 2004	6 050	6 00.046
113 Total Interest	\$ -	\$ 5,497	\$ 6,942	\$ 8,391	\$ 9,842	\$ 11,296	\$ 12,754	\$ 13,414	\$ 12,491	\$ 9,698	\$ 5,879	\$ 2,884	\$ 858	\$ 99,945
114														



Northern Ounties, Inc. New Hamsphire Division Schedule 5A Page 1 of 5

Northern Utilities, Inc. Pipeline Contract Demand Cost Estimates

November 1, 2010 through October 31, 2011

	1	<u> </u>	T			11010111001 1, 20	To through Octobe	01,	2011		,						
Pipeline	Contract ID	Rate	Negotiated Rate	MDQ	Dth / GJ	Receipt Zone	Delivery Zone		mand Rate (\$/MDQ)	Currency	Months Per Year	Support for Demand Rate	Note	1	Monthly Demand		nual mand
Algonquin	93201A1C	AFT-1 (F-2/F-3)	Yes	286	Dth	Centerville, NJ	Taunton, MA	\$	5.9771	USD	12	FXW-5A, Page 1		s	1,709	\$.	20,513
Algonquin	93201A1C	AFT-1 (F-2/F-3)	Yes	965	Dth	Lambertville, NJ	Taunton, MA	\$	5.9771	USD	12	FXW-5A, Page 1		s			69,215
Algonquin	93002F	AFT-1 (AFT-2)	No	4,211	Dth	Mendon, MA	Brockton, MA	\$	6.1138	USD	12	FXW-5A, Page 2		\$	25,745	-	308,943
Granite	10-010-FT-NN	FT-NN	No	100,000	Dth	NA	NA	\$	1.6666	USD	2	FXW-5A, Page 3	1	\$			333,320
Granite	10-010-FT-NN	FT-NN	No	100,000	Dth	NA	NA	\$	3.5518	USD	10	FXW-5A, Page 4	1	\$			551,800
Iroquois	R181001	RTS-1	No	6,569	Dth	Zone 1	Zone 1	\$	6.5971	USD	12	FXW-5A, Page 5		\$			520,036
PNGTS	1997-003	FT	No	1,100	Dth	Pittsburgh	GSGT	\$	27.4017	USD	1	FXW-5A, Page 6	2	s			30,142
PNGTS	1997-003	FT	No	1,100	Dth	Pittsburgh	GSGT	\$	40.2456	USD	11	FXW-5A, Page 7	2	\$		•	186,972
PNGTS	1997-004	FT	Yes	33,000	Dth	Pittsburgh	GSGT	\$	52.0632	USD	1	FXW-5A, Page 6	3	s			718.086
PNGTS	1997-004	FT	Yes	33,000	Dth	Pittsburgh	GSGT	\$	76.4666	USD	4	FXW-5A, Page 7	3	\$			093,591
Tennessee	5083	FT-A	No	4,605	Dth	Zone 0	Zone 6	\$	16,5900	USD	12	FXW-5A, Page 8		\$			16,763
Tennessee	5083	FT-A	No	8,550	Dth	Zone L	Zone 6	\$	15.1500	USD	12	FXW-5A, Page 8	4	\$	' 1		554,390
Tennessee	5265	FT-A	No	2,653	Dth	Zone 4	Zone 6	\$	5.8900	USD	12	FXW-5A, Page 8		\$. 1		187,514
Tennessee	5292	FT-A	No	1,406	Dth	Zone 5	Zone 6	\$	4.9300	USD	12	FXW-5A, Page 8		\$			83,179
Tennessee	39735	FT-A	No	929	Dth	Zone 5	Zone 6	\$	4.9300	USD	12	FXW-5A, Page 8		\$	' 1		54,960
Tennessee	41099	FT-A	No	4,267	Dth	Zone 5	Zone 6	\$	4.9300	USD	12	FXW-5A, Page 8		S	21,036		252,436
Tennessee	46314	FT-A	No	950	Dth	Zone 5	Zone 6	\$	4.9300	USD	12	FXW-5A, Page 8		\$	' 1		56,202
Tennessee	31861	NET-284	No	1,382	Dth	3	3	\$	5.0700	USD	12	FXW-5A, Page 9	5	\$	' 1		84,081
Tennessee	31861	NET-284	No	844	Dth	3	4	\$	10.6100	USD	12	FXW-5A, Page 9	5	\$			107,458
Texas Eastern	800384	FT-1	No	965	Dth	M3	мз	\$	5.8080	USD	12	FXW-5A, Page 10 & 20	6	\$			67,257
Texas Eastern	800436	CDS	No	64	Dth	М3	М3	\$	5.3710	USD	12	FXW-5A, Page 10		\$		\$	4,125
Texas Eastern	800464	CDS	No	33	Dth	ELA	М1	\$	2.3750	USD	12	FXW-5A, Page 10	7	\$	- 1	\$	941
Texas Eastern	800464	CDS	No	9	Dth	ETX	M1	\$	2.1890	USD	12	FXW-5A, Page 10	7	\$	20	\$	236
Texas Eastern	800464	CDS	No	16	Dth	STX	M1	\$	6.8120	USD	12	FXW-5A, Page 10	7	\$	109	\$	1,308
Texas Eastern	800464	CDS	No	18	Dth	WLA	M1	\$	2.8280	USD	12	FXW-5A, Page 10	7	\$	1	\$	611
Texas Eastern	800464	CDS	No	59	Dth	M1	M3	\$	11.2800	USD	12	FXW-5A, Page 10	7	\$	666	\$	7,986
TransCanada	29594	FT	No	6,264	GJ	Dawn	Iroquois	\$	11.6124	CAD	12	FXW-5A, Page 11 & 12	8	\$	69,103	\$ 8	329,238
TransCanada	33322	FT	No	35,872	GJ	Dawn	E. Hereford	\$	18.7330	CAD	12	FXW-5A, Page 11 & 12	9	\$	638,391		60,696
Vector	CRL-NUI-0725	FT-1	Yes	17,172	Dth	Alliance	Dawn	\$	7.6042	USD	12	FXW-5A, Page 13		\$		\$ 1,5	566,952
Vector	CRL-NUI-0727	FT-1	Yes	17,086	Dth	W-10	Dawn	\$	4,5625	USD	5	FXW-5A, Page 14		\$	77,955	\$ 3	389,774
Vector	FT-1-NUI-0122	FT-1	Yes	6,070	Dth	Alliance	St. Clair	\$	7.7745	USD	12	FXW-5A, Page 15 & 16	10	\$. 1		66,295
Vector	FT-1-NUI-C0122	FT-1	Yes	6,404	GJ	St. Clair	Dawn	\$	0.4623	CAD	12	FXW-5A, Page 17		\$	2,813		33,750

Total Annual Demand Costs

Exchange Rate (CAD/USD) = 0.95

FXW-5A, Page 18

\$ 31,558,769

Note 1: Granite filed new rates under FERC docket RP10-896. New Granite rates projected to take effect on 1/1/2011.

Note 2: PNGTS filed new rates under FERC docket RP10-729. New PNGTS rates projected to take effect on 12/1/2010.

Note 3: Seasonal Recourse Rate. PNGTS filed new rates under FERC docket RP10-729. New PNGTS rates projected to take effect on 12/1/2010.

Note 4: The demand rate applied for Zone L to Zone 6 transportation capacity Zone 1 to Zone 6 demand rate.

Note 5: The rate is the Segment 3 demand rate of \$5.07 per Dth plus the Segment 4 demand rate of \$5.54 per Dth.

Note 6: For Contract ID 800384, Northern pays both the FT-1 Reservation Charge of \$5.148 (Page 10 of FXW-5A) and the FT-1/FTS Other Transportation Services charge of \$0.66 (Page 20 of FXW-5A).

Note 7: Rate is expressed in the tariff sheet as as a Delivery Zone of AAB ("Access Area Boundary"). The AAB is the border between the Access Areas (ETX, ELA, WLA, and STX) and the M1 Zone.

Note 8: Rate is the Delivery Pressure Toll for deliveries into Iroquois of \$CAD 0.78572 (Page 11 of FXW-5A) plus the FT Toll for Union Dawn to Iroquois of \$CAD 10.82669 (Page 12 of FXW-5A).

Note 9: Rate is the Delivery Pressure Toll for deliveries into E. Hereford of \$CAD 1.96558 (Page 11 of FXW-5A) plus the FT Toll for Union Dawn to E. Hereford of \$CAD 16.76744 (Page 12 of FXW-5A).

Note 10: Maximum tariff rate of \$7.7745 (Page 15 of FXW-5A) exceeds negotiated rate of \$8.0908 (Page 16 of FXW-5A). Therefore, Maximum tariff rate applies.

Northern Utilities, Inc.

Pipeline Contract Demand Cost Allocations

November 1, 2009 through October 31, 2010

Pipeline	Contract ID	MDQ	Dth / GJ	Pipeline MDQ	Storage MDQ	Peaking MDQ	Pipeline %	Storage %	Peaking %	Monthly Demand	Monthly Pipeline Allocated Cost	Sto	nthly rage led Cost	Monthly Peaking Allocated Cost	Annual Demand	Annual Pipeline Allocated Cost	Annual Storage Allocated Cost	Annual Peaking Allocated Cost
Algonquin	93201A1C	286	Dth	201	85		70%	30%	0%	\$ 1,709	\$ 1,201	\$	508	\$ -	\$ 20,513	\$ 14,417	\$ 6,097	s .
Algonquin	93201A1C	965	Dth	965			100%	0%	0%	\$ 5,768	\$ 5,768	\$	-	\$ -	\$ 69,215		\$ -	\$ -
Algonquin	93002F	4,211	Dth	4,211			100%	0%	0%	\$ 25,745	\$ 25,745	\$	-	\$ -	\$ 308,943		\$ -	\$.
Granite	10-010-FT-NN	100,000	Dth	23,896	35,475	40,629	24%	35%	41%	\$ 166,660			59,123	\$ 67,712	\$ 333,320	1 '	\$ 118,245	\$ 135,425
Granite	10-010-FT-NN	100,000	Dth	23,896	35,475	40,629	24%	35%	41%	\$ 355,180				\$ 144,306		\$ 848,738	\$ 1,260,001	\$ 1,443,061
Iroquois	R181001	6,569	Dth	6,569			100%	0%	0%	\$ 43,336			_	\$ -	\$ 520,036	\$ 520,036	\$ -	\$ 1,445,001
PNGTS	1997-003	1,100	Dth	1,100			100%	0%	0%	\$ 30,142			_	•	\$ 30,142	\$ 30,142	1 '	8
PNGTS	1997-003	1,100	Dth	1,100			100%	0%	0%	\$ 44,270			_	•	\$ 486,972			\$
PNGTS	1997-004	33,000	Dth		33,000		0%	100%	0%			1	718.086		\$ 1,718,086		\$ 1,718,086	\$ -
PNGTS	1997-004	33,000	Dth		33,000		0%	100%	0%	\$ 2,523,398	\$ -	1	' 1		\$ 10,093,591		\$ 10,093,591	\$ -
Tennessee	5083	4,605	Dth	4,605			100%	0%	0%						\$ 916,763			\$
Tennessee	5083	8,550	Dth	8,550			100%	0%	0%		1		_		\$ 1,554,390			9
Tennessee	5265	2,653	Dth		2,653		0%	100%	0%			\$	15,626		\$ 187,514			\$ -
Tennessee	5292	1,406	Dth	1,406	-		100%	0%	0%	\$ 6,932	\$ 6,932				\$ 83,179			\$ -
Tennessee	39735	929	Dth	929	-		100%	0%	0%	\$ 4,580	\$ 4,580		-		\$ 54,960			\$ -
Tennessee	41099	4,267	Dth	4,267	-		100%	0%	0%		\$ 21,036		-		\$ 252,436	\$ 252,436		\$ -
Tennessee	46314	950	Dth	950	-		100%	0%	0%	\$ 4.684			-		\$ 56,202	\$ 56,202		\$ -
Tennessee	31861	1,382	Dth	1,382			100%	0%	0%	\$ 7,007			-		\$ 84,081	\$ 84,081	\$ -	\$ -
Tennessee	31861	844	Dth	844			100%	0%	0%	\$ 8,955			-		\$ 107,458	\$ 107,458	\$ -	\$ -
Texas Eastern	800384	965	Dth	965	-		100%	0%	0%	\$ 5,605			-		\$ 67,257	\$ 67,257	\$ -	\$ -
Texas Eastern	800436	64	Dth	64	-		100%	0%	0%	\$ 344	\$ 344	\$.	\$ -	\$ 4,125	\$ 4,125	\$ -	\$ -
Texas Eastern	800464	33	Dth	33			100%	0%	0%	\$ 78	\$ 78	\$	-	\$ -	\$ 941	\$ 941	\$ -	\$ -
Texas Eastern	800464	9	Dth	9			100%	0%	0%	\$ 20	\$ 20	\$	-	\$ -	\$ 236	\$ 236	\$ -	\$ -
Texas Eastern	800464	16	Dth	16			100%	0%	0%	\$ 109	\$ 109	\$	-	\$ -	\$ 1,308	\$ 1,308	\$ -	\$ -
Texas Eastern	800464	18	Dth	18			100%	0%	0%	\$ 51	\$ 51	\$	-		\$ 611	\$ 611		\$ -
Texas Eastern	800464	59	Dth	59			100%	0%	0%	\$ 666	\$ 666	\$	-	\$ -	\$ 7,986	\$ 7,986	\$ -	\$ -
TransCanada	29594	6,264	GJ	6,264	-		100%	0%	0%	\$ 69,103	\$ 69,103	\$	-	\$ -	\$ 829,238		\$ -	\$ -
TransCanada	33322	35,872	GJ		35,872		0%	100%	0%	\$ 638,391	\$ -	\$ 6	38,391	\$ -	\$ 7,660,696	1	\$ 7,660,696	s -
Vector	CRL-NUI-0725	17,172	Dth		17,172		0%	100%	0%	\$ 130,579	\$ -			\$ -	\$ 1,566,952		\$ 1,566,952	
Vector	CRL-NUI-0727	17,086	Dth		17,086	1	0%	100%	0%	\$ 77,955	\$ -		77,955	\$ -	\$ 389,774		\$ 389,774	\$ -
Vector	FT-1-NUI-0122	6,070	Dth	6,070	-		100%	0%	0%	\$ 47,191	\$ 47,191		-)	\$ 566,295	\$ 566,295		\$ -
Vector	FT-1-NUI-C0122	6,404	GJ	6,404	-		100%	0%	0%				_	\$ -	\$ 33,750			\$ -

Annual Total Demand Costs

\$ 6,161,947 \$ 660,263 \$ 5,289,666 \$ 212,018 \$ 31,558,769 \$ 6,979,327 \$ 23,000,956 \$ 1,578,485

Northern Utilities, Inc. New Hamsphire Division Schedule 5A Page 3 of 5

Northern Utilities, Inc.

Storage Contract Demand Cost Estimates

November 1, 2010 through October 31, 2011

Vendor	Contract ID	Rate	Negotiated	MSQ	Space Charge Billing Determinant	MDWQ	Space Rate	Demand		Support for Demand Rates	Monthly Fixed Charges	Annual Space Charge	Annual Demand Charge	Annual Fixed Charges
Tennessee	5195	FS-MA	No	259,337	259,337	4,243	\$ 0.0185	\$ 1,1500	12	CVIVI CA D 40				
Texas Eastern	400215	SS-1	No	1,470					1	FXW-5A, Page 19		\$ 57,573	\$ 58,553	\$ 116,126
Texas Eastern	400513	FSS-1	No			21			12	FXW-5A, Page 20	\$ 133	\$ 189	\$ 1,412	\$ 1.601
W-10	1 1			3,840		64	\$ 0.1293	\$ 0.8950	12	FXW-5A, Page 20	\$ 99	\$ 497	\$ 687	
VV-10	01052	Storage	Yes	3,400,000		34,000	<u> </u>		12	FXW-5A, Page 21	\$ 240,833		\$ -	\$ 2,890,000

Total Annual Fixed Charges

MSQ = Maximum Space Quantity
MDWQ = Maximum Daily Withdrawal Quantity

13.1103545

8.01319821

\$ 3,008,911

24.88671576

Northern Utilities, Inc.

Peaking Contract Demand Cost Estimates

November 1, 2010 through October 31, 2011

Resource	Contract Quantity	Maximum Daily Quantity	Contract Quantity Demand Rate	MDQ Demand Rate	Months Per Year	Support for Demand Rates	Annual CQ Demand Cost	Annual MDQ Demand Cost	Monthly Fixed Charges	Annual Fixed Charges
Peaking Supply 1	755,000	5,000	\$ -	\$ 44.09	12	FXW-5A, Page 22	\$ -	\$ 2,645,238	\$ 220,437	\$ 2,645,238
Peaking Supply 2	1,435,000	57,400	\$ 1.3500	\$ -	5	FXW-5A, Page 23	\$ 1,937,250	\$ -	\$ 387,450	\$ 1,937,250
Total Peaking Supply Contract Demand Costs \$ 4,582,4										\$ 4,582,488

Northern outities, Inc. New Hamsphire Division Schedule 5A Page 5 of 5

Northern Utilities, Inc.

Asset Management and Capacity Release Revenue Projections

November 1, 2010 through October 31, 2011

Asset Management Agreeement Revenue						
Resources		Projected				
Nesources	1	Revenue				
Chicago via Vector, TCPL, Iroquois, TGP, Algonquin	\$	(442,000)				
Wash 10 via Vector, TCPL, PNGTS	\$	(1,100,000)				
PNGTS Contract 1997-003	\$	(30,000				
Tennessee Niagara	\$	(100,000)				
Tennessee Long-Haul	\$	(835,000)				
Total Asset Management	\$	(2,507,000)				

Resources		Projected
1/csources		Revenue
Texas Eastern Contract 800384	\$	(66,701
AGT Contract 93201A1C	\$	(98,779
Tennessee 5265	\$	(259,050
Total Capacity Release	\$	(424,530



ALGONQUIN GAS TRANSMISSION, LLC DISCOUNTED RATE LETTER - SCHEDULE

		<u> </u>		·		
					Recourse	Recourse
			Rate	Discounted	Reservation	Usage
Customer Name	Contract No.	Contract Term	Schedule	Rate	Rate	Rate
NORTHERN UTILITIES, INC.	93201A1C	12/1/1997 - 10/31/2012	AFT-12	5.97710	6.58540	0.01120



ALGONQUIN GAS TRANSMISSION, LLC SUMMARY OF RATES

Currently Effective Rates 12/01/2009

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 2 of 23

• RATE SCHEDULE AFT-1

		Commo	dity	Authorized	Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
(F-1/WS-1)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(F-2/F-3)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(F-4)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(STB/SS-3)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(FTP)	\$11.8368	\$0.0019	\$0.0019	\$0.3911	\$0.0019	\$0.3892
(PSS-T)	\$ 9.7854	\$0.0019	\$0.0019	\$0.3236	\$0.0019	\$0.3217
(AFT-2)	\$ 6.1138	\$0.0019	\$0.0019	\$0.2029	\$0.0019	\$0.2010
(AFT-3)	\$10.7554	\$0.0019	\$0.0019	\$0.3555	\$0.0019	\$0.3536
(AFT-5)	\$12.6265	\$0.0019	\$0.0019	\$0.4170	\$0.0019	\$0.4151
(ITP)	\$13.0110	\$0.0019	\$0.0019	\$0.4297	\$0.0019	\$0.4278
(X-35)	\$10.2027	\$0.0019	\$0.0019	\$0.3373	\$0.0019	\$0.3354
X-39	\$13.2089	\$0.0019	\$0.0019	\$0.4362	\$0.0019	\$0.4343
Incremental	Surcharges					
Hubline	\$ 1.8607	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0612
Secondary	1/	\$0.0612	\$0.0000			
Tiverton	\$ 1.6424	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0540
Ramapo	\$ 7.5608	\$0.0000	\$0.0000	\$0.2486	\$0.0000	\$0.2486

• RATE SCHEDULE AFT-1S

		Commo	Commodity		Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
(F-1/WS-1)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(F-2/F-3)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(F-4)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0031	\$0.0864
(STB/SS-3)	\$ 2,6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(Hubline) 1	./	\$0.0612	\$0.0000			

•OTHER FIRM RATE SCHEDULES

		Commo	dity	Authorized	Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
AFT-E	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(Hubline) 1/		\$0.0612	\$0.0000			
AFT-ES	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(Hubline) 1/		\$0.0612	\$0.0000			
T-1	\$ 1.6480	\$0.0058		\$0.0600		
AFT-4	\$ 3.5211	\$0.0032		\$0.1190		
AFT-CL:						
Canal	\$ 2.0858	\$0.0019	\$0.0019	\$0.0705	\$0.0019	\$0.0686
Middletown	\$ 3.2764	\$0.0019	\$0.0019	\$0.1096	\$0.0019	\$0.1077
Cleary	\$ 1.4529	\$0.0019	\$0.0019	\$0.0497	\$0.0019	\$0.0478
Lake Road	\$ 0.6476	\$0.0019	\$0.0019	\$0.0232	\$0.0019	\$0.0213
Brayton Pt.	\$ 1.2700	\$0.0019	\$0.0019	\$0.0437	\$0.0019	\$0.0418
Manchester	\$ 2.4500	\$0.0019	\$0.0019	\$0.0824	\$0.0019	\$0.0805
Bellingham	\$ 0.9714	\$0.0019	\$0.0019	\$0.0338	\$0.0019	\$0.0319
Phelps Dodge	\$ 0.0000	\$0.0185	\$0.0019	\$0.0185	\$0.0019	\$0.0000
Cape Cod	\$ 9.0501	\$0.0019	\$0.0019	\$0.2994	\$0.0019	\$0.2975
Northeast Gateway	\$ 4.3449	\$0.0019	\$0.0019	\$0.1447	\$0.0019	\$0.1428
J-2 Facility	\$ 4.9077	\$0.0019	\$0.0019	\$0.1632	\$0.0019	\$0.1613
X-33	\$ 3.0873	\$0.0412		\$0.1427		

*INTERRUPTIBLE SERVICE

	Commo	dity	Authorized	Overrun
	Max	Min	Max	Min
AIT-1	\$0.2440	\$0.0095	\$0.2440	\$0.0095
(Hubline 1/)	\$0.0612	\$0.0000		
AIT-2				
Brayton Pt.	\$0.0437	\$0.0019	\$0.0437	\$0.0019
Manchester	\$0.0824	\$0.0019	\$0.0824	\$0.0019
Canal	\$0.0705	\$0.0019	\$0.0705	\$0.0019
Cape Cod	\$0.2994	\$0.0019	\$0.2994	\$0.0019
Northeast Gateway	\$0.1447	\$0.0019	\$0.1447	\$0.0019
J-2 Facility	\$0.1632	\$0.0019	\$0.1632	\$0.0019
PAL	\$0.2440	\$0.0000	\$0.0000	\$0.0000

*TITLE TRANSFER TRACKING SERVICE

Max Min TTT \$5.3900 \$0.0000

Rates are per MMBTU. Commodity rates include ACA Charge of \$0.0019.

*FUEL REIMBURSEMENT PERCENTAGES

Period

Duration

FRP

Granite State Gas Transmission, Inc. FERC Gas Tariff Fourth Revised Volume No. 1

> Rate Schedule FT-NN Firm Transportation Service

	\$/Dth	
Base		Total
Tariff	ACA	Current
Rate 1/	Adj.	Rate
\$1.6666		\$1.6666
\$0.0000		\$0.0000
\$0.0000	\$0.0019	\$0.0019
\$0.0000	\$0.0019	\$0.0019
\$0.0548	\$0.0019	\$0.0567
\$0.0000	\$0.0019	\$0.0019
		0.5%
\$0.0548		\$0.0548
\$0.0000		\$0.0000
	Tariff Rate 1/ \$1.6666 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0548 \$0.0000	Tariff ACA Rate 1/ \$1.6666 \$0.0000 \$0.0019 \$0.0000 \$0.0019 \$0.0000 \$0.0019 \$0.0019 \$0.0019

The Base Tariff Rate is the effective rate on file with the Commission, excluding adjustment approved by the Commission.

Issued by: Mark H. Collin, Treasurer Issued on: January 15, 2010

Effective: March 1, 2010

Page 4 of 23

First R.

Superseding Original Sheet No. 16

Granite State Gas Transmission, Inc. FERC Gas Tariff Fourth Revised Volume No. 1

Rate Schedule FT-NN Firm Transportation Service

	\$/oth					
	Base	.,	Total			
	Tariff	ACA	Current			
	Rate	Adj.	Rate			
Reservation Charge:						
Maximum	\$ 3.5518		\$3.5518			
Minimum	\$0.0000		\$0.000			
Commodity Charge:						
Maximum	\$0.0000	\$0.0019	\$0.0019			
Minimum	\$0.0000	\$0.0019	\$0.0019			
Authorized Overrun Commodity Charge:						
Maximum	\$0.1168	\$0.0019	\$0.1187			
Minimum	\$0.0000	\$0.0019	\$0.0019			
Fuel and Losses						
Percentage			0.5%			
Volumetric Reservation Charge						
Maximum	\$0.1168	\$0.0019	\$0.1187			
Minimum	50.0000	\$0.0019	\$0.0019			
* * * * * * * * * * * * * * * * * * * *						

Issued by: Mark H. Collin, Treasurer Issued on: June 29, 2010

Effective: August 1,2010

Thirty First Revised Sheet No. 4

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates

Page 5 of 23

Iroquois Gas Transmission System, L.P.

C Gas Tariff T REVISED VOLUME NO. 1 Superseding

Thirtieth Revised Sheet No. 4

 RATES	(All	in	\$ Per	Dth)	

	Non-Settlement Recourse & Eastchester			ent Recourse Rat tchester/Non-Co		
	Initial	Effective	Effective	Effective	Effective	Effective
Mini	mum Rates 3/	1/1/2003	7/1/2004	1/1/2005	1/1/2006	1/1/2007
RTS DEMAND:						
Zone 1 \$0.0	0000 \$7.5637	\$7.5637	\$6.9586	\$6.8514	\$6.7788	\$6.5971
Zone 2 \$0.0	0000 \$6.4976	\$6.4976	\$5.9778	\$5.8857	\$5.8233	\$5.6673
Inter-Zone \$0.0	0000 \$12.7150	\$12.7150	\$11.6978	\$11.5177	\$11.3956	\$11.0902
Zone 1 (MFV) 1/ \$0.0	\$5.3607	\$5.3607	\$4.9318	\$4.8559	\$4.8044	\$4.6757
RTS COMMODITY:						
Zone 1 \$0.0	0030 \$0.0030	\$0.0030	\$0.0030	\$0.0030	\$0.0030	\$0.0030
Zone 2 \$0.0	0024 \$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024
Inter-Zone \$0.0	0054 \$0.0054	\$0.0054	\$0.0054	\$0.0054	\$0.0054	\$0.0054
Zone 1 (MFV) 1/ \$0.0	300 \$0.1506	\$0.1506	\$0.1386	\$0.1364	\$0.1350	\$0.1314
ITS COMMODITY:						
Zone 1 \$0.0	0030 \$0.2517	\$0.2517	\$0.2318	\$0.2283	\$0.2259	\$0.2199
Zone 2 \$0.0	0024 \$0.2160	\$0.2160	\$0.1989	\$0.1959	\$0.1938	\$0.1887
Inter-Zone \$0.0	0054 \$0.4234	\$0.4234	\$0.3900	\$0.3840	\$0.3800	\$0.3700
Zone 1 (MFV) 1/ \$0.0	300 \$0.3268	\$0.3268	\$0.3007	\$0.2960	\$0.2929	\$0.2850
MAXIMUM VOLUMETRIC (CAPACITY RELEASE RAT	E 4/:				
Zone 1 \$0.0	0000 \$0.2487	\$0.2487	\$0.2288	\$0.2253	\$0.2229	\$0.2169
Zone 2 \$0.0	0000 \$0.2136	\$0.2136	\$0.1965	\$0.1935	\$0.1915	\$0.1863
Inter-Zone \$0.0	0000 \$0.4180	\$0.4180	\$0.3846	\$0.3787	\$0.3746	\$0.3646
Zone 1 (MFV) 1/ \$0.0	0000 \$0.1762	\$0.1762	\$0.1621	\$0.1596	\$0.1580	\$0.1537

**SEE SHEET NO. 4A FOR ADJUSTMENTS TO RATES WHICH MAY BE APPLICABLE

As authorized pursuant to order of the Federal Energy Regulatory Commission, Docket Nos. RS92-17-003, et al., dated June 18, 1993 (63 FERC para. 61,285).

Settlement Recourse Rates were established in Iroquois' Settlement dated August 29, 2003, which was approved by Commission order issued Oct. 24, 2003, in Docket No. RP03-589-000. That Settlement also established a moratorium on changes to the Settlement Rates until January 1, 2008, defines the Non-Eastchester/Non-Contesting parties to which it applies, and provides that Iroquois' TCRA will be terminated on July 1, 2004.

See Sections 1.2 and 4.3 of the Settlement referenced in footnote 2. As directed by the Commission's January 30, 2004 Order in Docket No. RP04-136, the Eastchester Initial Rates apply for service to Eastchester Shippers prior to the July 1, 2004 effective date of the rates set forth on Sheet No. 4C.

(Footnotes continued on Sheet 4.01)

Issued by: Jeffrey A. Bruner, Vice Pres., Gen Counsel &	ssued by:	ounsel & Secretary	
---	-----------	--------------------	--

Effective: Jan 27, 2009 Issued on: Jan 26, 2009

Previous

Next

Page 6 of 23

Seventh Revised Sheet No. 100: Effective

Supercedes Sixth Revised Sheet No. 100

Portland Natural Gas Transmission System FERC Gas Tariff Second Revised Volume No. 1

Statement of Transportation Rates (Rates per DTH)

Rate Rate Base ACA Unit Current
Schedule Component Rate Charge 1/ Rate

FT Recourse Reservation Rate

-- Maximum \$27.4017 ----- \$27.4017

-- Minimum \$00.0000 ----- \$00.0000

Seasonal Recourse Reservation Rate

-- Maximum \$52.0632 ----- \$52.0632

-- Minimum \$00.0000 ----- \$00.0000

Recourse Usage Rate

-- Maximum \$00.0000 \$00.0019 \$00.0019

-- Minimum \$00.0000 \$00.0019 \$00.0019

FT-FLEX Recourse Reservation Rate

--Maximum \$18.3920 ----- \$18.3920

--Minimum \$00.0000 ----- \$00.0000

Recourse Usage Rate

--Maximum \$00.2962 \$00.0019 \$00.2981

--Minimum \$00.0000 \$00.0019 \$00.0019

Attachment to Schedule 5A New Hampshire Division

Support for Demand Rates

Page 7 of 23

Eighth Rev

Seventh Revised Sheet No. 100

Portland Natural Gas Transmission System FERC Gas Tariff Second Revised Volume No. 1

Statement of Transportation Rates . (Rates per DTH)							
Rate Schedule	Rate Component	Base Rate	ACA Unit Charge 1/	Current Rate			
FT	Recourse Reservation Maximum Minimum	Rate \$40.2456 \$00.0000		\$40.2456			
	Seasonal Recourse Re Maximum Minimum	servation Rate \$76.4666 \$00.0000		\$76.4666 \$00.0000			
	Recourse Usage Rate Maximum Minimum	\$00.0000 \$00.0000	\$00.0019 \$00.0019	\$00.0019 \$00.0019			
FT-FLEX	Recourse ReservationMaximumMinimum	Rate \$27.0128 \$00.0000	NOTE THAT THE THAT THE SAME	\$27.0128 \$00.0000			
	Recourse Usage Rate Maximum Minimum	\$00.4350 \$00.0000	\$00.0019 \$00.0019	\$00.4369 \$00.0019			
The	following adjustment	applies to all	Rate Schedules	above:			

MEASUREMENT VARIANCE:

down to -1.00% up to +1.00% Minimum Maximum

Issued by: David J. Haag - Manager, Rates and Regulatory Affairs

Issued on: May 12, 2010

Effective on: June 11, 2010

^{1/} ACA assessed where applicable under Section 154.402 of the Commission's regulations and will be charged pursuant to Section 17 of the General Terms and Conditions at such time that initial and successive ACA assessments are made.

Tennessee Gas Pipeline Company FERC Gas Tariff Sixth Revised Volume No. 1

RATES PER DEKATHERM

FIRM TRANSPORTATION RATES RATE SCHEDULE FOR FT-A

Base Reservation Rates				0	ELIVERY 2	ZONE			
	RECEIPT ZONE	0	L.	1	2	3	4	5	6
	0 L	\$3.10	\$2.71	\$6.45	\$9.06	\$10.53	\$12,22	\$14.09	\$16.59
	1	\$6.66	\$2.7 I	\$4.92	\$7.62	\$9.08	\$10.77	\$12.64	\$15.15
	2	\$9.06		\$7.62	\$2,86	\$4.32	\$6.32	\$7,89	\$10,39
	3	\$10.53		\$9.08	\$4.32	\$2.05	\$6.08	\$7.64	\$10.14
	4	\$12.53		\$11.08	\$6.32	\$6.08	\$2.71	\$3.38	\$5.89
	5 6	\$14.09 \$16.59		\$12.64 \$15.15	\$7.89 \$10.39	\$7.64 \$10.14	\$3.38 \$5.89	\$2.85 \$4.93	\$4,93 \$3,16
Surcharges				Е	DELIVERY 7	ZONE			
	RECEIPT ZONE	0	L	1	2	3	4	5	6
PCB Adjustment: 1/	0 L	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	ī	\$0.00	40.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	2	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	3	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5 6	\$0.00 \$0.00		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Maximum Reservation Rates 2 /				C	DELIVERY :	ZONE			
	RECEIPT ZONE	0	L	1	2	3	4	5	6
	0 L	\$3.10	\$2.71	\$6.45	\$9.06	\$10.53	\$12.22	\$14.09	\$16.59
	1	\$6.66	φ ∠. /1	\$4.92	\$7,62	\$9,08	\$10.77	\$12.64	\$15.15
	2	\$9.06		\$7,62	\$2.86	\$4.32	\$6,32	\$7.89	\$10.39
	3	\$10.53		\$9.08	\$4.32	\$2.05	\$6.08	\$7.64	\$10.14
	4	\$12.53		\$11.08	\$6.32	\$6.08	\$2.71	\$3.38	\$5.89
	5	\$14.09		\$12.64	\$7.89	\$7.64	\$3.38	\$2.85	\$4.93
	6	\$16.59		\$15.15	\$10.39	\$10.14	\$5.89	\$4.93	\$3.16

 $\label{eq:minimum FT-A} \mbox{ Reservation Rate is $0.00 per Dth}$

Notes:

2/ Maximum rates are inclusive of base rates and above surcharges.

Issued: April 19, 2010 Effective: April 19, 2010

PCB adjustment surcharge originally effective for PCB Adjustment Period of July 1, 1995 - June 30, 2000, was revised and the PCB Adjustment Period has been extended until June 30, 2010 as required by the Stipulation and Agreement filed on May 15, 1995 and approved by Commission Orders Issued November 29, 1995 and February 20, 1996.

Tennessee Gas Pipeline Company FERC Gas Tariff Sixth Revised Volume No. 1

RATES PER DEKATHERM

RATE SCHEDULE NET 284

Rate Schedule and Rate	Base Tariff Rate	ADJUST	MENTS (PCB) 5/	Rate After Current Adjustments	Fuel and Use
Demand Rate 1/, 5/					
Segment U Segment 1 Segment 2 Segment 3 Segment 4	\$9.65 \$1.33 \$8.08 \$5.07 \$5.54		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$9.65 \$1.33 \$8.08 \$5.07 \$5.54	
Commodity Rate 2/, 3/					
Segments U, 1, 2, 3 & 4		\$0.0019		\$0.0019	6/
Extended Receipt and Deliver	y Rate 4/, 7/				
Segment U Segment 1 Segment 2 Segment 3 Segment 4	\$0.3173 \$0.0437 \$0.2656 \$0.1667 \$0.1821			\$0.3173 \$0.0437 \$0.2656 \$0.1667 \$0.1821	5.52% 0.69% 0.59% 0.73% 0.36%

Notes:

- 1/ A specific customer's Monthly Demand Rate is dependent upon the location of its points of receipt and delivery, and is to be determined by summing the Monthly Demand Rate components for those pipeline segments connecting said points.
- 2/ The applicable surcharge for ACA will be assessed on actual quantities delivered and are not dependent upon the location of points of receipt and delivery.
- 3/ The Incremental Pressure Charge associated with service to MassPower shall be \$0.0334 plus an additional Incremental Fuel Charge of 5.83%.
- 4/ Rates are subject to negotiation pursuant to the terms of the Rate Schedule for NET 284.
- 5/ PCB adjustment surcharge originally effective for PCB Adjustment Period of July 1, 1995 June 30, 2000, was revised and the PCB Adjustment Period has been extended until June 30, 2010 as required by the Stipulation and Agreement filed on May 15, 1995 and approved by Commission Orders issued November 29, 1995 and February 20, 1996.
- 6/ The applicable fuel retention percentages are listed on Sheet No. 105.
- 7/ The Extended Receipt and Delivery Rates are additive for each segment outside of the segments under Shipper's base NET-284 contract.

Issued: April 19, 2010 Effective: April 19, 2010 Docket No. RP10-619-000 Accepted:

TEXAS EASTERN TRANSMISSION, LP SUMMARY OF RATES

CURRENTLY EFFECTIVE RATES 2/01/2010

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 10 of 23

• RESERVATION CHARGES

	CDS	FT-1	SCT	7 (0) RATE	SCHEDULES
STX-AAB	6.8120	6.5890	2.7250	I	TS	5.3500
WLA-AAB	2.8280	2.6050	1.1310	I	TS-2	7.9590
ELA-AAB	2.3750	2.1520	0.9500	I	TS-4	7.7210
ETX-AAB	2.1890	1.9660	0.8760	I	TS-5	5.1790
STX-STX	5.7400	5.5170	2.2950	I	TS-7	6.5760
STX-WLA	5.8990	5.6760	2.3580	I	TS-8	6.8640
STX-ELA	6.8160	6.5930	2.7240	7	-127	7.7060
STX-ETX	6.8170	6.5940	2.7250	3	-129	7.5430
WLA-WLA	2.0570	1.8340	0.8220		-130	7.5430
WLA-ELA	2.8310	2.6080	1.1310		-135	1.6030
WLA-ETX	2.8300	2.6070	1.1300	2	-137	4.0100
ELA-ELA	2.3790	2.1560	0.9500			
ETX-ETX	2.1930	1.9700	0.8760			
ETX-ELA	2.3780	2.1550	0.9500			
M1-M1	4.5870	4.3640	1.8320			
M1-M2	8.5650	8.3420	3.4230			
M1-M3	11.2800	11.0570	4.5080			
M2 -M2	6.6330	6.4100	2.6510			
M2-M3	9.4860	9.2630	3.7910			
м3-м3	5.3710	5.1480	2.1460			
SCT DE	MAND CHAR	GES .0020				
		.0030				
		.0030				
		.0040				

•USAGE CHARGES

CDS & FT-1 U	JSAGE-1						
Forward Hau from STX from WLA from ELA from M1 from M2 from M3	0.0090	WLA 0.0098 0.0060	ELA 0.0143 0.0105 0.0089	ETX 0.0143 0.0105 0.0089 0.0089	M1 0.0363 0.0325 0.0309 0.0309 0.0220	M2 0.0726 0.0688 0.0672 0.0672 0.0583 0.0408	M3 0.0976 0.0938 0.0922 0.0922 0.0833 0.0655 0.0292
Backhaul from STX from WLA from ELA from MI from M1 from M2	STX 0.0088 0.0096 0.0140 0.0140 0.0358 0.0720	WLA 0.0059 0.0103 0.0103 0.0321 0.0683	0.0087 0.0087 0.0305 0.0667	0.0087 0.0305 0.0667	M1 0.0218 0.0580	M2 0.0405	м3
from M3 SCT USAGE-1	0.0968	0.0931	0.0915	0.0915	0.0828	0.0651	0.0290
Forward Hau from STX from WLA from ELA from ETX from M1 from M2 from M3	ol STX 0.1903	WLA 0.1963 0.0662	ELA 0.2309 0.0961 0.0797	ETX 0.2309 0.0961 0.0797 0.0736	M1 0.3962 0.2614 0.2449 0.2388 0.1653	M2 0.5632 0.4284 0.4119 0.4058 0.3323 0.2513	M3 0.6774 0.5427 0.5262 0.5201 0.4465 0.3698 0.1983
Backhaul from STX from WLA from ELA from ETX from M1 from M3	STX 0.1901 0.1961 0.2306 0.2306 0.3957 0.5626 0.6766	WLA 0.0661 0.0959 0.0959 0.2610 0.4279 0.5420	0.0795 0.0795 0.2445 0.4114 0.5255	0.0734 0.2384 0.4053 0.5194	M1 0.1651 0.3320 0.4460	M2 0.2510 0.3694	M3
IT-1 USAGE-1							
Forward Hau from STX from WLA from ELA from ETX from M1 from M2 from M3	0.1904	WLA 0.1964 0.0663	ELA 0.2311 0.0962 0.0798	ETX 0.2311 0.0962 0.0798 0.0736	M1 0.3966 0.2618 0.2453 0.2391 0.1655	M2 0.5636 0.4288 0.4123 0.4061 0.3325 0.2516	M3 0.6779 0.5431 0.5266 0.5204 0.4468 0.3701 0.1985
Backhaul from STX from WLA	STX 0.1902 0.1962	WLA 0.0662	ELA	ETX	м1	M2	мз
from ELA from ETX from M1 from M2 from M3	0.2308 0.2308 0.3961 0.5630 0.6771	0.0960 0.0960 0.2614 0.4283 0.5424	0.0796 0.0796 0.2449 0.4118 0.5259	0.0734 0.2387 0.4056 0.5197	0.1653 0.3322 0.4463	0.2513 0.3697	0.1983



Transportation Tolls Approved Final Mainline Tolls effective January 1, 2010

Refer to Schedule 5.2 for FT, STFT and Interruptible transportation tolls

Storage Transportation Service

Line No	Particulars	Demand Toll (\$/GJ/mo)	Commodity Toll (\$/GJ)
110			
	(a)	(b)	(c)
1	Centra Gas Manitoba - MDA	3.16583	0.00330
2	Union Gas - WDA	23.37333	0.03242
3	Union Gas - NDA	8.93667	0.01154
4	Union Gas - EDA	5.78250	0.00692
5	Kingston PUC	5.61583	0.00657
6	Gaz Metropolitain - EDA	10.42417	0.01357
7	Enbridge - CDA	1.17750	0.00012
8	Enbridge - EDA	3.52250	0.00363
9	Cornwall	8.03083	0.01007
10	Philipsburg	10.62833	0.01384

Enhanced Capacity Release

Line		Commodity Toll
No	Particulars	(\$/GJ)
	(a)	(b)
11 EC	CR Surcharge	0.036

Delivery Pressure

Line No	Particulars	Demand Toll (\$/GJ/mo)	Commodity Toll (\$/GJ)	Daily Equivalent *(1) (\$/GJ)
	(a)	(b)	(c)	(d)
12	Emerson - 1 (Viking)	0.11697	0.00000	0.00385
13	Emerson - 2 (Great Lakes)	0.12218	0.00000	0.00402
14	Dawn	0.06338	0.00000	0.00208
15	Niagara Falls	0.16857	0.00000	0.00554
16	Iroquois	0.78572	0.00000	0.02583
17	Chippawa	0.81314	0.00000	0.02673
18	East Hereford	1.96558	0.03798	0.10260

^{*(1)} The Demand Daily Equivalent Toll is only applicable to STS Injections, IT, Diversions and STFT.



FT, STFT and Interruptible Transportation Tolls Approved Final Mainline Tolls effective January 1, 2010 Attachment to Schedule 5A New Hampshire Division Support for Demand Rates

Page 12 of 23

						(1)	
					(FT, STFT Minimum Tolls)	IT Bid Floor	
Line			Demand Toll	Commodity Toll	(100% LF FT Tolls)	(110% FT Tolls)	
No.	Receipt Point	Delivery point	(\$/GJ/MO)	(\$/GJ)	(\$/GJ)	(\$/GJ)	
1	Union Dawn	Emerson 2	24.78632	0.00000	0.8149	0.8964	
2	Union Dawn	St. Clair	1.44127	0.00000	0.0474	0.0521	
3	Union Dawn	Dawn Export	1.08608	0.00000	0.0357	0.0393	
4	Union Dawn	Kirkwall	3.89830	0.00408	0.1323	0.1455	
5	Union Dawn	Niagara Falls	5.56504	0.00650	0.1895	0.2085	
6 7	Union Dawn	Chippawa	5.60066	0.00655	0.1907	0.2098 0.4070	
8	Union Dawn Union Dawn	Iroquois Cornwall	10.82669 11.41501	0.01413 0.01498	0.3700 0.3903	0.4293	
9	Union Dawn	Napierville	13.74832	0.01837	0.4704	0.4293	
10	Union Dawn	Philipsburg	14.01051	0.01875	0.4794	0.5273	
11	Union Dawn	East Hereford	16.76744	0.02275	0.5741	0.6315	
12	Union Dawn	Welwyn	30.92367	0.00000	1.0167	1.1184	
13	Enbridge CDA	Empress	44.96349	0.06366	1.5420	1.6962	
14	Enbridge CDA	Transgas SSDA	38.53100	0.05386	1.3207	1.4528	
15	Enbridge CDA	Centram SSDA	35.13836	0.04935	1.2046	1.3251	
16	Enbridge CDA	Centram MDA	31.69563	0.04470	1.0867	1.1954	
17	Enbridge CDA	Centrat MDA	29.89504	0.04180	1.0247	1.1272	
18	Enbridge CDA	Union WDA	23.06458	0.03197	0.7903	0.8693	
19	Enbridge CDA	Nipigon WDA	21.03519	0.02948	0.7211	0.7932	
20	Enbridge CDA	Union NDA	8.85618	0.01144	0.3026	0.3329	
21	Enbridge CDA	Calstock NDA	16.51673	0.02317	0.5662	0.6228	
22	Enbridge CDA	Tunis NDA	12.95923	0.01820	0.4443	0.4887	
23	Enbridge CDA	GMIT NDA	8.90462	0.01063	0.3034	0.3337	
24	Enbridge CDA	Union SSMDA	14.53608	0.01946	0.4974	0.5471	
25	Enbridge CDA	Union NCDA	3.73926	0.00389	0.1268	0.1395	
26	Enbridge CDA	Union CDA	2.49167	0.00173	0.0836	0.0920	
27	Enbridge CDA	Enbridge CDA	1.08608	0.00000	0.0357	0.0393	
28	Enbridge CDA	Union EDA	5.46815	0.00644	0.1862	0.2048 0.2966	
29	Enbridge CDA	Enbridge EDA	7.90059	0.00994	0.2696	0.2966	. 2,210
30 31	Enbridge CDA Enbridge CDA	GMIT EDA KPUC EDA	9.99004 5.18271	0.01297 0.00597	0.3414 0.1764	0.3755	
32	Enbridge CDA Enbridge CDA	North Bay Junction	6.35205	0.00597	0.1764	0.1940	
33	Enbridge CDA	Enbridge SWDA	5.46696	0.00630	0.1860	0.2046	
34	Enbridge CDA	Union SWDA	5.69755	0.00672	0.1940	0.2134	
35	Enbridge CDA	Spruce	29.80382	0.04168	1.0216	1.1238	
36	Enbridge CDA	Emerson 1	29.16586	0.04068	0.9996	1.0996	
37	Enbridge CDA	Emerson 2	29.16586	0.04068	0.9996	1.0996	
38	Enbridge CDA	St. Clair	5.82216	0.00682	0.1982	0.2180	
39	Enbridge CDA	Dawn Export	5.46696	0.00630	0.1860	0.2046	
40	Enbridge CDA	Kirkwall	2.65473	0.00222	0.0895	0.0985	
41	Enbridge CDA	Niagara Falls	3.67800	0.00372	0.1246	0.1371	
42	Enbridge CDA	Chippawa	3.72391	0.00379	0.1262	0.1388	
43	Enbridge CDA	Iroquois	7.01147	0.00862	0.2391	0.2630	
44	Enbridge CDA	Cornwall	7.59949	0.00948	0.2593	0.2852	
45	Enbridge CDA	Napierville	9.93325	0.01286	0.3395	0.3735	
46	Enbridge CDA	Philipsburg	10.19544	0.01324	0.3484	0.3832	
47	Enbridge CDA	East Hereford	12.95192	0.01724	0.4430	0.4873	
48	Enbridge CDA	Welwyn	35.84726	0.05044	1.2289	1.3518	
49 50	Enbridge EDA	Empress	45.84410	0.06496	1.5722	1.7294	
50 51	Enbridge EDA Enbridge EDA	Transgas SSDA	39.59108 36.59835	0.05552 0.05155	1.3571 1.2548	1.4928 1.3803	
52	Enbridge EDA Enbridge EDA	Centram SSDA Centram MDA	32.87570	0.03133	1.1272	1.2399	
53	Enbridge EDA Enbridge EDA	Centrat MDA Centrat MDA	36.85711	0.05199	1.2637	1.3901	
54	Enbridge EDA	Union WDA	24.24450	0.03371	0.8308	0.9139	
55	Enbridge EDA	Nipigon WDA	21.03310	0.02897	0.7205	0.7926	
56	Enbridge EDA	Union NDA	10.03625	0.01317	0.3432	0.3775	
57	Enbridge EDA	Calstock NDA	16.10325	0.02182	0.5512	0.6063	
58	Enbridge EDA	Tunis NDA	12.22185	0.01619	0.4180	0.4598	
59	Enbridge EDA	GMIT NDA	9.61741	0.01236	0.3286	0.3615	
60	Enbridge EDA	Union SSMDA	20.53183	0.02825	0.7033	0.7736	
61	Enbridge EDA	Union NCDA	9.39814	0.01213	0.3211	0.3532	
62	Enbridge EDA	Union CDA	8.46521	0.01037	0.2887	0.3176	
63	Enbridge EDA	Enbridge CDA	7.90059	0.00994	0.2696	0.2966	1
64	Enbridge EDA	Union EDA	3.67770	0.00377	0.1247	0.1372	4
65	Enbridge EDA	Enbridge EDA	1.08608	0.00000	0.0357	0.0393	wasp
66	Enbridge EDA	GMIT EDA	5.31969	0.00611	0.1810	0.1991	
67	Enbridge EDA	KPUC EDA	3.88012	0.00405	0.1317	0.1449	
68 69	Enbridge EDA	North Bay Junction	7.23267	0.00895	0.2468	0.2715	
09	Enbridge EDA	Enbridge SWDA	11.46271	0.01509	0.3920	0.4312	

Support for Demand Rates
Page 13 of 23

CAPACITY RELEASE TRANSACTIONS CONFIRMATION LETTER

1-	uebiacement ambhet a Maule: Moutlett Or	nines, inc.
2.	 a. Master Service Agreement for Capa b. Underlying Rate Schedule No.:F 	acity Release Agreement No. <u>: CRT-NUI-0079</u> T-1
3.	Replacement Shipper's Firm Transportation Temporary Assignment of Canadian portion	Agreement No.: <u>CRL-NUJ-0725</u> Agreement No.: <u>CRL-NUJ-C0725</u>
4.	Releasing Shipper's Firm Transportation Ag	greement No.: FT1-DTE-0425
5.	Commencement Date: 04/01/2008 Termination Date: 10/31/2017	
6.	Reservation Quantity: 17,172 Dth/d	
7.	Primary Receipt Point(s):	Maximum Daily Reservation Quantity Oth
	Alliance Interconnect	17,172
8.	Primary Delivery Point(s):	Maximum Daily Reservation Quantity Oth
	St. Clair (US) Interconnect	17,172
9.	Reservation Rate:	\$7.6042/Dth (\$0.2500 per Dth on a 100% load factor basis), exclusive of ACA and fuel reimbursement.
10.	Usage Rate:	\$0.00/Dth
11.	Special Terms and Conditions of Release (if any):	Authorized Signature of Replacement Shipper:
	Replacement shipper will receive corresponding Vector-Canada capacity from St. Clair (International Border) to Dawn at no additional cost.	Name: DON TULLY FASICY Title: ANALYST
	The Term of the FT1-DTE-0425 contract underlying this release is subject to the June 30, 2005 Precedent Agreement between DTE Energy Trading, Inc. and Vector Pineline I. P.	Telephone: 508 - 856 - 7259 Fax: () 508 - 870 - 2294

Page 14 of 23

CAPACITY RELEASE TRANSACTIONS CONFIRMATION LETTER

1.	Replacement Shipper's Name: Northe	m Utilities, Inc.			
2.	a. Master Service Agreement for Capacity Release Agreement No.: <u>CRT-NUI-0079</u>				
	b. Underlying Rate Schedule No.:	FT-1			
3.	Replacement Shipper's Firm Transport	ation Agreement No.: CRL-NUI-0727			
0.	Temporary Assignment of Canadian po	ortion Agreement No.: CRL-NUI-C0727			
4.	Releasing Shipper's Firm Transportation	on Agreement No.: FT1-DTE-0426			
5.	Commencement Date: 11/01/2008 Termination Date: 03/31/2017	Winter Only (November 1 thru March 31 on an annual basis)			
6.	Reservation Quantity: 17,086 Dth/d				
7.	Primary Receipt Point(s):	Maximum Daily Reservation Quantity Dth			
	Washington 10 Interconnect	17,086			
8.	Primary Delivery Point(s):	Maximum Daily Reservation Quantity Dth			
	St. Clair (US) Interconnect	17,086			
9.	Reservation Rate:	\$4.5625/Dth (\$0.1500 per Dth on a 100% load factor basis), exclusive of ACA and fuel reimbursement.			
10.	Usage Rate:	\$0.00/Dth			
11.	Special Terms and Conditions of Release (if any):	Authorized Signature of Replacement Shipper:			
	Replacement shipper will receive corresponding Vector-Canada capacity from St. Clair (International Border) to Dawn at no additional cost.	Name: DON TUCHING Title: ANACIST			
	The Term of the FT1-DTE-0425 contract underlying this release is subject to the June 30, 2005 Precedent Agreement between DTE Energy Trading, Inc. and Vector Pipeline I. P.	Telephone: () <u>504 - 836 72</u> 57 Fax: () <u>508 - 870 - 2244</u>			

DELIVERING CLEAN, SECURE NORTH AMER

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 15 of 23

Superseding

bout Us

Shipper Info

Projects

Pipeline Safety

News

Informational Postings

STATEMENT OF RATES AND CHARGES

All rates are stated in U.S. \$

Customer Activities

Eleventh Revised Sheet No. 20

Tenth Revised Sheet No. 20

INFORMATIONAL POSTINGS

You are here: Vector > Informational Postings > Informational Postings > Tariff > Currently Effective Rates

Previous Next

FERC Gas Tariff

Vector Pipeline L.P.

Original Volume No. 1

Capacity

Gas Quality

Index of Customers

Notices

Posted Imbalances

Standards of Conduct

Tariff

Title Sheet

Table of Contents

Preliminary Statement

Мар

Currently Effective Rates

Rate Schedules

General Terms and Conditions

Form of Service Agreement

Entire Tariff

Sheet Index

Rate Schedule FT-1 1/

ector - Canada Tariff

 \mathscr{A} ansactional Reporting

Other Downloads

Search

Customer Activities

Site Map

Recourse Rates:

	Zone	ne 1 2/ Zone 2 2/		2 2/
	Maximum	Minimum	Maximum	Minimum
Reservation Charge				
(\$ per Dth per month)	\$1.2501	0.0000	\$7.7745	0.0000
Usage Charge (\$ per Dth)	0.0000	0.0000	0.0000	0.0000
ACA Charge	0.0019	0.0019	0.0019	0.0019
Usage and ACA Charge	0.0019	0.0019	0.0019	0.0019

Negotiated Rates:

The effective maximum negotiated charge for any negotiated rate transportation agreement is the charge agreed to by the parties, as set forth in the attached Tariff sheets.

Rate Schedule FT-L 1/

Recourse Rates:

Zone 1 2/

Zone 2 2/

Minimum

Maximum

Minimum

Exhibit A

То

Firm Transportation Agreement No. FT1-NUI-0122 Under Rate Schedule FT-1 Between

Vector Pipeline L.P. and Northern Utilities, Inc.

Primary Term

05/01/2006 - 03/31/2016

Contracted Capacity:

6,070 Dth/day

Primary Receipt Points:

Alliance Interconnect

Primary Delivery Points:

St. Clair (US) Interconnect

Rate Election Recourse:

The Reservation Charge applicable to this service is \$8.0908/Dth/month (\$0.2660 per Dth on a 100% load factor basis), exclusive of fuel reimbursement, Annual Charge Adjustment ("ACA") and any other future surcharges. Secondary points within the primary path and out of path secondary backhauls are subject to the same rate as the primary path.

Exhibit A

То

FT-1 Firm Transportation Agreement No. FT1-NUI-C0122 Under Toll Schedule FT-1 Between

Vector Pipeline Limited Partnership and Northern Utilities, Inc.

Primary Term:

05/01/2006 - 03/31/2016

Contracted Capacity:

6,404 GJ/d

Primary Receipt Points:

St. Clair (Canada) Interconnect

Primary Delivery Points:

Dawn Interconnect

Toll Election Negotiated:

The Reservation Charge applicable to this service is \$0.4623/GJ/month (\$0.0152 per GJ on a 100% load factor basis). Secondary points within the primary path and out of secondary from Dawn Interconnect to St. Clair (Canada) Interconnect are subject to the same rate as the primary path.

Bank of Canada

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates

Page 18 of 23

SEE ALSU:

10-Year Currency Converter

FREQUENTLY ASKED:

Why is the currency I'm looking for not listed here?

The Bank currently collects data for over 50 foreign currencies. These data are intended primarily for individuals with a research interest in foreign exchange markets and represent only a sampling of currencies.

More comprehensive currency converters include <u>CanadianForex</u> and <u>OANDA.com</u>.

Are the exchange rates shown here accepted by the Canada Revenue Agency?

Yes. The Agency accepts Bank of Canada exchange rates as the basis for calculations involving income and expenses that are denominated in foreign currencies.

Rates and Statistics Exchange Rates Daily currency converter

SEE ALSO: 10-Year Currency Converter

Using rates for: 20	Jul 2010 ———	A	
onvert to and from	Canadian dolla	rs, using the latest noo	n rates.
Currency:	U.S. dollar		-ton
There is the strategical and the strategical a	O.O. dollar		No.
Amount:	1.00		
Convert:	• from \$Ca	n 🦰 to \$Can	w.
Use the:	Nominal raCash rate (a)	***************************************	~~
Answer:	0.95	CONVERT	
Exchange rate:	0.9500		***

Summary:

On 20 Jul 2010, 1.00 Canadian dollar(s) = 0.95 U.S. dollar(s), at an exchange rate of 0.9500 (using nominal rate.)

Effective 1 January 2009, the euro replaces the Slovak koruna.

Copyright © 1995 - 2010, Bank of Canada. Permission is granted to reproduce or cite portions herein, if attribution is given to the Bank of Canada. Contact us. Read our privacy statement.

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 19 of 23

Tennessee Gas Pipeline Company FERC Gas Tariff Sixth Revised Volume No. 1

RATES PER DEKATHERM

FIRM STORAGE SERVICE RATE SCHEDULE FS

	======	=======	NATE SCHOOL	OLL 13	========
Rate Schedule and Rate	Tariff Rate		TMENTS (PCB) 2/	Current Adjustment	Retention Percent 1/
FIRM STORAGE SERVICE (FS) - PRODUCTION AREA					
Deliverability Rate Space Rate Injection Rate Withdrawal Rate Overrun Rate	\$2.02 \$0.0248 \$0.0053 \$0.0053 \$0.2427		\$0.00 \$0.0000	\$2.02 \$0.0248 \$0.0053 \$0.0053 \$0.2427	1.49%
FIRM STORAGE SERVICE (FS) - MARKET AREA					
Deliverability Rate Space Rate Injection Rate Withdrawal Rate Overrun Rate	\$1.15 \$0.0185 \$0.0102 \$0.0102 \$0.1380		\$0.00 \$0.0000	\$1.15 \$0.0185 \$0.0102 \$0.0102 \$0.1380	1,49%

The quantity of gas associated with losses is 0.5%.

Issued: April 19, 2010 Effective: April 19, 2010 Docket No. RP10-619-000 Accepted:

PCB adjustment surcharge originally effective for PCB Adjustment Period of July 1, 1995 - June 30, 2000, was revised and the PCB Adjustment Period has been extended until June 30, 2010 as required by the Stipulation and Agreement filed on May 15, 1995 and approved by Commission Orders Issued November 29, 1995 and February 20, 1996.

•OTHER TRANSPORTATION SERVICES

	Reservation	Usage-1	Shrinka	ge
			In Path Ou	t-of-Path
LLFT	3.3400	0.0023	0.43%	
	3.3400 1/			
LLIT		0.1121	0.43%	
		0.1121 1	/ 0.43%	
VKFT	0.0945		0.00%	
VKIT		0.0945	0.00%	
FT-1/FTS	0.6600		0.00%	
FT-1/FTS-4	3.0110		0.00%	
FT-1/M1	5.4934		0.36%	
FT-1/NC	6.5590		0.00%	
FT-1/RIV	10.4380		0.00%	
FT-1/PLP	1.9410		0.00%	
FT-1/L1A	1.5830		0.00%	
FT-1/LEP	4.4610		0.00%	
FT-1/IRW	1.2690 2/		0.00%	
FT-1/TME	12.3400		4.01%	4.25%
FT-1/TME2	24.4038		3.69%	4.63%
MLS-1/FH	0.6315		0.01%	
MLS-1/FA	0.8690	0.0286 3	/ 0.00%	
MLS-1/HR	1.1120	0.0366 3	/ 0.01%	
MLS-1/CB	0.9270		0.01%	

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 20 of 23

- 1/ Pursuant to Section 26 of the General Terms and Conditions 2/ Effective May 1 through September 30 3/ Per Section 3.3 of MLS-1 Rate Schedule

•STORAGE SERVICES

	RES.	SPACE	INJ.	WITH
SS	5.5050	0.1293	0.0339	0.059
SS-1	5.6020	0.1293	0.0339	0.059
X-28	4.9060	0.1293	0.0339	0.054
FSS-1	0.8950	0.1293	0.0339	0.033
ISS-1		0.0323	0.1896	0.033

•SHRINKAGE PERCENTAGES

ASA TRANSPORTATION RATE SCHEDULES

ecember 1 tl							
	STX	WLA	ELA	ETX	M1	M2	м3
from STX	2.12%	2.32%	3.38%	3.38%	5.35%	7.30%	8.59%
from WLA	1.40%	1.40%	2.48%	2.48%	4.45%	6.40%	7.69%
from ELA	2.08%	2.08%	2.08%	2.08%	4.05%	6.00%	7.29%
from ETX	2.12%	2.08%	2.08%	2.08%	4.05%	6.00%	7.29%
from Ml					1.97%	3.92%	5.21%
from M2						2.99%	4.30%
from M3 pril 1 thro	ugh Novemb	er 30					2.36%
from M3 pril 1 thro	ıgh Novemb	per 30					2.36%
pril 1 thro	STX	WLA	ELA	ETX	м1	M2	мз
	-		ELA 3.02%	ETX 3.02%	M1 4.97%	M2 6.46%	
pril 1 thro	STX	WLA					мз
pril 1 thro	STX 2.06%	WLA 2.22%	3.02%	3.02%	4.97%	6.46%	M3 7.46%
pril 1 throw from STX from WLA	STX 2.06% 1.52%	WLA 2.22% 1.52%	3.02% 2.34%	3.02% 2.34%	4.97% 4.29%	6.46% 5.78%	M3 7.46% 6.78%
pril 1 throw from STX from WLA from ELA	STX 2.06% 1.52% 2.03%	WLA 2.22% 1.52% 2.03%	3.02% 2.34% 2.03%	3.02% 2.34% 2.03%	4.97% 4.29% 3.98%	6.46% 5.78% 5.47%	M3 7.46% 6.78% 6.47%
pril 1 throu from STX from WLA from ELA from ETX	STX 2.06% 1.52% 2.03%	WLA 2.22% 1.52% 2.03%	3.02% 2.34% 2.03%	3.02% 2.34% 2.03%	4.97% 4.29% 3.98% 3.98%	6.46% 5.78% 5.47% 5.47%	M3 7.46% 6.78% 6.47% 6.47%

NON-ASA RATE SCHEDULES

FTS-4 LEIDY	FTS 1.29%	STORAGE SERVICE 12/01-3/3	1 04/01-11/30
(Apr 1-Nov 14) 1.00%	FTS-2 0.00%	WITHDRAWALS:	
(Nov 15-Mar 31) 4.89%	X-127 0.00%	SS,SS-1,X-28 3.11%	3.04%
FTS-4 CHMSBG 0.00%	X-129 0.00%	FSS-1,ISS-1 0.96%	0.96%
FTS-5 0.00%	X-130 0.00%		
FTS-7 M3 2.00%	X-135 0.00%	INJECTIONS 0.96%	0.96%
FTS-7 M1 & M2 0.00%	X-137 1.30%	INVENTORY LEVEL 0.08%	0.08%
FTS-8 M3 1.50%			
FTS-8 M1 & M2 0 00%			

ASA STORAGE RATE SCHEDULES

•SURCHARGES

ACA Surcharge Commodity 0.0019

[•]The Summary of Rates serves as a handy reference and does not replace Texas Eastern's Tariff.

Contract #

Attention: Vice-President, Washington 10 Storage Corporation

Telephone: (313) 235-6445

Fax: (313) 235-6450

SHIPPER:

NORTHERN UTILITIES, INC. 300 Friberg Parkway Westborough, MA 01581-5039

INVOICES, STATEMENTS AND NOMINATIONS

Stacy Djucik 1500 – 165th Street Hammond, IN 46324 Telephone: (219) 853-4320

ALL OTHER MATTERS

F. Chico DaFonte

Telephone: (508) 836-7253 Facsimile: (508) 870-2294

Email:

fdafonte@nisource.com

ARTICLE VIII: FURTHER AGREEMENT

Article II is amended to add the following sentence at the end of the first paragraph:

The Monthly Deliverability Rate and Monthly Capacity Rate shall be paid in the form of a monthly demand charge of \$240,833.34 assuming a typical 12 month, April through March storage cycle). The parties agree that Transporter may, from time to time, modify the Monthly Deliverability Rate and the Monthly Capacity Rate set forth in Exhibit I, so long as the amounts set forth on the revised Exhibit I do not exceed Shipper's monthly demand charge of \$240,833.34. Unless otherwise specified, the revised Exhibit I will be effective the first day of the month immediately following the date that Transporter provides a copy of the revised Exhibit I to Shipper.

Attachment to Schedule 5A New Hampshire Division Support for Demand Rates Page 22 of 23

Northern Utilities, Inc.							
Projected Peaking Supply 1 Demand Rate (Unit Call Payment)							
Effective No	vem	ber 2010 tl	hrough October 2011				
PPI_Base		127.17	Average PPI - Nov 95 through Oct 96				
Projected PPI		181.85	Average PPI - Nov 09 through Oct 10				
Base Unit Call Payment	1 ,						
Projected Unit Call Payment	\$	44.09	Base UCP times (PPI / PPI_BASE)				

large and the corresponding Base or Augmented Service SCQ and shall be payable in 5 equal monthly installments during the Winter Season of each Contract Year in accordance with the terms of Article 10.

Contract	Base Service Demand Charge	Augmented Service Demand Charge
Year	(\$/MMBtu)	(\$/MMBtu)
2001-02	1.90	1.60
2002-03	1.90	1.45
2003-04	1.65	1.45
2004-05	1.65	1.35
2005-06	1.45	1.35
2006-07	1.40	1.35
2007-08	1.40	1.35
2008-09	1.40	1.35
2009-10	1.35	1.35
2010-11	1.35	1.35

Commodity Charge: Buyer shall pay Seller a Commodity Charge for each MMBtu requested and selivered during any Month under either the Base or Augmented Service, as appropriate, equal to the average of the prices posted in Gas Daily's "Daily Price Survey" for deliveries to the Tenn Zone 6 (delivered) and Algonquin City-gates on the actual delivery date plus \$0.60 per MMBtu. If one or both City-gate prices from "Daily Price Survey" is unavailable for such date, then the average of the prices for deliveries to the Tenn Zone 6 (delivered) and Algonquin City-gates from the "Daily Price Survey" for the next Business Day shall apply. If Gas Daily is no longer published or if it no longer publishes in the "Daily Price Survey," either or both prices for deliveries to the Tenn Zone 6 (delivered) and Algonquin City-gates, a comparable replacement publication and/or index mutually and reasonably agreeable to the Parties shall be used. In the event the Parties are unable to reach agreement regarding a comparable publication or index to be utilized, either Party may elect to resolve the dispute by arbitration under Article XIV by giving written notice to the other Party In the event either Party elects to resolve the dispute by arbitration, the dispute shall be resolved by arbitration regardless of the amount in controversy. The

Northern Utilities, Inc. New Hampshire Division Schedule 5B Page 1 of 6

Northern Utilities, Inc. Retail Marketer Capacity Assignment Revenue Projections November 2010 through October 2011								
Item	Revenue	Reference						
NH Division Pipeline Contract Capacity Assignment	\$ (2,094,795)	Page 2						
NH Division Storage Contract Capacity Assignment	\$ (216,339)	Page 3						
NH Division Peaking Demand	\$ (392,804)	Page 4						
NH Division Asset Management and Capacity Release Revenue Assigned to Retail Suppliers	\$ 71,945	Page 5						
NH Division Net PNGTS Litigation Costs & Projected 2008 Rate Case Refund Assigned to Retail Suppliers	\$ 31,856	Page 6						
NH Division Capacity Assignment Demand Revenue	\$ (2,600,137)	Sum of Items Above						

Northern Utilities, Inc. New Hampshire Division Pipeline Capacity Assignment Estimates November 1, 2010 through October 31, 2011

		Т	·····			em	Der 1, 2010	T	ough Octobe Capacity	,	peline		lorono	ľ	T		
Pipeline	Contract ID		Pipeline		Storage		Peaking	١.	Assigned?		ocated		torage	Assigned	Assigned	ì	NH Annual
1	Community	Allo	ocated Cost	ΑII	ocated Cost	Αll	ocated Cost	t '	(Y/N)	3	MDQ	,	ocated MDQ	Pipeline MDQ	Storage MDQ	١٠	Cap Assign
Algonquin	93201A1C	\$	14,417	\$	6,097	\$		h		NA '	VIDQ	NA.	VIDQ			6	Credit
Algonquin	93201A1C	\$	69,215	\$	0,007	\$		N		NA		NA		_	-	\$	-
Algonquin	93002F	\$	308,943	\$	_	φ	_	Ϊ́γ		'''	4,211	INA		(267)	-	\$	(10 500)
Granite	10-010-FT-NN	\$	79,650	\$	118,245	\$	135,425	Ϋ́			23,896		35,475	(1,516)		1	(19,589) (21,982)
Granite	10-010-FT-NN	\$	848,738	\$	1,260,001	\$	1,443,061	Ϊ́Υ			23,896		35,475	(1,516)			(234,241)
Iroquois	R181001	\$	520,036	\$	1,200,001	\$	1,440,001	ľ			6,569		33,473	(417)	(2,555)	\$	(33,012)
PNGTS	1997-003	\$	30,142	\$	_	\$	_	ľ			1,100	Ì	_	(70)	-	\$	(33,012)
PNGTS	1997-003	\$	486,972	ŝ	_ '	\$	_	ľ		{	1,100	İ	_	(70)	-	φ	(30,989)
PNGTS	1997-004	\$.00,0.2	\$	1,718,086	\$	_	V		ĺ	1,100		33,000	(70)	(2,375)	\$	(123,650)
PNGTS	1997-004	\$	_	,	10,093,591	\$	_	١ż			_		33,000	_	(2,375)		(726,433)
Tennessee	5083	Š	916,763	\$		\$	_	١ż			4,605		55,000	(292)	(2,575)	\$	(58,131)
Tennessee	5083	\$	1,554,390	\$	_	\$	_	Ý			8,550		_	(542)	_	4	(98,536)
Tennessee	5265	\$	- 1	\$	187,514	\$	_	V			0,000		2,653	(042)	(191)	\$	(13,500)
Tennessee	5292	\$	83,179	\$.0.,0	\$	_	Ιż			1,406		2,000	(89)	(131)	\$	(5,265)
Tennessee	39735	\$	54,960	\$	_	\$	_	ĺγ			929		_	(59)		\$	(3,490)
Tennessee	41099	\$	252,436	\$	_ :	\$	_	ĺγ			4,267		_	(271)	_	\$	(16,032)
Tennessee	46314	\$	56,202	\$	_	\$	_	ĺγ			950		_	(60)	_	\$	(3,550)
Tennessee	31861	\$	84,081	\$	_	\$	_	ΙY			1,382			(88)	_	\$	(5,354)
Tennessee	31861	\$	107,458	\$	-	\$	-	ΙY			844		_	(54)	_	ŝ	(6,875)
Texas Eastern	800384	\$	67,257	\$	-	\$	-	N		NA		NA		(-,	_	\$	(0,0,0,
Texas Eastern	800436	\$	4,125	\$	_	\$	_	N		NA		NA		_	_	ŝ	_
Texas Eastern	800464	\$	941	\$	-	\$	_	N		NA		NA		_	-	\$	
Texas Eastern	800464	\$	236	\$	-	\$	_	N		NA		NA		_	_	\$	_
Texas Eastern	800464	\$	1,308	\$	-	\$	<u>.</u>	N		NA		NA		-	_	\$	_
Texas Eastern	800464	\$	611	\$	-	\$	_	N		NA		NA		_	_ :	\$	_
Texas Eastern	800464	\$	7,986	\$	-	\$	-	N		NA		NA		_	_	\$	-
TransCanada	29594	\$	829,238	\$	-	\$	-	N		NA		NA		_	_	\$	_
TransCanada	33322	\$	· _	\$	7,660,696	\$	-	Y			-		35,872	_	(2,582)	\$	(551,403)
Vector	CRL-NUI-0725	\$	-	\$	1,566,952	\$	-	Y			_		17,172	_	(1,236)		(112,785)
Vector	CRL-NUI-0727	\$	_	\$	389,774	\$	-	Y			-		17,086	_	(1,230)		(28,059)
Vector	FT-1-NUI-0122	\$	566,295	\$		\$		N		NA		NA	, -	_	-	\$	·
Vector	FT-1-NUI-C0122	\$	33,750	\$	-	\$	-	N		NA		NA		-	-	\$	_

Total NH Capacity Assignment Credits

\$ (2,094,795)

Northern Utilities, Inc. New Hampshire Division Schedule 5B Page 3 of 6

Northern Utilities, Inc.

New Hampshire Division Storage Contract Capacity Assignment Estimates

November 1, 2010 through October 31, 2011

Vendor	Contract ID	Annual Fixed Charges	Capacity Assigned (Y/N)	Company Managed (Y/N)	Storage Assigned NH	Assigned MSQ	Assigned MDWQ	NH Annual Cap Assign Credit
Tennessee	5195	\$ 116,126	Υ	N	7.20%	(18,663)	(305)	\$ (8,357)
W-10	01052	\$ 2,890,000	Υ	Υ	7.20%	(244,685)	(2,447)	\$ (207,982)

Total NH Division Storage Capacity Assignment

\$ (216,339)

MSQ = Maximum Space Quantity
MDWQ = Maximum Daily Withdrawal Quantity

Asset Management and Capacity Release Revenue Assigned to Retail Suppliers

November 2009 through October 2010

Asset	Management Agree	eement Revenue)		
Resources	Projected Value	Company- Managed Resources	Resource Type	Percentage Capacity Assigned	Annual Value to NH Retail Marketers
Chicago via Vector, TCPL, Iroquois, TGP, Algonquin	\$ (442,000)	No	Pipeline	6.34%	\$ -
Wash 10 via Vector, TCPL, PNGTS	\$ (1,100,000)	Yes	Pipeline	6.34%	\$ 69,786
PNGTS Contract 1997-003	\$ (30,000)	Yes	Storage	7.20%	\$ 2,159
Tennessee Niagara	\$ (100,000)	No	Pipeline	6.34%	\$ -
Tennessee Long-Haul	\$ (835,000)	No	Pipeline	6.34%	\$ -
Total Asset Management	\$ (2,507,000)				\$ 71,945

Capacity Release Revenue					
Resources	Annual Value	Company- Managed Resources	Resource Type	Percentage Capacity Assigned	Annual Value to NH Retail Marketers
Texas Eastern Contract 800384	\$ (66,701)	No	Pipeline	6.34%	\$ -
AGT Contract 93201A1C	\$ (98,779)	No	Pipeline	6.34%	\$ -
Tennessee 5265	\$ (259,050)	No	Pipeline	7.20%	\$ -
Total Capacity Release	\$ (424,530)				\$ -

Total Asset Management and Capacity Release Revenue	\$ (2,931,530)

\$ 71,945

Northern Utilities, Inc. New Hampshire Division Schedule 5B Page 5 of 6

Northern Utilities, Inc. New Hampshire Division

Peaking Demand Capacity Assignment Revenues

November 2010 through April 2011

Month	Retail	Retail	Retail	Retail	Retail	Retail	Total Peaking	Rate	D	emand
WOTET	Supplier 1	Supplier 2	Supplier 3	Supplier 4	Supplier 5	Supplier 6	Demand TCQ	Rate	Re	evenue
Nov-10	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)
Dec-10	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)
Jan-11	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)
Feb-11	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)
Mar-11	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)
Apr-11	681	683	228	2,791	80	268	4,731	\$ 13.84	\$	(65,467)

Total Division Peaking Demand Revenue

\$ (392,804)

Northern Utilities, Inc. New Hampshire Division Schedule 5B Page 6 of 6

Northern Utilities, Inc. New Hampshire Division PNGTS Litigation Costs & Projected 2008 Rate Case Refund - Assigned to Retail Suppliers November 2010 through October 2011

PNGTS Litigation Costs	\$ 183,943
PNGTS Projected 2008 Rate Case Refund	\$ (628,298)
Net PNGTS Litigation Items	\$ (444,355)

PNGTS Contract	MDQ	Percentage MDQ	Allocated PNGTS Litigation Items	Resource Type	Percentage Capacity Assigned	Capacity Assignment Revenue
PNGTS Contract 1997-003	1,100	3%	\$ (14,334)	Pipeline	6.34%	\$ 909
PNGTS Contract 1997-004	33,000	97%	\$ (430,021)	Storage	7.20%	\$ 30,947
PNGTS Total	34,100	100%	\$ (444,355)			\$ 31,856

Estimate of PNGTS Transportation Costs Subject to Refund

Prior Rates

Filed Rates

Subject to Refund

 Annual Rate
 Winter Rate

 Prior Rate
 \$ 25.245
 \$ 48.515

 Volume
 1,100
 33,000

Annual Rate Winter Rate
\$ 27.4017 \$ 52.063
1,100 33,000

Annual Rate Winter Rate
\$ 2,157 \$ 3,549
1,100 33,000

	L			_		L	11,100				L	1,100	55,5	001													
Month	FT	-1997-003	FT-1997-00	‡ T	otal Cost	FT	-1997-003	FT-1997	004	Total Cost	FT-	1997-003	FT-1997-0	004	Total Cost	ME Allocator	NH Allocator	ME Refu	nd N	H Refund	Begi	n Month Balance	End Month Balance	Average	Balance	Interest Rati	Interest
Sep-08	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.93%	50.07%	\$ 1,1	85 \$	1,188	\$	- ;	\$ 2,372		1,186	5.30	
Oct-08	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.93%	50.07%	\$ 1,1	85 \$	1,188	\$	2.378	\$ 4,750	S	3,564	5.00	
Nov-08	\$	27,770	\$ 1,600,985	S	1,628,755	\$	30,142	\$ 1,718,	086 \$	1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	49.91%	50.09%	\$ 59,6	29 \$	59,844	\$	4,765	\$ 124,238		64,502	5.00	
Dec-08	\$	27,770	\$ 1,600,985	S	1,628,755	\$	30,142	\$ 1,718,	086 \$	1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	49.91%	50.09%	\$ 59,6	29 \$	59,844	S	124,507			184,243	5.00	
Jan-09	\$	27,770	\$ 1,600,985	\$	1,628,755	\$	30,142	\$ 1,718,	086 \$	1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	49.91%	50.09%	\$ 59.6	29 S	59.844	S	244,773			304,510		6 \$ 1.185
Feb-09	\$	27,770	\$ 1,600,985	\$	1,628,755	\$	30,142	\$ 1,718,	86 \$	1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	49.91%	50.09%	\$ 59,6	29 \$	59,844	Ś	365,431			425,168		6 \$ 1,495
Mar-09	\$	27,770	\$ 1,600,985	\$	1,628,755	\$	30,142	\$ 1,718,	86 \$	1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	49.91%	50.09%	\$ 59,6	29 \$	59,844	\$	486,399			546.135		6 \$ 2,126
Apr-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.91%	50.09%	S 1,1	84 \$	1,188	\$	607,997			609,183		6 \$ 1,711
May-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		S	2,372	49.91%	50.09%	\$ 1,1	84 \$	1,188	\$	612,080	\$ 614,453		613,267		6 \$ 1.780
Jun-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.91%	50.09%	\$ 1,1	84 \$	1,188	\$	616,233	\$ 618,605	S	617.419	3.37	6 \$ 1,734
Jul-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.91%	50.09%	\$ 1,1	84 \$	1,188	\$	620,339			621,525		6 \$ 1,739
Aug-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.91%	50.09%	\$ 1,1	84 \$	1,188	\$	624,451	\$ 626,823	\$	625,637	3.25	6 \$ 1.751
Sep-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49,91%	50.09%	\$ 1,1	84 \$	1,188	\$	628,574	\$ 630,946	\$	629,760	3.25	6 \$ 1,706
Oct-09	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	49.91%	50.09%	\$ 1,1	84 \$	1,188	\$	632,652	\$ 635,024	\$	633,838	3.25	6 \$ 1,774
Nov-09	\$		\$ 1,600,985		1,628,755	\$		\$ 1,718,			\$		\$ 117,1		119,473	52.54%	47.46%	\$ 62,7	71 \$	56,702	\$	636,798	\$ 756,271	\$	696,534	3.25	6 \$ 1,886
Dec-09	\$		\$ 1,600,985		1,628,755	\$		\$ 1,718,		1,748,227	\$	2,372		01 \$	119,473	52.54%	47.46%	\$ 62,7	71 \$	56,702	\$	758,157	\$ 877,630	\$	817,894	3.25	6 \$ 2,289
Jan-10	\$		\$ 1,600,985		1,628,755	S				1,748,227	\$	2,372	\$ 117,1	01 \$	119,473	52.54%	47.46%	\$ 62,7	71 \$	56,702	\$	879,919	\$ 999,392	\$	939,656	3.25	6 \$ 2,630
Feb-10	\$		\$ 1,600,985		1,628,755	\$				1,748,227	\$		\$ 117,1		119,473	52.54%	47.46%	\$ 62,7	71 \$	56,702	\$	1,002,022	\$ 1,121,495	\$	1,061,758	3.25	6 \$ 2,684
Mar-10	\$		\$ 1,600,985	\$	1,628,755	\$		\$ 1,718,)86 \$	1,748,227	\$		\$ 117,1	01 \$	119,473	52.54%	47.46%	\$ 62,7	71 \$	56,702	\$	1,124,179	\$ 1,243,651	\$	1,183,915	3.25	6 \$ 3,313
Apr-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 \$	1,126	\$	1,246,965	\$ 1,249,337	\$	1,248,151	3.25	6 \$ 3,380
May-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 S	1,126	\$	1,252,718	\$ 1,255,090	\$	1,253,904	3.25	6 \$ 3,509
Jun-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 \$	1,126	\$	1,258,599	\$ 1,260,971	\$	1,259,785	3.25	6 \$ 3,412
Jul-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 \$	1,126	\$	1,264,383	\$ 1,266,756	\$	1,265,570	3.25	6 \$ 3,542
Aug-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	S	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 \$	1,126	\$	1,270,298	\$ 1,272,670	\$	1,271,484	3.25	6 \$ 3,558
Sep-10	\$	27,770		\$	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%	\$ 1,2	46 \$	1,126	\$	1,276,228	\$ 1,278,601	\$	1,277,415	3.25	6 \$ 3,460
Oct-10	\$	27,770		_\$_	27,770	\$	30,142		\$	30,142	\$	2,372		\$	2,372	52.54%	47.46%		46 \$	1,126	\$	1,282,060	\$ 1,284,433	\$	1,283,247	3.25	6 \$ 3,591
Period Tota	1 \$	722,007	\$ 16,009,851	\$ 1	6,731,858	\$	783,689	\$ 17,180,	356 \$	17,964,545	\$	61,682	\$ 1,171,0	05 \$	1,232,687	51.22%	48.78%			601,304	\$	1,288,024					\$ 55,337
														_	F	Period Total Incli	uding Interest	\$ 659,7	26 \$	628,298					51.22%		\$ 28,344
																									48.78%	NH	\$ 26,994

Northern Utilities, Inc. Expenses Incurred to Oppose Proposed PNGTS Rate Increases, 9/1/2009 - 8/13/2010

Service Provider	Service Period	Description of Services	Date Paid		Expense	Rate Case	
Bates White, LLC - Total RP08-3	06			\$	39,237.49	RP08-306	•
Benjamin Schlesinger and Associ Benjamin Schlesinger and Associ				\$ \$	11,836.80 746.70	RP08-306 RP10-729	-
Continental Economics, Inc Tot				\$	4,560.00	RP10-729	: :
Hall Estill Attorneys at Law - Tota Hall Estill Attorneys at Law - Tota				\$ \$	273,630.42 42,549.91	RP08-306 RP10-729	•
Jeffry L. Fink - Total RP08-306 Jeffry L. Fink - Total RP10-729				\$ \$	1,862.00 2,416.80	RP08-306 RP10-729	
Snake Hill Energy Resources, Inc	Total			\$	-		
Subtotal - Rate Case = RP08-306 Subtotal - Rate Case = RP10-729 Total Expenses Paid Since Septem	1			\$ \$	326,566.71 50,273.41 331,126.71	RP08-306 RP10-729	
Maine New Hampshire Total Expenses Paid Since Septem	iber 1, 2009	Fixed PR Allocators 51.1880% 48.8120%		\$ \$	RP08-306	RP10-729 \$ 25,733.97 \$ 24,539.44 \$ 50,273.41	Since 9/1/09 \$ 192,897.08 \$ 183,943.04 \$ 376,840.12
ME Division - Presented to MPUC i ME Division - Expenses since Sept Total ME Division Expenses	S .			\$	RP08-306 228,066.64 167,163.10 395,229.75	RP10-729 \$ 25,733.97 \$ 25,733.97	ME Total \$ 228,066.64 \$ 192,897.08 \$ 420,963.72

Northern Utilities, Inc. New Hampshire Division Schedule 6A Page 1 of 3

	***************************************	Northe	ern Utilities, In	C.			
		•	Cost by Supply				,
ļ		November 20	010 through A	pril 2011			
Description	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Season
Pipeline							
Chicago	\$ 411,430	\$ -	\$ 10,566	\$ 75,236	\$ 231,901	\$ 938,668	\$ 1,667,801
Pittsburgh, NH	\$ 201,993	\$ 217,831	\$ 223,457	\$ 200,878	\$ 219,127	\$ 176,781	\$ 1,240,066
Niagara	\$ 382,660	\$ -	\$ -	\$ 53,935	\$ 139,599	\$ 459,192	\$ 1,035,386
Tennessee Production	\$1,763,674	\$1,272,854	\$ 953,501	\$ 648,859	\$1,582,445	\$1,547,079	\$ 7,768,412
Storage							
Tennessee Storage	\$ -	\$ -	\$ 307,731	\$ 158,390	\$ 228,551	\$ 12,830	\$ 707,503
Washington 10 Storage	\$ -	\$2,582,738	\$3,763,469	\$3,230,332	\$2,001,207	\$ -	\$ 11,577,747
5 11							
Peaking	6 000 000	6 504.004	¢ 500 444	Ф 4 Г 4 447	ф 407 407	¢ 407.446	¢ 2404469
Peaking Supply 1	\$ 366,320	\$ 504,034	\$ 508,144	\$ 451,147	\$ 467,407	\$ 107,416	\$ 2,404,468
Peaking Supply 2	\$ -	\$ -	\$ -	\$ -	\$ 21,557	\$ -	\$ 21,557
LNG	\$ 9,402	\$ 9,375	\$ 9,290	\$ 7,955	\$ 65,264	\$ 9,937	\$ 111,223
T. 1.1.0	00 405 470	# 4 F00 000	Φ E 770 450	# 4 000 704	# 4 057 057	£2.054.002	© 00 E04 400
Total Commodity Cost	\$3,135,479	\$4,586,832	\$5,776,158	\$4,826,734	\$4,957,057	\$3,251,903	\$ 26,534,162

Northern Utilities, Inc. New Hampshire Division Schedule 6A Page 2 of 3

		Northe	ern Utilities, In	c.							
	Con	nmodity Volum	es by Supply	Source (Dth)							
		November 20	10 through A	oril 2011							
Description	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Season				
Pipeline											
Chicago	73,841	0	1,773	12,562	39,178	174,508	301,862				
Pittsburgh, NH	33,000	34,100	34,100	30,800	34,100	33,000	199,100				
Niagara	68,184	0	0	8,953	23,563	83,993	184,693				
Tennessee Production	324,343	222,595	161,528	110,471	274,333	281,822	1,375,093				
Storage											
Tennessee Storage	o	o	64,297	33,094	47,753	2,536	147,681				
Washington 10 Storage	0	571,056	832,121	714,242	442,476	0	2,559,895				
Da alda a											
Peaking	04 704	400,000	407.004	440,000	447.004	00.005	200 044				
Peaking Supply 1	91,721	126,202	127,231	112,960	117,031	26,895	602,041				
Peaking Supply 2	1 0 70	0		0	2,670		2,670				
LNG	1,350	1,395	1,395	1,260	11,646	1,826	18,872				
Total Delivered (Dth)	592,439	955,348	1,222,446	1,024,342	992,752	604,580	5,391,907				

Northern Utilities, Inc. New Hampshire Division Schedule 6A Page 3 of 3

Northern Utilities, Inc.														
<u>/</u>		D		ered Cost										
			No	vember 2	010	through A	pril 2	2011						
Description		Nov-10] [Dec-10	,	Jan-11	F	eb-11		Mar-11		Apr-11	S	Season
Pipeline														
Chicago	\$	5.5718			\$	5.9576	\$	5.9892	\$	5.9192	\$	5.3789	\$	5.5251
Pittsburgh, NH	\$	6.1210	\$	6.3880	\$	6.5530	\$	6.5220	\$	6.4260	\$	5.3570	\$	6.2284
Niagara	\$	5.6122					\$	6.0241	\$	5.9244	\$	5.4670	\$	5.6060
Tennessee Production	\$	5.4377	\$	5.7183	\$	5.9030	\$	5.8736	\$	5.7683	\$	5.4896	\$	5.6494
Storage								:						
Tennessee Storage					\$	4.7861	\$	4.7861	\$	4.7861	\$	5.0595	\$	4.7908
Washington 10 Storage			\$	4.5227	\$	4.5227	\$	4.5227	\$	4.5227			\$	4.5227
				:										
Peaking														
Peaking Supply 1	\$	3.9939	\$	3.9939	\$	3.9939	\$	3.9939	\$	3.9939	\$	3.9939	\$	3.9939
Peaking Supply 2	*	0.0000	*	0.0000	*	0.0000	Ψ	0.0000	\$	8.0723	*	0.0000	\$	8.0723
LNG	\$	6.9643	\$	6.7203	\$	6.6594	\$	6.3138	\$	5.6039	\$	5.4412	\$	5.8934
Total Constant			_	4.0040	φ.	4 7054		4.7400	•	4.0000	_	F 0700	_	4.0044
Total System	\$	5.2925	\$	4.8012	\$	4.7251	\$	4.7120	\$	4.9932	\$	5.3788	\$	4.9211

675,64r 050,51r 809.0 \$ 6100,0 260,84r 080,51r 810.0 \$ 6100,0 185 \$ 515	#DIV/Oi \$ 1.35% 14,461 \$ 5 \$ 5 \$ 2 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 811,61 10\\IQ\# %\\\8.0 - \\726,81	Mariable Transportation Gegmant 6C Algorithm Contract 93200F) Algorithm Case Transmission (Contract 93200F) Algorithm Case Transmission (Contract 93200F) Algorithm Case Transmission (Contract 9320F) Algorithm Case Rate Trin Sale Delivered Volume Line 94 Line 1 of Page 2 City Cale Delivered Volume Line 94 Line 1 of Page 2 City Cale Delivered Volume City Cale Delivered Volume Avaisable Transportation Rate TXW 7A, Line 1 of Page 2 City Cale Delivered Volume Avaisable Transportation Rate City Cale Delivered Volume City Cale Delivere
CGS,S21 STF,21T %2Q,1 %88,1 %2Q,0 \$ %870,0 2TF,QHT %00,ETF %2Q,0 %840,0 %2Q,0 %40,0 %2Q,0 br>%2Q,0 %2Q,0 %2Q,0 %2Q,0 %2Q,0 %2Q,0 %2Q,0 %2Q,	OTT, S SS.S OVVIOW OVV	\$ - \$ 66p't : i0/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	78
905,82 217,82 908,02,0 908,02,0 909,02,0 909,02,0 909,02,0 909,02,0 909,02,0 909,02,0 909,0	\(\begin{array}{cccccccccccccccccccccccccccccccccccc	\$ - \$ 6E \$ 500.0 \$ 6100.0 \$ 6100.0 \$	16 Granite State Gas Transmission (Contract 10-010-FT-NM) 69 Granite State Gas Transmission (Contract 10-010-FT-NM) 70 Receipt Point: Northern City Cates 71 Delivevy Point: Northern City Cates 72 Received Volume 73 Fuel Loss Rate 74 City Cate Delivered Volume 75 Variable Transportation Rate 76 Variable Transportation Costs 77 Variable Transportation Costs 78 Variable Transportation Costs 79 Variable Transportation Costs 70 Variable Transportation Costs 70 Variable Transportation Costs 71 City Cate Deliver Variation Rate 72 Variable Transportation Costs 73 Variable Transportation Costs 74 Variable Transportation Costs
71.0,52 77.0,42 7.0,72 77.0,42 7.0,0019 \$6,309 7.0,126	\$ 91. \$ \(\frac{1}{2} \) \$ - \(\frac{1}{2} \) \$ 6100'0 \$ 6100'0 \$ \(\frac{1}{2} \) \$ 10/\ld\(\frac{1}{2} \) \$ 625'\(\frac{1}{2} \) \$ \(\frac	\$ - \$ 600.0 2 2 100\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
027,86 80S,9E %98.0 %86.0 %86.0 508,7e \$ 168,8E \$ 168,8E \$ 160.0	\$ 26 \$ 21 \$ 6 6 7 1 6 7	\$ 10\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	48 Transporation Segment 3A Transporation Segment 3A 20 Receipt Point: Mendon 51 Receipt Point: Mendon 52 Received Volume 53 Received Volume 54 City Gate Delivered Yolume 55 Control Segment 56 City Gate Delivered Volume 57 City Gate Delivered Volume 58 City TAN, Line 12 of Page 2 59 Variable Transportation Rate 50 Variable Transportation Costs 50 Variable Transportation Costs 50 Variable Transportation Costs 51 City Available Transportation Costs 52 Variable Transportation Costs 53 City Available Transportation Costs 54 City Segment 55 City Segment 56 Variable Transportation Costs 57 City Segment 58 Variable Transportation Costs 59 City Segment 50 City Segment 50 City Segment 50 City Segment 51 City Segment 52 City Segment 53 City Segment 54 City Segment 55 City Segment 56 City Segment 57 City Segment 58 City Segment 59 City Segment 50 City S
676,806 878,871 601,0 806,371 601,0 806,371 601,0 806,371 601,0 806,371 601,0 806,371 601,0 806,371 601,0 806,371	\$ 802 \$ 99 \$ 6 \$ 800.0	\$ - \$ 166 : \$ 10/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	188 Transportation Segment 4 199 (Receipt Point: Parkway) 19 (Receipt Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Wright (Interconnection with Tennessee) 19 (Belivery Point: Propriet (Interconnection with Tennessee) 19 (Belivery Point:
968,081 %EE.1 368,081 %EE.1 368,081 100,0 \$ 1910,0 110,0 \$	\$ \$99\$ \$ 081 \$ \$Z \$ \$\$1\$10.0 \$ \$\$1\$10.0 \$ \$\$1\$10.0 \$ \$\$1\$2\$ \$62.2\$\$\$\$1\$ \$62.5\$\$\$\$\$1\$ \$65.5\$\$\$\$\$\$1\$ \$65.5\$\$\$\$\$1\$ \$65.5\$\$\$\$\$1\$ \$65.5\$\$\$\$1\$ \$65.5\$\$\$\$1\$ \$65.5\$\$1\$ \$65.5\$\$\$1\$ \$65.5\$\$\$1\$ \$65.5\$\$\$1\$ \$65.5\$\$\$1\$ \$65.5\$\$\$1\$ \$65.5\$		7 Transportation Segment 3 92 TransCanada Pipeline (Contract 29594) 93 Receipt Point: Dawn 94 Delivery Point: Pawn 95 Received Volume 96 Page 2 97 Point Page 3 98 Puel Loss Rate 99 Puint Pawn 99 Point Page 2 90 Paint Page 3 90 Paint Page 3 91 Paint Page 3 92 Puel Loss Rate 93 Paint Page 3 94 Paint Page 3 95 Paint Page 3 96 Page 3 97 Paint Page 3 98 Paint Page 3 99 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Paint Page 3 90 Page 4
660.0 \$ 600.0 \$ 6100.	\$ 77 \$ 22 \$ \$ 610.0 \$ 6100.0 \$		Tinspostation feel Losses and Variable Charges Transportation Eegment 1&2. Transportation Eegment 1&2. Transportation Eegment 1&2. Transportation (Contracts FT-1-NUI-0122 and FT-1-NUI-0122) Cecepit Point: Milance December Point: Dawn (Inferconnects with TransCanada) TransCanada Seceived Volume Line 2X Innes (1 - Line 23) Truet Loss Rate Transportation Rate FXW 7A, Line 17 of Page 2 Seceived Volume Line 2X Innes (1 - Line 23) Wariable Transportation Rate Variable Transportation Costs Variable Transportation Costs Seceived Volume Transportation Rate Seceived Volume Variable Transportation Costs Seceived Volume Transportation Costs Seceived Volume Transportation Rate Seceived Volume Seceived Volume Transportation Rate Seceived Volume Transport
h73,215 hh3,281 620.2 \$ 810.2 620.3 \$ 602,016 620.3 \$ 602,016 620.3 \$ 602,016 620.3 \$ 600.0 600.0 \$ 600.0	\$ 920'th ELLIEL LES'T \$ 209'S \$ 869'S \$ 627'S \$ 260'0 \$ 766'0 \$ 766'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0 \$ 576'5 \$ 900'S \$ 260'0	\$ - \$ 096'225 \$ - \$ 902'05 \$ - \$ 202'05 \$ - \$ 202'05	8 Chicago Supply Costs 9 Purchased Volumes 19 Purchased Volumes 10 Monthly WYMEX Price 11 WYMEX Cost Line 9 times Line 10 Page 1 12 WYMEX Basis Costs 13 WYMEX Basis Costs 14 Total Purchase Price 15 Line 10 plus Line 13 15 Lotal Purchase Price 16 Line 11 plus Line 13 16 Lotal Purchase Cost 17 Marchase Price 18 Line 11 plus Line 13 18 Lotal Purchase Cost 19 Line 11 plus Line 13 19 Lotal Purchase Cost 19 Line 11 plus Line 13 19 Lotal Purchase Cost 10 Line 11 plus Line 13 10 Line 11 plus Line 13
1102-0102 Masq 143,215 103,215 104,005 108,705 108,	A Tr-nsM Tr-da-] Tr-nst 320,rh Err,cr 728,r 810,ec 2a2,cr 777,r \$ 8528,ess \$ 717,h7 \$ \$22,01 \$ 70,c \$ 618 \$ 109,res \$ 109,res \$ 862,as \$ 889,8 \$ 109,res \$ 862,as \$ 889,8 \$ 109,res \$ 862,as \$ 889,8 \$ 109,res \$ 862,as \$ 889,as \$ 889,as \$ 888,as \$ 88	\$ - \$ \$\forall \text{Z,E} \\ \text{\$ 060,114} \\ \text{\$ } \\ \$	Line City Gate Delivered Costs 1 Purchased Volumes 2 City Gate Delivered Volume 3 Total Purchase Cost 4 Variable Transpondition Costs 5 Average Delivered Costs 6 Average Delivered Price 7 Total City Gate Delivered Costs 7 Total City Gate Delivered Costs 8 Sum Lines 26, 36, 46, 56, 66, 76, 86 9 Average Delivered Costs 7 Sum Lines 3 and 4 8 Average Delivered Price 7 Sum Lines 3 and 4 8 Average Delivered Price 9 Sum Lines 3 but Vine 2 9 Sum Lines 3 and 4 9 Sum Lin

Source of Supply: Chicago (Interconnect of Alliance and Vector Pipelines)
Delivered to Northem via Vector, TransCanada, Iroquois, Tennessee and Granite Pipelines
Delivered to Northem via Vector, TransCanada, Iroquois, Tennessee, Algonquin Pipelines and Bay State Exchange Agreement

Source of Supply: Pittsburgh, NH Delivered to Northern via PNGTS and Granite Pipelines

Line	City Gate Delivered Costs	Reference	Nov-10	Dec-10	Jan-11	Feb-11				Apr-11	20	10-2011 [~] Peak
1	Purchased Volumes	Line 9	33,000	34,100	34,100	30,800		34,100		33,000		199,100
2	City Gate Delivered Volume	Line 34	33,000	34,100	34,100	30,800		34,100		33,000		199,100
3	Total Purchase Cost	Line 14	\$ 201,993	\$ 217,831	\$ 223,457	\$ 200,878	\$	219,127	\$	176,781	\$1	,240,066
4	Variable Transportation Costs	Sum Lines 26 and 36	\$ -	\$ -	\$ -	\$ -	\$	_	\$	-	\$	
5	Total City Gate Delivered Costs	Sum Lines 3 and 4	\$ 201,993	\$ 217,831	\$ 223,457	\$ 200,878	\$	219,127	\$	176,781	\$1	240,066
6	Average Delivered Price	Line 5 divided by Line 2	\$ 6.121	\$ 6.388	\$ 6.553	\$ 6.522	\$	6.426	\$	5.357	\$	6.228
7												
8	Portland Supply Costs											
9	Purchased Volumes	Sendout Optimization	33,000	34,100	34,100	30,800		34,100		33,000		199,100
10	Monthly NYMEX Price	FXW-7A, Line 1 of Page 1	\$ 4.905	\$ 5.172	\$ 5.337	\$ 5.306	\$	5.210	\$	5.018	\$	5.158
11	NYMEX Cost	Line 9 times Line 10	\$ 161,865	\$ 176,365	\$ 181,992	\$ 163,425	\$	177,661	\$	165,594	\$1	,026,902
12	NYMEX Basis Price	FXW-7A, Line 8 of Page 1	\$ 1.216	\$ 1.216	\$ 1.216	\$ 1.216	\$	1.216	\$	0.339	\$	1.071
13	NYMEX Basis Costs	Line 9 times Line 12	\$ 40,128	\$ 41,466	\$ 41,466	\$ 37,453	\$	41,466	\$	11,187	\$	213,165
14	Total Purchase Price	Line 10 plus Line 12	\$ 6.121	\$ 6.388	\$ 6.553	\$ 6.522	\$	6.426	\$	5.357	\$	6.228
15	Total Purchase Cost	Line 11 plus Line 13	\$ 201,993	\$ 217,831	\$ 223,457	\$ 200,878	\$	219,127	\$	176,781	\$1	240,066

Source of Supply: Niagara (Interconnect of TransCanada and Tennessee Pipelines)
Delivered to Northern via Tennessee and Granite Pipelines

Vered to Northern via Tennessee and Bay State Exhange Agreement

Line	City Gate Delivered Costs	Reference		Nov-10	D	ec-10	Jan-11		Feb-11		Mar-11		Apr-11		10-2011 Peak
1	Purchased Volumes	Line 9		69,700		-		_	9,155		24,089		85.695		188,640
2	City Gate Delivered Volume	Sum Lines 24, 54 and 44		68,184		-		-	8,953		23,563		83,993		184,693
3	Total Purchase Cost	Line 14	\$	377,288		-	\$	- \$	53,228	\$	137,741	\$	452,557	\$ 1	,020,815
4	Variable Transportation Costs	Sum Lines 26, 56, 36 and 46	\$	5,373		-	\$	- \$		\$		\$		\$	14,572
5	Total City Gate Delivered Costs	Sum Lines 3 and 4	\$	382,660		-	•	- \$		\$	-	\$	459,192		
6 7	Average Delivered Price	Line 5 divided by Line 2	\$	5.612	#1	DIV/0!	#DIV/0!	\$	6.024	\$	5.924	\$	5.467	\$	5.606
8	Niagara Supply Costs														
9	Purchased Volumes	Sendout Optimization		69.700		_		_	9,155		24,089		85,695		188,640
10	Monthly NYMEX Price	FXW-7A, Line 1 of Page 1	\$	4.905	#1	DIV/0!	#DIV/0!	\$	5.306	\$	5.210	\$	5.018	\$	5.015
11	NYMEX Cost	Line 9 times Line 10	\$	341,880			\$	- \$	48,578	\$		\$			945,981
12	NYMEX Basis Price	FXW-7A, Line 7 of Page 1	\$	0.508		DIV/0!	#DIV/0!	\$	0.508	\$	0.508	\$	0.263	\$	0.397
13	NYMEX Basis Costs	Line 9 times Line 12	\$	35,408		-	•	- \$	4,651		12,237		22,538		74,834
14	Total Purchase Price	Line 10 plus Line 12	\$	5.413		DIV/0!	#DIV/0!	\$				\$	5.281	\$	5.411
15 16	Total Purchase Cost	Line 11 plus Line 13	\$	377,288	\$	-	\$	- \$	53,228	\$	137,741	\$	452,557	\$ 1	,020,815
17	Transportation Fuel Losses and	Variable Charges													
18	Transportation Segment 1A	variable Citatges													
19	Tennessee Gas Pipeline (Contra	ct 5292)													
20	Receipt Point: Niagara	,													
21	Delivery Point: Bay State City Ga	ate (Delivered to Northern via Exchang	e Ag	reement)											
22	Received Volume	Line 9		34,398		-		-	3,558		11,864		37,571		87,391
23	Fuel Loss Rate	FXW 7A, Line 11 of Page 2		2.09%	#[DIV/0!	#DIV/0!		2.09%		2.09%		1.86%		1.99%
24	City Gate Delivered Volume	Line 22 times (1 - Line 23)		33,679		-		-	3,484	_	11,616	_	36,872	_	85,651
25 26	Variable Transportation Rate Variable Transportation Costs	FXW 7A, Line 11 of Page 2	\$ \$	0.0784		DIV/0!	#DIV/0!	- \$		\$ \$	0.0784		0.0784		0.0784
27	variable transportation Costs	Line 24 times Line 25	Þ	2,640	Ф	-	\$	- 3	273	Ф	911	Þ	2,891	Ф	6,715
28	Transportation Segment 1B														
29	Tennessee Gas Pipeline (Contra-	ct 39375)													
30	Receipt Point: Niagara	•													
31	Delivery Point: Pleasant St. (Inte	rconnection with Granite)													
32	Received Volume	Line 9		12,166		-		-	2,173		4,571		22,165		41,075
3	Fuel Loss Rate	FXW 7A, Line 11 of Page 2		2.09%	#1	DIV/0!	#DIV/0!		2.09%		2.09%		1.86%		1.97%
4 35	Delivered Volume Variable Transportation Rate	Line 32 times (1 - Line 33)	•	11,912		-	#D# ((0)	-	2,127	•	4,476		21,753	•	40,268
36	Variable Transportation Costs	FXW 7A, Line 11 of Page 2 Line 34 times Line 35	\$ \$	0.0784 934	#1 \$	DIV/0!	#DIV/0!	- \$		\$ \$	0.0784 351		0.0784 1,705		0.0784 3,157
37	Variable Transportation Costs	Line 34 lines Line 33	Φ	934	Ð	-	Ψ	- ş	101	Φ	331	Φ	1,703	Φ	3,137
38	Transportation Segment 2B														
39	Granite State Gas Transmission	(Contract 10-010-FT-NN)													
40	Receipt Point: Pleasant St.														
41	Delivery Point: Northern City Gat														
42	Received Volume	Line 34		11,912				-	2,127		4,476		21,753		40,268
43 44	Fuel Loss Rate City Gate Delivered Volume	FXW 7A, Line 3 of Page 2 Line 42 times (1 - Line 43)		0.50% 11.853		0.50%	0.50	%	0.50% 2,117		0.50% 4.454		0.50% 21,644		0.50% 40,067
45	Variable Transportation Rate	FXW 7A, Line 3 of Page 2	\$	0.0019	\$	0.0019	\$ 0.001	9 \$		\$	0.0019	¢		\$	0.0019
46	Variable Transportation Costs	Line 44 times Line 45	\$		\$	0.0013	\$ 0.00	- \$		\$		\$	41		76
47			•		*		•	•	•	*	ŭ	•	• •	•	
48	Transportation Segment 1C														
49	Tennessee Gas Pipeline (Contract	ct 46314)													
50	Receipt Point: Niagara														
51		ate (Delivered to Northern via Exchang	e Ag	,											
52 53	Received Volume Fuel Loss Rate	Line 9		23,136	411		#01///01	-	3,424		7,654		25,960		60,173
53 54	City Gate Delivered Volume	FXW 7A, Line 11 of Page 2 Line 52 times (1 - Line 53)		2.09% 22,652	#Ł)//VIC	#DIV/0!	_	2.09% 3,352		2.09% 7,494		1.86% 25,477		1.99% 58,975
55	Variable Transportation Rate	FXW 7A, Line 11 of Page 2	\$	0.0784	#1	!0\VIC	#DIV/0!	- \$		\$	0.0784	s	0.0784	\$	0.0784
56	Variable Transportation Costs	Line 54 times Line 55	\$	1,776			\$	- \$		\$		\$	1,997		4,624
				•									•		•

Source of Supply: Tennessee Production Delivered to Northern via Tennessee and Granite Pipelines

Line	City Gate Delivered Costs	Reference	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	2010-2011 Peak
1	City Gate Volumes - Z0	Line 2 of Page 5	113,541	4,766	24,620	30,248	72,689	74,272	320,137
2	City Gate Volumes - Z1	Line 2 of Page 6	210,802	217,829	136,908	80,223	201,644	207,550	1,054,956
3	Total City Gate Volumes	Line 1 plus Line 2	324,343	222,595	161,528	110,471	274,333	281,822	1,375,093
4	City Gate Delivered Costs - Z0	Line 6 of Page 5	\$ 619,779	\$ 27,417	\$ 146,100	\$ 178,466	\$ 421,189	\$ 409,056	\$1,802,007
5	City Gate Delivered Costs - Z1	Line 6 of Page 6	\$ 1,143,896	\$ 1,245,437	\$ 807,401	\$ 470,393	\$ 1,161,256	\$ 1,138,022	\$5,966,405
6	Total City Gate Delivered Costs	Line 4 plus Line 5	\$ 1,763,674	\$ 1,272,854	\$ 953,501	\$ 648,859	\$ 1,582,445	\$ 1,547,079	\$7,768,412
7	Average Delivered Price	Line 6 divided by Line 3	\$ 5.438	\$ 5.718	\$ 5.903	\$ 5.874	\$ 5.768	\$ 5.490	\$ 5.649

Source of Supply: Tennessee Zone 0

Delivered to Northern via Tennessee and Granite Pipelines

, and a																
Line	City Gate Delivered Costs	Reference		Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Apr-11	20)10-2011 Peak
1	Purchased Volumes	Line 32		124.999		5,247		27,104		33,301		80,025		80,628		351,304
2	City Gate Delivered Volume	Line 44		113.541		4,766		24,620		30,248		72,689		74,272		320,137
3	Total Purchase Price	Line 24	\$	4.808	\$	5.075	\$	5.240	\$	5.209	\$	5.113	\$	4.921	\$	4.976
4	Total Purchase Cost	Line 2 times Line 3	\$	600,997	\$	26,628	\$	142,027	\$	173,462	\$	409,165	\$	396,770	\$ 1	,749,050
5	Variable Transportation Costs	Sum Lines 36 and 46	\$	18,782	\$	788	\$	4,073	\$	5,004	\$	12,024	\$	12,286	\$	52,956
6	Total City Gate Delivered Costs	Sum Lines 4 and 5	\$	619,779	\$	27,417	\$	146,100	\$	178,466	\$	421,189	\$	409,056	\$ 1	,802,007
7	Average Delivered Price	Line 6 divided by Line 2	\$	5.459	\$	5.753	\$	5.934	\$	5.900	\$	5.794	\$	5.508	\$	5.629
8	•	·														
9	Tennessee Northern Storage II	njection Meter Deliveries														
10	Purchased Volumes	Line 52		-		-		-		-		-		17,827		17,827
11	Storage Delivered Volume	Line 54		-		-		-		-		-		16,793		16,793
12	Total Purchase Price	Line 24	\$	4.808	\$	5.075	\$	5.240	\$	5.209	\$	5.113	\$	4.921		4.976
13	Total Purchase Cost	Line 10 times Line 12	\$	-	\$	-	\$	-	\$	-	\$	-	\$	87,725	\$	87,725
14	Variable Transportation Costs	Line 56	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,909	\$	1,909
15	Total Storage Delivered Costs	Line 13 plus Line 14	\$	-	\$	-	\$	-	\$	-	\$	-	\$	89,635	\$	89,635
16	Average Delivered Price	Line 15 divided by Line 11		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	\$	5.338	\$	5.338
17																
18	Tennessee Zone 0 Supply Costs															
19	Purchased Volumes	Sendout Optimization		124,999		5,247		27,104		33,301		80,025	_	98,455	_	369,130
20	Monthly NYMEX Price	FXW-7A, Line 1 of Page 1	\$	4.905	-	5.172		5.337			\$			5.018		5.073
21	NYMEX Cost	Line 25 times Line 26	\$	613,122		27,137		144,656		•	\$			494,046		
22	NYMEX Basis Price	FXW-7A, Line 4 of Page 1	\$	(0.097)		(0.097)		(0.097)		(0.097)				(0.097)		(0.097)
23	NYMEX Basis Costs	Line 25 times Line 28	\$	(12,125)		(509)		(2,629)		(3,230)				(9,550)		(35,806)
24	Total Purchase Price	Line 26 plus Line 28	\$	4.808			\$	5.240		5.209	\$			4.921	\$	4.976
25	Total Purchase Cost	Line 27 plus Line 29	\$	600,997	\$	26,628	\$	142,027	\$	173,462	\$	409,165	\$	484,496	\$ 1	1,836,776
26																
27	Transportation Fuel Losses and	Variable Charges														
28	Transportation Segment 1A															
29	Tennessee Gas Pipeline (Contra															
30	Receipt Point: Tennessee Zone															
31	Delivery Point: Pleasant St. (Inte			124,999		5,247		27,104		33.301		80,025		80,628		351,304
32	Received Volume	Line 19		8.71%		5,247 8.71%		8.71%		8.71%		8.71%		7.42%		8.41%
3	Fuel Loss Rate	FXW 7A, Line 7 of Page 2		114,112		4.790		24,744		30.400		73,054		74,645		321,745
.54	Delivered Volume	Line 32 times (1 - Line 33)	\$	0.1627	•	0.1627	Œ	0.1627	æ	0.1627	¢		\$	0.1627	\$	0.1627
35 36	Variable Transportation Rate Variable Transportation Costs	FXW 7A, Line 7 of Page 2 Line 34 times Line 35	\$	18,566			\$	4,026		4,946				12,145		52,348
36 37	variable transportation costs	Line 34 times Line 33	Φ	10,500	Φ	113	Ψ	4,020	Ψ	4,540	Ψ	11,000	Ψ	12,110	*	02,010
38	Transportation Segment 2A															
39	Granite State Gas Transmission	(Contract 10-010-FT-NN)														
40	Receipt Point: Pleasant St.	(Comfact 10-010-11-1414)														
41	Delivery Point: Northern City Ga	ites														
42	Received Volume	Line 34		114,112		4,790		24,744		30,400		73,054		74,645		321,745
43	Fuel Loss Rate	FXW 7A, Line 3 of Page 2		0.50%		0.50%		0.50%		0.50%		0.50%		0.50%		0.50%
44	City Gate Delivered Volume	Line 42 times (1 - Line 43)		113,541		4,766		24,620		30,248		72,689		74,272		320,137
45	Variable Transportation Rate	FXW 7A, Line 3 of Page 2	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019
46	Variable Transportation Costs	Line 44 times Line 45	\$		\$		\$	47	\$	57	\$	138	\$	141	\$	608
47	,															
48	Transportation Segment 3															
49	Tennessee Gas Pipeline (Contra	act 5083)														
50	Receipt Point: Tennessee Zone	0														
51	Delivery Point: Tennessee Mark	et Area Storage														
52	Received Volume	Line 25 minus Line 38		-		-		-		-		-		17,827		17,827
53	Fuel Loss Rate	FXW 7A, Line 6 of Page 2		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		5.80%		5.80%
54	Storage Delivered Volume	Line 52 times (1 - Line 53)		-		-		-		-		-		16,793		16,793
55	Variable Transportation Rate	FXW 7A, Line 6 of Page 2		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	\$	0.1137		0.1137
56	Variable Transportation Costs	Line 54 times Line 55	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,909	\$	1,909

Source of Supply: Tennessee Zone L Delivered to Northern via Tennessee and Granite Pipelines

Line	City Gate Delivered Costs	Reference		Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Apr-11		10-2011 Peak	
2	Purchased Volumes	Line 33		229,835		237,496		149,269		87,466		219,850		223,500		147,415	
3	City Gate Delivered Volume	Line 45		210,802		217,829		136,908		80,223		201,644		207,550	1,	054,956	
4	Total Purchase Price	Line 25	\$	4.835	\$	5.102	\$	5.267	\$		\$	5.140	\$	4.948	\$	5.056	
5	Total Purchase Cost	Line 2 times Line 3	\$	1,111,250	\$	1,211,703	\$	786,199	\$			1,130,028		1,105,880		803,030	
6	Variable Transportation Costs	Sum Lines 37 and 47	\$	32,646	\$	33,734	\$	21,202	\$		\$		\$	32,142		163,376	
7	Total City Gate Delivered Costs	Sum Lines 4 and 5	\$	1,143,896		1,245,437	\$	807,401	\$			1,161,256				,966,405	
8	Average Delivered Price	Line 6 divided by Line 2	\$	5.426	\$	5.718	\$	5.897	\$	5.864	\$	5.759	\$	5.483	\$	5.656	
9																	
10	Tennessee Northern Storage In													14,805		14,805	
11	Purchased Volumes	Line 53 Line 55		-		-		-		•		-		14,005		14,005	
12 13	Storage Delivered Volume Total Purchase Price	Line 55 Line 25	\$	4.835	\$	5.102	\$	5.267	\$	5.236	\$	5.140	\$	4.948	\$	5.056	
14	Total Purchase Cost	Line 10 times Line 12	\$	4.000	\$	3.102	\$	3.201	\$		\$		\$	73.253		73,253	
15	Variable Transportation Costs	Line 10 times Line 12	\$	_	\$		\$	-	\$		\$		\$	1,452	,	1,452	
16	Total Storage Delivered Costs	Line 13 plus Line 14	\$	_	\$	-	\$	_	\$		\$	-	\$		\$	74,705	
17	Average Delivered Price	Line 15 divided by Line 11	*	#DIV/0!		#DIV/0!	*	#DIV/0!	•	#DIV/0!	•	#DIV/0!	\$		\$	5.315	
18	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																
19	Tennessee Zone L Supply Costs	i															
20	Purchased Volumes	Sendout Optimization		229,835		237,496		149,269		87,466		219,850		238,305		162,219	
21	Monthly NYMEX Price	FXW-7A, Line 1 of Page 1	\$	4.905	\$	5.172	\$	5.337	\$	5.306	\$	5.210	\$	5.018	\$	5.126	
22	NYMEX Cost	Line 25 times Line 26	\$	1,127,338	\$	1,228,328	\$	796,648	\$			1,145,418				,957,638	
23	NYMEX Basis Price	FXW-7A, Line 5 of Page 1	\$	(0.070)		(0.070)		(0.070)				, ,		(0.070)		(0.070)	•
24	NYMEX Basis Costs	Line 25 times Line 28	\$	(16,088)		(16,625)		(10,449)						(16,681)		(81,355)	
25	Total Purchase Price	Line 26 plus Line 28	\$	4.835	\$	5.102	\$	5.267	\$		\$		\$	4.948	\$	5.056	
26	Total Purchase Cost	Line 27 plus Line 29	\$	1,111,250	\$	1,211,703	\$	786,199	\$	457,970	\$	1,130,028	\$	1,179,133	\$ 5	,876,282	
27																	
28	Transportation Fuel Losses and	Variable Charges															
29	Transportation Segment 1B	-4.5000)															
30 31	Tennessee Gas Pipeline (Contra Receipt Point: Tennessee Zone I																
32	Delivery Point: Pleasant St. (Inte																
33	Received Volume	Line 20		229,835		237,496		149,269		87,466		219,850		223,500	1	,147,415	
34	Fuel Loss Rate	FXW 7A, Line 9 of Page 2		7.82%		7.82%		7.82%		7.82%		7.82%		6.67%		7.60%	''ج د
35	Delivered Volume	Line 33 times (1 - Line 34)		211,861		218,923		137,596		80,626		202,658		208,593	1	,060,257	WITH THE W
36	Variable Transportation Rate	FXW 7A, Line 9 of Page 2	\$	0.1522	\$	0.1522	\$	0.1522	\$	0.1522	\$	0.1522	\$	0.1522	\$	0.1522	E.
37	Variable Transportation Costs	Line 35 times Line 36	\$	32,245	\$	33,320	\$	20,942	\$	12,271	\$	30,844	\$	31,748	\$	161,371	
38																	
39	Transportation Segment 2B																
40	Granite State Gas Transmission	(Contract 10-010-FT-NN)															
41	Receipt Point: Pleasant St.																
42	Delivery Point: Northern City Ga			044.004		040.000		407 500		00.000		202.050		200 502	4	,060,257	
43	Received Volume	Line 35		211,861		218,923 0.50%		137,596 0.50%		80,626 0.50%		202,658 0.50%		208,593 0.50%	,	0.50%	
44	Fuel Loss Rate	FXW 7A, Line 3 of Page 2		0.50% 210,802		217,829		136.908		80.223		201.644		207,550	1	.054,956	
45 46	City Gate Delivered Volume	Line 43 times (1 - Line 44) FXW 7A, Line 3 of Page 2	\$	0.0019	\$	0.0019	\$	0.0019	\$		\$		\$	0.0019	\$	0.0019	
46 47	Variable Transportation Rate Variable Transportation Costs	Line 45 times Line 46	\$	401	\$	414	\$	260	\$				\$		\$	2,004	
48	Variable Transportation Costs	Line 45 dines Line 40	Ψ	401	Ψ	717	Ψ	200	Ψ	.02	•	000	•	•	•	_,00.	
49	Transportation Segment 3																
50	Tennessee Gas Pipeline (Contra	ct 5083)															
51	Receipt Point: Tennessee Zone I	•															
52	Delivery Point: Tennessee Mark																
53	Received Volume	Line 25 minus Line 38		-		-		-		-		-		14,805		14,805	
54	Fuel Loss Rate	FXW 7A, Line 8 of Page 2		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		5.06%		5.06%	
55	Storage Delivered Volume	Line 53 times (1 - Line 54)		-		•		-		-		-		14,055		14,055	
56	Variable Transportation Rate	FXW 7A, Line 8 of Page 2		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	_	#DIV/0!	\$	0.1033	\$	0.1033	
57	Variable Transportation Costs	Line 55 times Line 56	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,452	Þ	1,452	

Source of Supply: Tennessee FS-MA Inventory Delivered to Northern via Tennessee and Granite Pipelines

12 40 cats	ne City Gate	Belivered Costs	Reference	Nov-10	Dec-10	Jan-1	1 Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr+12	2010-2011
7	Gross Wi	Indrawa Volume	Line 9			. 66	054 33,9	8 49,058	2,599				-	_			23.679	68,725	51,746	57,257		Peak 151.708
		Delivered Volume	Line 36				297 33.0						-	-		-	23,049	66,897	50,370	55,735	,	147.681
		ndrawal Costs	Line 17		- \$	- \$ 302							s :	s :		. :		356,255 \$		296.808 \$:	
. 1.		Transportation Costs	Sum Lines 28 and 38				634 \$ 2.9						;					5.862 \$	4.414 5	290,600 \$:	
		Gala Delivered Costs	Line 3 plus Line 4			- \$ 307															:	
		Delivered Price	Line 5 divided by Line 2	#DIV/Qt	#DIV/01		786 \$ 1.7				#DIV/DI	#DIVADI	#DIV/01	#Dry/0!	#DIV/01	#DIV/0!						
	7	Donning i nou	case o avided by Exit 2	WD14105	4014101		100 \$ 4.7	4.760	\$ 3.039	#C14701	#(J1V/UI	*010701	#DIV/01	*0:4/0:	#UIV/UI	WDIV/U	3 5.413 4	5,413 \$	3.413 3	5,413	#DIVIO!	\$ 4.791
	Tennesse	ee ES-MA Withdrawn Inv	ventory (Segment 1)																			
-		thdrawn Volume	Sendout Optimization		_	. 66	054 33,9	8 49,058	2,599								23.679	68,725	51,746	57.257		151,708
1	O Withdraw		FXW-7A, Line 1 of Page 3	KON/OR	#DtV/01		102 \$ 0.01			#D/V/01	#DIV/01	#DIV/01	#DIV/0!	#DIV/OI	#DIV/01	#DIV/DI	5 0.0102 5				#DIV/01	\$ 0.0102
		ral Charges	Line 9 times Line 10		- \$		674 \$ 3			* -			* WOIVIO:	*	2		242 3	701 \$	528 \$	584 \$	# CHANN	\$ 1.547
	2 Inventory		JOS-8, Page 1	#DIV/0t	#D/V/DI		633 \$ 4.56			*00/08	#DIV/DI	#DIV/DI	#OIV/01	#DIV/01	#00V01	MODAN	5.1736 5	5.1736 \$	5.1736 \$		#DIVIO!	\$ 4.5681
		n Inventory Value	Line 9 times Line 12	2	. 1	- \$ 301					\$		\$.					355,554 \$	267.715			
1	4 Withdraw	al Fuel Loss Rate	FXW-7A, Line 1 of Page 3	#D(V/0)	*DIV/05		00% 0.0				#DIV/DI	#DIV/01	#DIV/0I	#DIV/01	#DIVIDI	#DIV/OI	0.00%	0.00%	0.00%		#DIV/01	0.00%
1		al Fuel Losses							0.00%	- MUI(VIO:		*******	4014101	*******	-011101	*********	0.00 A	0 00 /4	0.00%	0.00%	-	0.00%
1	6 Net Withd	drawn Volume	Line 9 minus Line 14			- 66	054 33.9	8 49.058	2,599						:		23,679	68,725	51,746	57.257	- 1	151,708
1	7 Total Will	hdrawal Costs	Line 11 plus Line 13	s	- 5		097 \$ 155.4											356,255 \$	268,242 3	296,608 \$		
1	8				-					•	•	•	•	•	•			. 300,200		250,405		3 034,002
1	9 Transport	lation Fuel Losses and \	/ariable Charges																			
2		lation Segment 2																				
2	1 Tennesse	e Gas Pipeline (Contra	ct 5265)																			
2		ont: Tennessee FS-MA																				
2			rconnection with Granite)																			
2			Line 16			. 66			2,599								23,679	68,725	51,746	57,257		151,708
2	5 Fuel Loss		FXW 7A, Line 10 of Page 2	#D/V/0!	#DIVIO	2	17% 2.1	% 2,17%	1.92%	#O(V/0t	#017/01	#DIV/01	#DIV/0	#DIV/0!	#DIV/0!	#DIV/0t	2.17%	2.17%	2.17%	2.17%	#DIV/DI	2 17%
2			Line 24 times (1 - Line 25)		•	- 64	620 33,2	0 47,993	2,549	-							23,165	67,234	50,624	56,015		148,423
2		Fransportation Rate	FXW 7A, Line 10 of Page 2	#D/V/0#	#D(V/0!	\$ 0.0	853 \$ 0.08	£250.0 \$ Ei	\$ 0.0853	#EMV/01	#DIV/01	#D(V/0!	10/1/10#	#DIV/QI	#DIV/0!	#DIV/01	\$ 0.0853	0.0853 \$	0.0853	0.0853	#DIV/01	\$ 0.0853
2		Transportation Costs	Line 26 limes Line 27	\$. 5	- \$ 5	512 \$ 2.8	7 \$ 4,094	\$ 217	\$ -	. s	٠ ,	\$ -	\$ -	\$ - :		1,976	5.735 \$	4.318	4.778 \$		\$ 12,660
2																						
3		ation Segment 3																				
3			(Contract 10-010-FT-NN)																			
3		oint: Pleasant St.																				
3		oint: Northern City Gate																				
3			Line 26		-	- 64			2,549								23,165	67.234	50,624	56,015		148,423
3:			FXW 7A, Line 3 of Page 2	0.50	% 0.S		50% 0.5			0.50%	0.501	6 0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
3			Line 34 times (1 - Line 35)		-	- 64			2,536				-				23,049	66,897	50,370	55,735		147,681
3		ransportation Rate	FXW 7A, Line 3 of Page 2	\$ 0.001	3 2 0 00		0.00 \$ 0.00				\$ 0.0019	\$ 0.0019	\$ 0.0019	5 0.0019	\$ 0.0019	0.0019	\$ 0.0019 \$	0.0019 \$	0.0019 1	0.0019 \$	0.0019	\$ 0.0019
3	E Variable I	Fransportation Costs	Line 36 times Line 37	\$	٠ \$	- \$	122 \$	3 \$ 91	\$ 5	\$ -	· s ·	٠ .	\$ -	\$ -	\$ -:		\$ 44 5	127 \$	96 1	106 \$	-	\$ 281

Source of Supply: Washington 10 Inventory Delivered to Northern via TransCanada, PNGTS and Granite Pipelines

Line	City Gate Delivered Costs	Reference	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	2010-2011 \ Peak
1	Gross Withdrawn Volume	Line 9	-	584,864	852,241	731,512	453,175	-	2,621,792
2	City Gate Delivered Volume	Line 66	-	571,056	832,121	714,242	442,476	-	2,559,895
3	Total Withdrawal Costs	Line 17	\$ -	\$ 2,544,508		\$ 3,182,515		\$ -	\$ 11,406,369
4	Variable Transportation Costs	Sum Lines 28, 38, 48, 58 and 68	\$ -	Ψ 00,20.	\$ 55,708	\$ 47,816	\$ 29,623	\$ -	\$ 171,378
5 6	Total City Gate Delivered Costs	Line 3 plus Line 4	\$ - #DIV/0!	\$ 2,582,738	\$ 3,763,469		\$ 2,001,207		\$ 11,577,747
7	Average Delivered Price	Line 5 divided by Line 2	#017/0!	\$ 4.523	\$ 4.523	\$ 4.523	\$ 4.523	#DIV/0!	\$ 4.523
8	Washington 10 Withdrawn Inven	ton/(Seament 1)							
9	Gross Withdrawn Volume	Sendout Optimization	_	584,864	852,241	731,512	453,175	_	2,621,792
10	Withdrawal Rate	FXW-7A, Line 2 of Page 3	#DIV/0!	\$ -	\$ -	\$ -	\$ -	#DIV/0!	\$ -
11	Withdrawal Charges	Line 9 times Line 10	-	-	-	-	-	-	\$ -
12	Inventory Rate	JDS-8, Page 1	#DIV/0!	\$ 4.3506			\$ 4.3506	#DIV/0!	\$ 4.3506
13	Withdrawn Inventory Value	Line 9 times Line 12	\$,					, ,
14	Withdrawal Fuel Loss Rate	FXW-7A, Line 2 of Page 3	#DIV/0!	0.40%	0.40%	0.40%	0.40%	#DIV/0!	0.40%
15 16	Withdrawal Fuel Losses Net Withdrawn Volume	Line 9 minus Line 14	-	2,339 582,524	3,409	2,926	1,813	-	10,487
17	Total Withdrawal Costs	Line 11 plus Line 13	\$ -		848,832 \$ 3,707,761	728,586 \$ 3 182 515	451,363 \$ 1 971 584	s -	2,611,305 \$ 11,406,369
18	Total Trimaratian Socio	Zillo 11 pido Zillo 10	•	Ψ 2,044,000	Ψ 0,707,101	Ψ 0,102,010	Ψ 1,571,504	•	Ψ 11,400,000
19	Transportation Fuel Losses and	Variable Charges							•
20	Transportation Segment 2A								
21	Vector Pipeline (Contract CRL-N								
22	Receipt Point: Washington 10 W								
23	Delivery Point: Dawn (Interconne			400.004	404.400	054.754	007.540		4 407 000
24 25	Received Volume Fuel Loss Rate	Line 16 FXW 7A, Line 17 of Page 2	#DIV/0!	420,691 0.34%	424,402 0.34%	354,754 0.34%	207,516 0.34%	#DIV/0!	1,407,363 0.34%
26	Delivered Volume	Line 24 times (1 - Line 25)	#DIV/0:	419,260	422,959	353,548	206,810	#517/0:	1,402,578
27	Variable Transportation Rate	FXW 7A, Line 17 of Page 2	#DIV/0!	\$ 0.0019	\$ 0.0019			#DIV/0!	\$ 0.0019
28	Variable Transportation Costs	Line 26 times Line 27	\$ -	\$ 797					
29									
. 30	Transportation Segment 2B								
31	Vector Pipeline (Contract CRL-N	,	*						
32	Receipt Point: Washington 10 W								
33 34	Delivery Point: Union Dawn (Intel Received Volume	Line 26		161,833	424,430	373,832	243,847		1,203,942
35	Fuel Loss Rate	FXW 7A, Line 17 of Page 2	#DIV/0!	0.34%	0.34%	0.34%	0.34%	#DIV/0!	0.34%
36	Delivered Volume	Line 34 times (1 - Line 35)	#B1410.	161,283	422,987	372,561	243,018		1,199,849
37	Variable Transportation Rate	FXW 7A, Line 17 of Page 2	#DIV/0!	\$ 0.0019			•	#DIV/0!	\$ 0.0019
38	Variable Transportation Costs	Line 36 times Line 37	\$ -	\$ 306	\$ 804	\$ 708	\$ 462	\$ ~	\$ 2,280
39									
40	Transportation Segment 3	00000							
41 42	TransCanada Pipeline (Contract Receipt Point: Union Dawn	33322)							
43	•	connects with PNGTS at Pittsburgh)							
44	Received Volume	Line 36	_	580,544	845,946	726,109	449,828	_	2,602,426
45	Fuel Loss Rate	FXW 7A, Line 15 of Page 2	#DIV/0!	1.14%	1.14%	1.14%	1.14%	#DIV/0!	1.14%
46	Delivered Volume	Line 44 times (1 - Line 45)	-	573,925	836,302	717,831	444,700	-	2,572,759
47	Variable Transportation Rate	FXW 7A, Line 15 of Page 2	#DIV/0!	\$ 0.0609	\$ 0.0609	\$ 0.0609	\$ 0.0609	#DIV/0!	\$ 0.0609
48	Variable Transportation Costs	Line 46 times Line 47	\$ -	\$ 34,952	\$ 50,931	\$ 43,716	\$ 27,082	\$ -	\$ 156,681
49 50	Transportation Segment 4								
50 51	PNGTS (Contract 1997-004)								
52		erconnects with TransCanada at E. I	Hereford)						
53	Delivery Point: Granite (Westbroom		101010107						
54	Received Volume	Line 46	-	573,925	836,302	717,831	444,700	_	2,572,759
55	Fuel Loss Rate	FXW 7A, Line 5 of Page 2	#DIV/0!	0.00%	0.00%	0.00%	0.00%	#DIV/0!	0.00%
56	Delivered Volume	Line 54 times (1 - Line 55)	-	573,925	836,302	717,831	444,700	-	2,572,759
57	Variable Transportation Rate	FXW 7A, Line 5 of Page 2	#DIV/0!	\$ 0.0019				#DIV/0!	\$ 0.0019
58 50	Variable Transportation Costs	Line 56 times Line 57	\$ -	\$ 1,090	\$ 1,589	\$ 1,364	\$ 845	\$ -	\$ 4,888
59 60	Transportation Segment 5								
61	Granite State Gas Transmission	Contract 10-010-FT-NN\							
62	Receipt Point: Westbrook, Newir	•							
63	Delivery Point: Northern City Gat	•							
64	Received Volume	Line 56	-	573,925	836,302	717,831	444,700	-	2,572,759
65	Fuel Loss Rate	FXW 7A, Line 3 of Page 2	0.50%		0.50%	0.50%	0.50%	0.50%	0.50%
66	City Gate Delivered Volume	Line 64 times (1 - Line 65)		571,056	832,121	714,242	442,476		2,559,895
67 69	Variable Transportation Rate	FXW 7A, Line 3 of Page 2	\$ 0.0019					\$ 0.0019	
68	Variable Transportation Costs	Line 66 times Line 67	\$ -	\$ 1,085	\$ 1,581	\$ 1,357	\$ 841	\$ -	\$ 4,864

Source of Supply: Peaking Supply 1
Delivered to Northern via Tennessee and Granite Pipelines
Yered to Northern in liquid form via trucks

)																
Line	City Gate Delivered Costs	Reference		Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Apr-11	20)10-2011 Peak
1	Purchased Volumes	Line 10		92,182		126,837		127,871		113,528		117,619		27,030		605,066
2	City Gate Delivered Volume	Line 33		91,721		126,202		127,231		112,960		117,031		26,895		602,041
3	Total Purchase Price	Line 24	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972
4	Total Purchase Cost	Line 1 times Line 3	\$	366,145	\$	503,795	\$	507,902	\$	450,933	\$	467,184	\$	107,365	\$ 2	,403,324
5	Variable Transportation Costs	Line 35	\$	174	\$	240	\$	242	\$	215	\$	222	\$	51	\$	1,144
6	Total City Gate Delivered Costs	Line 4 plus Line 5	\$	366,320	\$	504,034	\$	508,144	\$	451,147	\$	467,407	\$	107,416	\$ 2	,404,468
7 8	Average Delivered Price	Line 6 divided by Line 2	\$	3.994	\$	3.994	\$	3.994	\$	3.994	\$	3.994	\$	3.994	\$	3.994
9	LNG Storage Deliveries															
10	Purchased Volumes	Line 41		2,023		1,395		361		2,294		10,612		2,860		19,545
11	Storage Delivered Volume	Line 43		2,023		1,395		361		2,294		10,612		2,860		
12	Total Purchase Price	Line 24	\$	3.972	Φ	3.972	ď		¢	,	æ		Φ.		Φ.	19,545
13	Total Purchase Cost	Line 24 Line 10 times Line 12	\$	8,034	\$			3.972	\$	3.972	\$	3.972		3.972		3.972
14	Variable Transportation Costs	Line 45		,	•	5,541		1,433	\$	9,112		42,151		11,361	\$	77,633
	Total Storage Delivered Costs		\$	1,901		1,311		339	\$	2,156	\$	9,975		2,689	\$	18,372
15	•	Line 13 plus Line 14	\$	9,935	-	6,852		1,773	\$	11,269	\$	52,127		14,050	\$	96,005
16	Average Delivered Price	Line 15 divided by Line 11	\$	4.912	\$	4.912	\$	4.912	\$	4.912	\$	4.912	\$	4.912	\$	4.912
17	Basilian Grands 4 Gasta (Grands								•							
18	Peaking Supply 1 Costs (Segme															
19	Purchased Volumes	Sendout Optimization	_	94,204	_	128,232	_	128,232		115,822	_	128,232		29,891	_	624,612
20	Peaking Supply 1 Prices	FXW 7A, Line 2 of Page 1	\$	3.972		3.972		3.972	\$	3.972	-	3.972		3.972		3.972
21	Peaking Supply 1 Costs	Line 19 times Line 20	\$	374,179	\$	509,336	\$	509,336	\$	460,045	\$	509,336	\$	118,726		,480,957
22	NYMEX Basis Price	N/A	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
23	NYMEX Basis Costs	Line 19 times Line 22	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
24	Total Purchase Price	Line 20 plus Line 22	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972	\$	3.972
25	Total Purchase Cost	Line 23 times (1 - Line 24)	\$	374,179	\$	509,336	\$	509,336	\$	460,045	\$	509,336	\$	118,726	\$ 2	,480,957
26																
27	Transportation Segment 2															
28	Granite State Gas Transmission	(Contract 10-010-FT-NN)														
29	Receipt Point: Pleasant St.															
30	Delivery Point: Northern City Gar															
1	Received Volume	Sendout Optimization		92,182		126,837		127,871		113,528		117,619		27,030		605,066
	Fuel Loss Rate	FXW 7A, Line 3 of Page 2		0.50%		0.50%		0.50%		0.50%		0.50%		0.50%		0.50%
33	City Gate Delivered Volume	Line 31 times (1 - Line 32)		91,721		126,202		127,231		112,960		117,031		26,895		602,041
34	Variable Transportation Rate	FXW 7A, Line 3 of Page 2	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019	\$	0.0019
35	Variable Transportation Costs	Line 33 times Line 34	\$	174	\$	240	\$	242	\$	215	\$	222	\$	51	\$	1,144
36																
37	Transportation Segment 3															
38	Trucking Contract (TransGas)															
39	Receipt Point: Distrigas Terminal															
40	Delivery Point: Northern LNG Fa	cility (Lewiston, ME)														
41	Received Volume	Line 19 minus Line 31		2,023		1,395		361		2,294		10,612		2,860		19,545
42	Fuel Loss Rate	Company Forecast		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%
43	Storage Delivered Volume	Line 41 times (1 - Line 42)		2,023		1,395		361		2,294		10,612		2,860		19,545
44	Variable Transportation Rate	Company Forecast	\$	0.9400	\$	0.9400	\$	0.9400	\$	0.9400	\$	0.9400	\$	0.9400	\$	0.9400
45	Variable Transportation Costs	Line 43 times Line 44	\$	1,901	\$	1,311	\$	339	\$	2,156	\$	9,975		2,689	\$	18,372
	-			•			•		•		•		•	-,	•	,

Source of Supply: Northern LNG Inventory On-System Storage

Line	City Gate Delivered Costs	Reference	i	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	20	010-2011 Peak
2	Gross Withdrawn Volume	Line 10		1,350	1,395	1,395	1,260	11,646	1,826		18,872
3	City Gate Delivered Volume	Line 16		1,350	1,395	1,395	1,260	11,646	1,826		18,872
4	Total Withdrawal Costs	Line 17	\$	9,402	\$ 9,375	\$ 9,290	\$ 7,955	\$ 65,264	\$ 9,937	\$	111,223
5	Variable Transportation Costs	N/A	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-
6	Total City Gate Delivered Costs	Line 3 plus Line 4	\$	9,402	\$ 9,375	\$ 9,290	\$ 7,955	\$ 65,264	\$ 9,937	\$	111,223
7	Average Delivered Price	Line 5 divided by Line 2	\$	6.964	\$ 6.720	\$ 6.659	\$ 6.314	\$ 5.604	\$ 5.441	\$	5.893
8											
9	Northern LNG Withdrawn Invent	ory									
10	Gross Withdrawn Volume	Sendout Optimization		1,350	1,395	1,395	1,260	11,646	1,826		18,872
11	Withdrawal Rate	N/A	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-
12	Withdrawal Charges	Line 9 times Line 10		-	-	-	-	-	-	\$	-
13	Inventory Rate	JDS-8, Page 1	\$	6.9643	\$ 6.7203	\$ 6.6594	\$ 6.3138	\$ 5.6039	\$ 5.4412	\$	5.8934
14	Withdrawn Inventory Value	Line 9 times Line 12	\$	9,402	\$ 9,375	\$ 9,290	\$ 7,955	\$ 65,264	\$ 9,937	\$	111,223
15	Withdrawal Fuel Losses	N/A		-	_	_	-	-	-		
16	Net Withdrawn Volume	Line 9 minus Line 14		1,350	1,395	1,395	1,260	11,646	1,826		18,872
17	Total Withdrawal Costs	Line 11 plus Line 13	\$	9,402	\$ 9,375	\$ 9,290	\$ 7,955	\$ 65,264	\$ 9,937	\$	111,223

Source of Supply: Peaking Supply 2 Delivered to Northern via Granite Pipeline

Line	City Gate Delivered Costs	Reference	ı	Nov-10	Dec-10		Jan-11		Feb-11		Mar-11		Apr-11	20	010-2011 Peak
1	Purchased Volumes	Line 9		-	_		-		-		2,684		-		2,684
2	City Gate Delivered Volume	Line 24		-	-		-		-		2,670		-		2,670
3	Total Purchase Cost	Line 14	\$	-	\$ -	\$	-	9		. 9	21,552	\$	-	\$	21,552
4	Variable Transportation Costs	Line 26	\$	-	\$ -	\$	-	9	;	. 9	5	\$	-	\$	5
5	Total City Gate Delivered Costs	Sum Lines 3 and 4	\$	_	\$ -	\$	-	9	;	. 9	21,557	\$	-	\$	21,557
6	Average Delivered Price	Line 5 divided by Line 2	#	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!	9	8.072		#DIV/0!	\$	8.072
7	-	•													
8	Peaking Supply 2 Costs														
9	Purchased Volumes	Sendout Optimization		-	-		-		-		2,684		-		2,684
10	Monthly NYMEX Price	FXW 7A, Line 1 of Page 1	#	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!	9	5.210		#DIV/0!	\$	5.210
11	NYMEX Cost	Line 9 times Line 10	\$	-	\$ -	\$	-	9	; -	. 9	13,983	\$	-	\$	13,983
12	NYMEX Basis Price	FXW 7A, Line 9 of Page 1	#	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!	5	2.820		#DIV/0!	\$	2.820
13	NYMEX Basis Costs	Line 9 times Line 12	\$	-	\$ -	\$		9	•	. 5	7,569	\$	-	\$	7,569
14	Total Purchase Price	Line 10 plus Line 12	#	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!	5	8.030		#DIV/0!	\$	8.030
15	Total Purchase Cost	Line 11 plus Line 13	\$	-	\$ -	\$	-	9	-	. 5	21,552	\$	-	\$	21,552
16															
17	Transportation Fuel Losses and	Variable Charges													
18	Transportation Segment 1											•			
19	Granite State Gas Transmission	(Contract 10-010-FT-NN)													
20	Receipt Point: Newington or We	stbrook													
21	Delivery Point: Northern City Ga	ites													
22	Received Volume	Line 9		-	-		-		-		2,684		-		2,684
23	Fuel Loss Rate	FXW 7A, Line 3 of Page 2		0.50%	0.50%	ò	0.50%	b	0.50%	6	0.50%		0.50%	,	0.50%
24	City Gate Delivered Volume	Line 22 times (1 - Line 23)		-	-		-		-		2,670		-		2,670
25	Variable Transportation Rate	FXW 7A, Line 3 of Page 2	\$	0.0019	\$ 0.0019	\$	0.0019	(0.0019				0.0019	\$	0.0019
26	Variable Transportation Costs	Line 24 times Line 25	\$	-	\$ -	\$; -	,	-	. :	\$ 5	\$	-	\$	5

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 1 of 23

Northern Utilities, Inc. Natural Gas Commodity Price Forecast

Based upon NYMEX Settlement for July 22, 2010										
Line	Item	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11			
1	NYMEX	\$4.905	\$5.172	\$5.337	\$5.306	\$5.210	\$5.018			
2	Peaking Supply 1	\$3.972	\$3.972	\$3.972	\$3.972	\$3.972	\$3.972			
3		Adders	s to NYME	by Supply	Source					
4	TGP Z0	(\$0.097)	(\$0.097)	(\$0.097)	(\$0.097)	(\$0.097)	(\$0.097)			
5	TGP Z1	(\$0.070)	(\$0.070)	(\$0.070)	(\$0.070)	(\$0.070)	(\$0.070)			
6	Chicago	\$0.392	\$0.392	\$0.392	\$0.392	\$0.392	\$0.050			
7	Niagara	\$0.508	\$0.508	\$0.508	\$0.508	\$0.508	\$0.263			
8	TGP Z6	\$1.216	\$1.216	\$1.216	\$1.216	\$1.216	\$0.339			
9	Peaking Supply 2	\$2.820	\$2.820	\$2.820	\$2.820	\$2.820				

Attachment to Schedule 6B New Hampshire Division Commodity Rates

Page 2 of 23

						North	em Utilities	Inc							
							e Variable								
					V	ariable	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11		Commodity	Fuel Rate
Line	Pipeline	Rate Schedule	Receipt	Delivery	Co	mmodity	Fuel	Fuel	Fuel	Fuel	Fuel	Fuei	Notes	Rate Support	Support
						Rate	Rates	Rates	Rates	Rates	Rates	Rates		Kale Support	Support
1	Algonquin	AFT-1 (AFT-2)	N/A	N/A	\$	0.0019	0.84%	1.35%	1.35%	1.35%	1.35%	0.84%		Pg 4	Pg 5
2	Algonquin	AFT-1 (F-2/F-3)	N/A	N/A	\$	0.0131	0.84%	1.35%	1.35%	1.35%	1.35%	0.84%		Pg 4	Pg 5
3	Granite	FT-NN	N/A	N/A	\$	0.0019	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%		Pg 6	Pg 6
4	Iroquois	RTS-1	Zone 1	Zone 1	\$	0.0052	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	1	Pgs 7 & 8	Estimated
5	PNGTS	FT	N/A	N/A	\$	0.0019	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		Pg 9	Estimated
6	Tennessee	FT-A	Zone 0	Zone 4	\$	0.1137	6.79%	6.79%	6.79%	6.79%	6.79%	5.80%		Pg 10	Pg 11
7	Tennessee	FT-A	Zone 0	Zone 6	\$	0.1627	8.71%	8.71%	8.71%	8.71%	8.71%	7.42%		Pg 10	Pg 11
8	Tennessee	FT-A	Zone L	Zone 4	\$	0.1033	5.90%	5.90%	5.90%	5.90%	5.90%	5.06%		Pg 10	Pg 11
9	Tennessee	FT-A	Zone L	Zone 6	\$	0.1522	7.82%	7.82%	7.82%	7.82%	7.82%	6.67%	2	Pg 10	Pg 11
10	Tennessee	FT-A	Zone 4	Zone 6	\$	0.0853	2.17%	2.17%	2.17%	2.17%	2.17%	1.92%	}	Pg 10	Pg 11
11	Tennessee	FT-A	Zone 5	Zone 6	\$	0.0784	2.09%	2.09%	2.09%	2.09%	2.09%	1.86%		Pg 10	Pg 11
12	Tennessee	NET	Segment 3	Segment 3	\$	0.0019	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%		Pg 12	Pg 13
13	Tennessee	NET	Segment 3	Segment 4	\$	0.0019	1.26%	1.26%	1.26%	1.26%	1.26%	1.26%	1	Pg 12	Pg 13
14	TransCanada	FT	Dawn	Iroquois	\$	0.0141	1.45%	1.45%	1.45%	1.45%	1.45%	1.25%		Pg 14	Pg 18
15	TransCanada	FT	Dawn	E. Hereford	\$	0.0609	1.14%	1.14%	1.14%	1.14%	1.14%	0.84%		Pg 14	Pg 18
16	Vector	FT-1	Alliance	W-10 Storage	\$	0.0019	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%		Pg 19	Pg 20
17	Vector	FT-1	W-10 Storage	Dawn	\$	0.0019	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	İ	Pg 19	Pg 20
18	Vector	FT-1	Alliance	Dawn	\$	0.0019	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	1	Pg 19	Pg 20

Note 1: Iroquois Commodity Rates are equal to the RTS Commodity rate on Page 7 plus the ACA Adjustment and Deferred Asset Surcharge on Page 8. Note 2: For Receipts from Zone L, the rates for Receipts from Zone 1 apply.

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 3 of 23

-		Northern Utilities, Inc.											
-4	Underground Storage Variable Rates												
	Line	Storage	Rate Schedule	Withdrawal Withdrawal Rate Fuel Loss			Injec	tion Rate	Injection Fuel Loss	Reference			
	1	Tennessee	FS-MA	\$	0.0102	0.00%	\$	0.0102	1.49%	Page 21			
	2	Washington 10	AFT-1 (F-2/F-3)	\$	-	0.40%	\$		1.00%	Pages 22 & 23			

ALGONQUIN GAS TRANSMISSION, LLC

SUMMARY OF RATES

Currently Effective Rates 12/01/2009

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 4 of 23

•RATE SCHEDULE AFT-1

		Commodity		Authorized	Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
(F-1/WS-1)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(F-2/F-3)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(F-4)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(STB/SS-3)	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(FTP)	\$11.8368	\$0.0019	\$0.0019	\$0.3911	\$0.0019	\$0.3892
(PSS-T)	\$ 9.7854	50,0019	\$0.0019	\$0.3236	\$0.0019	\$0.3217
(AFT-2)	\$ 6.1138	\$0.0019	\$0.0019	\$0.2029	\$0.0019	\$0.2010
(AFT-3)	\$10.7554	\$0.0019	\$0.0019	\$0.3555	\$0.0019	\$0.3536
(AFT-5)	\$12.6265	\$0.0019	\$0.0019	\$0.4170	\$0.0019	\$0.4151
(ITP)	\$13.0110	\$0.0019	\$0.0019	\$0.4297	\$0.0019	\$0.4278
(X-35)	\$10.2027	\$0.0019	\$0.0019	\$0.3373	\$0.0019	\$0.3354
X-39	\$13.2089	\$0.0019	\$0.0019	\$0.4362	\$0.0019	\$0.4343
Incremental	Surcharges					
Hubline	\$ 1.8607	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0612
Secondary	1/	\$0.0612	\$0.0000			
Tiverton	\$ 1.6424	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0540
Ramapo	\$ 7.5608	\$0.0000	\$0.0000	\$0.2486	\$0.0000	\$0.2486

• RATE SCHEDULE AFT-1S

		Commodity		Authorized	l Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
(F-1/WS-1)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(F-2/F-3)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(F-4)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0031	\$0.0864
(STB/SS-3)	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(Hubline) 1	/	\$0.0612	\$0.0000			

•OTHER FIRM RATE SCHEDULES

		Commodity		Authorized	Overrun	Capacity Release
	Reservation	Max	Min	Max	Min	Vol Res
AFT-E	\$ 6.5734	\$0.0131	\$0.0131	\$0.2292	\$0.0131	\$0.2161
(Hubline) 1/		\$0.0612	\$0.0000			
AFT-ES	\$ 2.6294	\$0.2292	\$0.0131	\$0.2292	\$0.0131	\$0.0864
(Hubline) 1/		\$0.0612	\$0.0000			
T-1	\$ 1.6480	\$0.0058		\$0.0600		
AFT-4	\$ 3.5211	\$0.0032		\$0.1190		
AFT-CL:						
Canal	\$ 2.0858	\$0.0019	\$0.0019	\$0.0705	\$0.0019	\$0.0686
Middletown	\$ 3.2764	\$0.0019	\$0.0019	\$0.1096	\$0.0019	\$0.1077
Cleary	\$ 1.4529	\$0.0019	\$0.0019	\$0.0497	\$0.0019	\$0.0478
Lake Road	\$ 0.6476	\$0.0019	\$0.0019	\$0.0232	\$0.0019	\$0.0213
Brayton Pt.	\$ 1.2700	\$0.0019	\$0.0019	\$0.0437	\$0.0019	\$0.0418
Manchester	\$ 2.4500	\$0.0019	\$0.0019	\$0.0824	\$0.0019	\$0.0805
Bellingham	\$ 0.9714	\$0.0019	\$0.0019	\$0.0338	\$0.0019	\$0.0319
Phelps Dodge	\$ 0.0000	\$0.0185	\$0.0019	\$0.0185	\$0.0019	\$0.0000
Cape Cod	\$ 9.0501	\$0.0019	\$0.0019	\$0.2994	\$0.0019	\$0.2975
Northeast Gateway	\$ 4.3449	\$0.0019	\$0.0019	\$0.1447	\$0.0019	\$0.1428
J-2 Facility	\$ 4.9077	\$0.0019	\$0.0019	\$0.1632	\$0.0019	\$0.1613
x-33	\$ 3.0873	\$0.0412		\$0.1427		

•INTERRUPTIBLE SERVICE

	Commod	lity	Authorized	Overrun	
	Max	Min	Max	Min	
AIT-1	\$0.2440	\$0.0095	\$0.2440	\$0.0095	
(Hubline 1/)	\$0.0612	\$0.0000			
AIT-2					
Brayton Pt.	\$0.0437	\$0.0019	\$0.0437	\$0.0019	
Manchester	\$0.0824	\$0.0019	\$0.0824	\$0.0019	
Canal	\$0.0705	\$0.0019	\$0.0705	\$0.0019	
Cape Cod	\$0.2994	\$0.0019	\$0.2994	\$0.0019	
Northeast Gateway	\$0.1447	\$0.0019	\$0.1447	\$0.0019	
J-2 Facility	\$0.1632	\$0.0019	\$0.1632	\$0.0019	
PAL	\$0,2440	\$0.0000	\$0.0000	\$0,0000	

*TITLE TRANSFER TRACKING SERVICE

Max Min FTT \$5.3900 \$0.0000

Rates are per MMBTU. Commodity rates include ACA Charge of \$0.0019.

•FUEL REIMBURSEMENT PERCENTAGES

Period

Duration

FRP

System Services

Winter Dec 1 - Mar 31 1.35% Spring, Summer and Fall Apr 1 - Nov 30 0.84%

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 5 of 23

Incremental Ramapo Services

er Dec 1 - Mar 31 2.36% ng, Summer and Fall Apr 1 - Nov 30 1.18%

1/ Hubline Surcharge applicable to all customers utilizing secondary receipt points between and including Beverly and Weymouth and/or utilizing secondary delivery points between Beverly and Weymouth, including Beverly and excluding Weymouth, and in addition to other applicable charges.

[•] The Summary of Rates serves as a handy reference and does not replace Algonquin's Tariff. The rates are subject to commission approval.

Granite State Gas Transmission, Inc. FERC Gas Tariff Fourth Revised Volume No. 1

Rate	Schedule F1	T-NN
Firm Tra	nsportation	Service

		\$/Dth		
	Base		Total	
	Tariff	ACA	Current	
	Rate 1/	Adj.	Rate	
Reservation Charge:				
Maximum	\$1.6666		\$1.6666	
Minimum	\$0.0000		\$0.0000	
Commodity Charge:				
Maximum	\$0.0000	\$0.0019	\$0.0019	
Minimum	\$0.0000	\$0.0019	\$0.0019	
Authorized Overrun Commodity Charge:				
Maximum	\$0.0548	\$0.0019	\$0.0567	
Minimum	\$0.0000	\$0.0019	\$0.0019	
Fuel and Losses Percentage			0.5%	
Volumetric Reservation Charge				
Maximum	\$0.0548		\$0.0548	
Minimum	\$0.0000		\$0.0000	

The Base Tariff Rate is the effective rate on file with the Commission, excluding adjustment approved by the Commission.

Issued by: Mark H. Collin, Treasurer Issued on: January 15, 2010

Effective: March 1, 2010

Page 7 of 23

Iroquois Gas Transmission System, L.P.

Thirty First Revised Sheet No. 4

TRRC Gas Tariff

Superseding

ST REVISED VOLUME NO. 1

Thirtieth Revised Sheet No. 4

----- RATES (All in \$ Per Dth) ------

	Non-Settlement Recourse & Eastchester		Settlement Recourse Rates Applicable to Non-Eastchester/Non-Contesting Shi						
	Initial	Effective	Effective	Effective	Effective	Effective			
Minimu	m Rates 3/	1/1/2003	7/1/2004	1/1/2005	1/1/2006	1/1/2007			
RTS DEMAND:									
Zone 1 \$0.000	0 \$7.5637	\$7.5637	\$6.9586	\$6.8514	\$6.7788	\$6.5971			
Zone 2 \$0.000	0 \$6.4976	\$6.4976	\$5.9778	\$5.8857	\$5.8233	\$5.6673			
Inter-Zone \$0.000	0 \$12.7150	\$12.7150	\$11.6978	\$11.5177	\$11.3956	\$11.0902			
Zone 1 (MFV) 1/ \$0.000	0 \$5.3607	\$5.3607	\$4.9318	\$4.8559	\$4.8044	\$4.6757			
RTS COMMODITY:									
Zone 1 \$0.003	0 \$0.0030	\$0.0030	\$0.0030	\$0.0030	\$0.0030	\$0.0030			
Zone 2 \$0.002	4 \$0.0024	\$0,0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024			
Inter-Zone \$0.005	4 \$0.0054	\$0.0054	\$0.0054	\$0.0054	\$0.0054	\$0.0054			
Zone 1 (MFV) 1/ \$0.030	0 \$0.1506	\$0.1506	\$0.1386	\$0.1364	\$0.1350	\$0.1314			
ITS COMMODITY:									
Zone 1 \$0.003	0 \$0.2517	\$0.2517	\$0.2318	\$0.2283	\$0.2259	\$0.2199			
Zone 2 \$0.002		\$0.2160	\$0.1989	\$0.1959	\$0.1938	\$0.1887			
Inter-Zone \$0.005	4 \$0.4234	\$0.4234	\$0.3900	\$0.3840	\$0.3800	\$0.3700			
Zone 1 (MFV) 1/ \$0.030	0 \$0.3268	\$0.3268	\$0.3007	\$0.2960	\$0.2929	\$0.2850			
MAXIMUM VOLUMETRIC CAE	ACTTY RELEASE RATE	E 4/:							
Zone 1 \$0.000		\$0.2487	\$0.2288	\$0.2253	\$0.2229	\$0.2169			
Zone 2 \$0.000		\$0.2136	\$0.1965	\$0.1935	\$0.1915	\$0.1863			
Inter-Zone \$0.000		\$0.4180	\$0.3846	\$0.3787	\$0.3746	\$0.3646			
Zone 1 (MFV) 1/ \$0.000	0 \$0.1762	\$0.1762	\$0.1621	\$0.1596	\$0.1580	\$0.1537			

^{**}SEE SHEET NO. 4A FOR ADJUSTMENTS TO RATES WHICH MAY BE APPLICABLE

As authorized pursuant to order of the Federal Energy Regulatory Commission, Docket Nos. RS92-17-003,

et al., dated June 18, 1993 (63 FERC para. 61,285).
Settlement Recourse Rates were established in Iroquois' Settlement dated August 29, 2003, which was approved by Commission order issued Oct. 24, 2003, in Docket No. RP03-589-000. That Settlement also established a moratorium on changes to the Settlement Rates until January 1, 2008, defines the Non-Eastchester/Non-Contesting parties to which it applies, and provides that Iroquois' TCRA will be

terminated on July 1, 2004.

See Sections 1.2 and 4.3 of the Settlement referenced in footnote 2. As directed by the Commission's January 30, 2004 Order in Docket No. RP04-136, the Eastchester Initial Rates apply for service to Eastchester Shippers prior to the July 1, 2004 effective date of the rates set forth on Sheet No. 4C.

(Footnotes continued on Sheet 4.01)

Tasned	hv:	Jeffrey	Α.	Bruner.	Vice	Pres	Gen	Counsel	æ	Secretary

Issued on: Jan 26, 2009 Effective: Jan 27, 2009

Previous Next

Previous <u>Next</u>

Iroquois Gas Transmission System, L.P.

Twenty-Fourth Revised Sheet No. 4a

FERC Gas Tariff

Superseding

FIRST REVISED VOLUME NO. 1

Twenty-Third Sheet No. 4a

To the extent applicable, the following adjustments apply:

ACA ADJUSTMENT:

Commodity

0.0019

DEFERRED ASSET SURCHARGE:

Commodity

0.0003

Zone 1 Zone 2 Inter-Zone

0.0005

MEASUREMENT VARIANCE/FUEL USE FACTOR:

0.00%

Maximum (Non-Eastchester Shipper)

1.00%

Maximum (Eastchester Shipper)

4.50%

Maximum (Brookfield Shipper)

1.20%

Issued by: Jeffrey A. Bruner, Vice Pres., Gen Counsel & Secretary

Issued on: Sep 30, 2009

Effective: Nov 01, 2009

Previous

Next

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 8 of 23

Page 9 of 23

tland Natural Gas Transmission System FERC Gas Tariff Second Revised Volume No. 1

Seventh Revised Sheet No. 100: Effective Supercedes Sixth Revised Sheet No. 100

Statement of Transportation Rates (Rates per DTH)

Rate Rate Base ACA Unit Current
Schedule Component Rate Charge 1/ Rate

FT Recourse Reservation Rate

-- Maximum \$27.4017 ----- \$27.4017

-- Minimum \$00.0000 ----- \$00.0000

Seasonal Recourse Reservation Rate

-- Maximum \$52.0632 ----- \$52.0632

-- Minimum \$00.0000 ----- \$00.0000

Recourse Usage Rate

-- Maximum \$00.0000 \$00.0019 \$00.0019

-- Minimum \$00.0000 \$00.0019 \$00.0019

FT-FLEX Recourse Reservation Rate

--Maximum \$18.3920 ----- \$18.3920

--Minimum \$00.0000 ----- \$00.0000

Reourse Usage Rate

--Maximum \$00.2962 \$00.0019 \$00.2981

--Minimum \$00.0000 \$00.0019 \$00.0019

RATES PER DEKATHERM

COMMODITY RATES RATE SCHEDULE FOR FT-A

\$0.0663

\$0.0765

\$0.1142

\$0.0401

\$0.0459

\$0.0834

\$0.0459

\$0.0427

\$0.0765

\$0.0834

\$0.0765

\$0.0642

Base Commodity Rates DELIVERY ZONE RECEIPT -----2 3 5 0 ZONE L 1 \$0.1118 \$0.1231 \$0.1608 \$0.0669 \$0.0880 \$0.0978 0 \$0.0439 \$0,0286 \$0.0669 \$0.0572 \$0.0776 \$0.0874 \$0.1014 \$0.1126 \$0,1503 1 \$0.0776 \$0.0433 \$0.0530 \$0.0681 \$0.0783 \$0.1159 2 \$0.0880 \$0.0874 \$0.0530 \$0.0366 \$0.0663 \$0.0765 \$0.1142 3 \$0.0978

\$0,1025

\$0,1126

\$0.1503

Minimum Commodity Rates 2/

DELIVERY ZONE RECEIPT 5 6 Ő 1 2 3 4 ZONE L ------\$0.0096 \$0.0161 \$0.0191 \$0.0233 \$0.0268 \$0.0326 \$0.0026 0 \$0,0034 \$0.0202 \$0.0236 \$0,0294 \$0.0159 \$0.0067 \$0.0129 1 \$0.0096 \$0.0131 \$0.0189 \$0.0054 \$0.0100 \$0.0161 \$0.0129 \$0.0024 \$0,0126 \$0.0184 \$0.0191 \$0.0159 \$0,0054 \$0.0004 \$0.0095 \$0.0015 \$0.0090 \$0.0237 \$0.0205 \$0.0100 \$0.0095 \$0.0032 \$0.0069 \$0.0236 \$0.0131 \$0.0126 \$0.0032 \$0,0022 5 \$0.0268 \$0.0294 \$0.0189 \$0.0184 \$0.0090 \$0.0069 \$0.0031 \$0.0326

\$0.0681

\$0.0783

\$0,1159

Maximum Commodity Rates 1/, 2/

0.505107				DELIVERY	ZONE			
RECEIPT ZONE	0	L	1	2	3	4	5	6
0	\$0.0458	\$0,0305	\$0,0688	\$0.0899	\$0.0997	\$0.1137	\$0.1250	\$0.1627
1	\$0.0688	40,0505	\$0.0591	\$0.0795	\$0.0893 \$0.0549	\$0.1033 \$0.0700	\$0.1145 \$0.0802	\$0.1522 \$0.1178
2 3	\$0.0899 \$0.0997		\$0.0795 \$0.0893	\$0.0452 \$0.0549	\$0.0385	\$0.0682	\$0.0784	\$0.1161
4 5	\$0.1148 \$0.1250		\$0.1044 \$0.1145	\$0.0700 \$0.0802	\$0.0682 \$0.0784	\$0.0420 \$0.0478	\$0.0478 \$0.0446	\$0.0853 \$0.0784
6	\$0.1627		\$0.1522	\$0.1178	\$0.1161	\$0.0853	\$0.0784	\$0.0661

Notes:

4

5

6

\$0,1129

\$0.1231

\$0.1608

(ACA) Annual Charge Adjustment

\$0.0019

Issued: April 19, 2010 Effective: April 19, 2010

^{1/} The above maximum rates include a per 0th charge for:

^{2/} The applicable fuel retention percentages are listed on Sheet No. 32, provided that for service rendered solely by displacement, shipper shall render only the quantity of gas associated with losses of .5%.

FUEL AND LOSS RETENTION PERCENTAGE 1\,2\,3\

NOVEMBER - MARCH

			Dell	very Zone				
RECEIPT ZONE	0	L	1	2	3	4	5	6
0	0,89%		2.79%	5.16%	5.88%	6.79%	7.88%	8.71%
L 1	1.74%	1.01%	1.91%	4,28%	4.99%	5,90%	6,99%	7.82%
2	4,59%		2.13%	1.43%	2.15%	3.05%	4.15%	4.98%
3	6.06% 7.43%		3.60% 4.97%	1.23% 2.68%	0.69% 3.07%	2.64% 1.09%	3.69% 1.33%	4.52%
4 5	7.51%		5.05%	2.76%	3.14%	1.16%	1.28%	2.09%
6	8.93%		6.47%	4.18%	4.56%	2.50%	1.40%	0.89%

APRIL - OCTOBER

			Deli	very Zone				
RECEIPT ZONE	0	L	1	2	3	4	5	6
0	0.84%		2.44%	4.43%	5.04%	5.80%	6.72%	7.42%
L		0.95%			4 2004	C C 0604	E 070/	6,67%
1	1.56%		1.70%	3.69%	4.29%	5.06%	5.97%	
2	3.95%		1.88%	1,30%	1.90%	2.66%	3.58%	4.28%
3	5.19%		3.12%	1.13%	0.67%	2.32%	3.19%	3.90%
4	6.34%		4,28%	2.35%	2.67%	1.01%	1.21%	1.92%
5	6.41%		4,34%	2.41%	2.74%	1.07%	1.17%	1.86%
6	7.61%		5,53%	3.61%	3.93%	2,20%	1.27%	0.85%

Issued: April 19, 2010 Effective: April 19, 2010

^{1\} Included in the above Fuel and Loss Retention Percentages is the quantity of gas associated with losses of 0.5%.

For service that is rendered entirely by displacement shipper shall render only the quantity of gas associated with losses of 0.5%.

^{3\} The above percentages are applicable to (IT) Interruptible Transportation, (FT-A) Firm Transportation, (FT-GS) Firm Transportation-GS, (PAT) Preferred Access Transportation, (IT-X) Interruptible Transportation-X, (FT-G) Firm Transportation-G.

RATES PER DEKATHERM

RATE SCHEDULE NET 284

	Base	ADJUS"	TMENTS	Rate After	Fuel
Rate Schedule and Rate	Tarlff Rate	(ACA)	(PCB) 5/	Current Adjustments	and Use
Demand Rate 1/, 5/					
Segment U Segment 1 Segment 2 Segment 3 Segment 4	\$9.65 \$1.33 \$8.08 \$5.07 \$5.54		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$9.65 \$1.33 \$8.08 \$5.07 \$5.54	
Commodity Rate 2/, 3/					
Segments U, 1, 2, 3 & 4		\$0.0019		\$0.0019	6/
Extended Receipt and Delivery	/ Rate 4/, 7/				
Segment U Segment 1 Segment 2 Segment 3 Segment 4	\$0.3173 \$0.0437 \$0.2656 \$0.1667 \$0.1821			\$0.3173 \$0.0437 \$0.2656 \$0.1667 \$0.1821	5,52% 0,69% 0,59% 0,73% 0,36%

Notes:

- 1/ A specific customer's Monthly Demand Rate is dependent upon the location of its points of receipt and delivery, and is to be determined by summing the Monthly Demand Rate components for those pipeline segments connecting said points.
- 2/ The applicable surcharge for ACA will be assessed on actual quantities delivered and are not dependent upon the location of points of receipt and delivery.
- 3/ The Incremental Pressure Charge associated with service to MassPower shall be \$0.0334 plus an additional Incremental Fuel Charge of 5.83%.
- A/ Rates are subject to negotiation pursuant to the terms of the Rate Schedule for NET 284.
- 5/ PCB adjustment surcharge originally effective for PCB Adjustment Period of July 1, 1995 June 30, 2000, was revised and the PCB Adjustment Period has been extended until June 30, 2010 as required by the Stipulation and Agreement filed on May 15, 1995 and approved by Commission Orders issued November 29, 1995 and February 20, 1996.
- 6/ The applicable fuel retention percentages are listed on Sheet No. 105.
- 7/ The Extended Receipt and Delivery Rates are additive for each segment outside of the segments under Shipper's base NET-284 contract.

Issued: April 19, 2010 Effective: April 19, 2010

NET-284 RATE SCHEDULE (continued)

5. FUEL AND USE (continued)

Т	ransportation Quantity		Seg	ments			,
Shipper	(Dth)	U	1	2	3	4	Fuel and Use
Bay State (from Granite) - Pleasant St.	3,706				*	*	1.26%
Bay State (from Granite) - Agawam	6,068				*		0.96%
Boston Gas d/b/a National Grid	35,000				*	*	1.31%
Boston Gas d/b/a National Grid	8,600				*	*	1.31%
Barclays Bank PLC	14,010				*	*	1.23%
EnergyNorth Natural Gas, Inc. d/b/a National Grid	4,000				*	*	1.54%
Essex Gas Company d/b/a National Grid	2,000				*	*	1.44%
Iroquois Gas Transmission (Connecticut Natural, Yankee Gas)	37,000				*		0.68%
Lockport Energy Associates	13,184	*	*				6.21%
New York State Electric & Gas Corp	14,816	*	*				6.21%
Northern Utilities (from Granite) Pleasant St.	844				*	*	1.26%
Northern Utilities (from Granite) Agawam	1,382				*		0.96%
The Narragansett Electric Company d/b/a National Grid	1,000				*	*	1.25%
Yankee Gas Services Company (Wright	9,000				*		1.07%
Total	150,610						

Issued: April 19, 2010 Effective: April 19, 2010

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 14 of 23

TransCanada Variable Transportation Rates

Line	Item	Units	Value	Reference
1	Union Dawn to Iroquois			
2	Commodity Rate	\$CAD / GJ	\$0.01413	Page 15
3	Delivery Pressure Commodity Rate	\$CAD / GJ	\$ -	
4	Variable Transportation Rate	\$CAD / GJ	\$0.01413	Line 2 plus Line 3
5	\$CAD to \$US	Ratio	0.95	Page 17
6	Variable Transportation Rate	\$US/GJ	\$ 0.0134	Line 4 times Line 5
7	GJ per Dth	Ratio	1.0551	
8	Variable Transportation Rate	\$US / Dth	\$ 0.0141	Line 6 divided by Line 7
9				_
10	Union Dawn to East Hereford			
11	Commodity Rate	\$CAD / GJ	\$0.02275	Page 15
12	Delivery Pressure Commodity Rate	\$CAD / GJ	\$0.03798	Page 16
13	Variable Transportation Rate	\$CAD / GJ	\$0.06073	Line 11 plus Line 12
14	\$CAD to \$US	Ratio	0.95	Page 17
15	Variable Transportation Rate	\$US / GJ	\$ 0.0577	Line 13 times Line 14
16	GJ per Dth	Ratio	1.0551	_
17	Variable Transportation Rate	\$US / Dth	\$ 0.0609	Line 15 divided by Line 16



FT, STFT and Interruptible Transportation Tolls

Union Dawn Dames	rove	d Final Mainline Tolls	effective January 1, 2010				
Bear Description Descrip							(1)
Line No. Delivery point Delivery point (RiGS)MO (RiGS) ((FT, STFT Minimum Tolls)	
No. Pisceptic Petent Dewer John (SIGJMO) (SIGJ) (SI	Line			Demand Toll	Commodity Toll		(110% FT Tolls)
Union Dawn	No.	Receipt Point	Delivery point	(\$/GJ/MO)	(\$/GJ)	•	` (\$/GJ)
1	1	Union Dawn	Emerson 2	24.78632	0.00000		
Union Dawn Kirowall 3,89830		Union Dawn		1.44127	0.00000	0.0474	0.0521
5 Union Dawn Nagara Falls 5,55504 0,00655 0,1895 0,2085 Francisco		Union Dawn	Dawn Export	1.08608	0.00000	0.0357	0.0393
Online Dawn Chippawa 5,60966 0,00655 0,1907 0,2098 Union Dawn Inquisite 10,82699 0,20143 3,3700 0,4707 0,5774			Kirkwall	3.89830	0.00408	0.1323	0.1455
Valinch Davin Inequipits 10,82699 10,7413 0,3700 0,4729 0,4729 0,4729 0,4724 0,5727 0,4724 0,47						0.1895	0.2085
8 Unión Dawn Comwell 11.4501 0.01738 0.3903 0.4293 0.4704 5.774 0.5774 0.05174							
Dinion Dawn Napideville 13,74822 0.01837 0.4704 0.5773							
10							
11			·				
12			· · ·				
Enbridge CDA							
Februidge CDA			•				
Entridge CDA		•					
Febridge CDA		•	_				
Febridge CDA							
18 Enbridge CDA Union WDA 23,06458 0,03197 0,7903 0,8693 20 Enbridge CDA Nipigon WDA 21,03519 0,02948 0,7211 0,7992 21 Enbridge CDA Union NDA 8,86918 0,01144 0,3026 0,3329 22 Enbridge CDA Tunis NDA 1,98923 0,01620 0,4443 0,4887 23 Enbridge CDA Union SSMDA 1,98923 0,01620 0,4443 0,4887 24 Enbridge CDA Union SSMDA 14,539008 0,01946 0,4974 0,5471 25 Enbridge CDA Union CDA 3,73926 0,00389 0,1288 0,1395 26 Enbridge CDA Union CDA 1,9872 0,00173 0,6838 0,0820 26 Enbridge CDA Enbridge CDA 1,0808 0,0000 0,357 0,0339 26 Enbridge CDA Union EDA 3,00189 0,0000 0,357 0,0339 27 Enbridge CDA KPUC EDA <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Febridge CDA							
20 Enbridge CDA Union NOA 8,85618 0.0114 0.3226 0.3228 21 Enbridge CDA Calestock NDA 16,51673 0.02217 0.5682 0.6228 22 Enbridge CDA Turis NDA 12,95923 0.01820 0.4443 0.4887 23 Enbridge CDA Union SSMDA 8,9482 0.01946 0.474 0.5471 24 Enbridge CDA Union CDA 2,49167 0.00173 0.0838 0.0920 26 Enbridge CDA Union CDA 2,49167 0.00173 0.0836 0.0920 27 Enbridge CDA Union EDA 5,46815 0.00604 0.1862 0.2048 28 Enbridge CDA Enbridge EDA 7,90059 0.00994 0.1297 0.3414 0.3755 29 Enbridge CDA GMIT EDA 9,89004 0.01297 0.3414 0.3755 31 Enbridge CDA KPUC EDA 5,18271 0.00597 0.01764 0.1940 32 Enbridge CDA N							
21 Enbridge CDA Calstock NDA 16.51873 0.02217 0.56822 0.6228 23 Enbridge CDA Tunis NDA 12.95923 0.01820 0.04443 0.4887 23 Enbridge CDA GMIT NDA 8.90462 0.01063 0.3034 0.3337 25 Enbridge CDA Union NCDA 3.73926 0.00389 0.1288 0.1395 26 Enbridge CDA Union NCDA 3.73926 0.000389 0.1288 0.1395 27 Enbridge CDA Union CDA 2.49167 0.00073 0.00357 0.0393 27 Enbridge CDA Enbridge CDA 1.08609 0.00000 0.0357 0.0393 29 Enbridge CDA Enbridge CDA 7.90059 0.00994 0.2696 0.2906 31 Enbridge CDA KPUC EDA 5.18271 0.00977 0.3414 0.3755 32 Enbridge CDA KPUC EDA 5.18271 0.00977 0.3414 0.3755 33 Enbridge CDA KPUC EDA		-					
22 Enbridge CDA Tunis NDA 12,95923 0.01820 0.4443 0.4887 23 Enbridge CDA GMIT NDA 8,90462 0.01063 0.3034 0.3337 24 Enbridge CDA Union NCDA 3,73926 0.00389 0.1288 0.1395 26 Enbridge CDA Union CDA 2,49167 0.00173 0.0836 0.0920 27 Enbridge CDA Union CDA 2,49167 0.00173 0.0836 0.0920 28 Enbridge CDA Union EDA 5,48815 0.00644 0.1862 0.2048 29 Enbridge CDA Enbridge CDA GNIT EDA 9,99004 0.01297 0.3414 0.3755 31 Enbridge CDA KPUC EDA 0.00994 0.01297 0.3414 0.3755 32 Enbridge CDA North Bay Junction 6,38205 0.00765 0.2165 0.2382 33 Enbridge CDA North Bay Junction 6,38205 0.00766 0.2165 0.2382 34 Enbridge CDA <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>		-					
23							
24 Enbridge CDA Union NCDA 1,53608 0,1946 0,4974 0,5471 25 Enbridge CDA Union CDA 2,9167 0,00173 0,0383 0,0920 26 Enbridge CDA Union CDA 2,9167 0,00173 0,0383 0,0920 27 Enbridge CDA Union EDA 5,48815 0,00644 0,1862 0,2048 29 Enbridge CDA Enbridge EDA 7,90059 0,00984 0,2896 0,2896 39 Enbridge CDA GMIT EDA 9,9904 0,01297 0,3414 0,3755 4 Enbridge CDA GMIT EDA 9,9904 0,01297 0,3414 0,3755 4 Enbridge CDA North Bay Junction 6,38205 0,00765 0,2165 0,2382 32 Enbridge CDA North Bay Junction 6,38205 0,00765 0,2165 0,2386 34 Enbridge CDA Linion SWDA 5,68755 0,00672 0,1940 0,2144 35 Enbridge CDA Linion SWDA		•					
25 Enbridge CDA Union NCDA 3,79926 0,00389 0,1288 0,1395 26 Enbridge CDA Union CDA 2,49167 0,00073 0,0836 0,0920 27 Enbridge CDA Enbridge CDA 1,08808 0,00000 0,0357 0,0393 28 Enbridge CDA Union EDA 5,48815 0,00044 0,1862 0,2048 29 Enbridge CDA Enbridge EDA 7,90059 0,00994 0,2996 0,2986 31 Enbridge CDA GMIT EDA 9,99004 0,01297 0,3414 0,3755 31 Enbridge CDA KPUC EDA 5,18271 0,00597 0,1764 0,1940 32 Enbridge CDA Morth Bay Junction 6,38205 0,00765 0,1680 0,2046 33 Enbridge CDA Enbridge SWDA 5,68976 0,00630 0,1840 0,2046 34 Enbridge CDA Spruce 2,9,0382 0,04188 1,0926 1,1238 36 Enbridge CDA Emerson 1							
26 Enbridge CDA Union CDA 2,49167 0,00173 0,0335 0,0920 27 Enbridge CDA Enbridge CDA 1,08608 0,00000 0,0357 0,0393 28 Enbridge CDA Union EDA 6,48815 0,00644 0,1862 0,2048 9 Enbridge CDA Enbridge EDA 7,90059 0,0094 0,2968 0,2968 1 Enbridge CDA GMT EDA 9,9904 0,01297 0,3414 0,3755 1 Enbridge CDA KPUC EDA 6,18271 0,00597 0,1764 0,1940 32 Enbridge CDA North Bay Junction 6,38205 0,00765 0,2165 0,2386 34 Enbridge CDA Enbridge SWDA 5,46896 0,00632 0,1880 0,2046 34 Enbridge CDA Union SWDA 5,68755 0,00672 0,1940 0,2134 35 Enbridge CDA Emerson 1 29,16856 0,0068 0,9996 1,0998 36 Enbridge CDA Emerson 2							
27 Enbridge CDA Enbridge CDA 1,08608 0,00000 0,0357 0,0393 28 Enbridge CDA Union EDA 5,46815 0,00644 0,1862 0,2048 29 Enbridge CDA Enbridge EDA 7,90059 0,00994 0,2696 0,2966 29 Enbridge CDA Enbridge EDA 7,90059 0,00994 0,2696 0,2966 29 Enbridge CDA KPUC EDA 5,18271 0,00597 0,1764 0,1940 20 Enbridge CDA North Bay Junction 6,35205 0,00765 0,2165 0,2382 23 Enbridge CDA Enbridge SWDA 5,46896 0,00630 0,1860 0,2046 24 Enbridge CDA Union SWDA 5,68975 0,00672 0,1940 0,2114 25 Enbridge CDA Spruce 29,80382 0,04188 1,0216 1,1233 26 Enbridge CDA Emerson 1 29,16366 0,04068 0,9996 1,0996 27 Enbridge CDA Emerson 2 29,16366 0,04068 0,9996 1,0996 1,0996 28 Enbridge CDA Emerson 2 29,16366 0,04068 0,9996 1,0996 1							
28							
Pehridge CDA			•				
Enbridge CDA GMIT EDA 9,99004 0,01297 0,3414 0,3755 1 Enbridge CDA KPUC EDA 5,18271 0,00597 0,1764 0,1940 32 Enbridge CDA North Bay Junction 6,35205 0,00765 0,2165 0,2382 32 Enbridge CDA Union SWDA 5,4896 0,00630 0,1860 0,2046 34 Enbridge CDA Union SWDA 5,4896 0,00630 0,1860 0,2046 34 Enbridge CDA Union SWDA 5,89755 0,00672 0,1940 0,2114 35 Enbridge CDA Emerson 1 29,16586 0,04168 1,0216 1,1238 35 Enbridge CDA Emerson 1 29,16586 0,04068 0,9996 1,0996 1,0996 37 Enbridge CDA Emerson 2 29,16586 0,04068 0,9996 1,0996 37 Enbridge CDA Emerson 2 29,16586 0,04068 0,9996 1,0996 39 Enbridge CDA St. Clair 5,82216 0,00682 0,1982 0,2180 39 Enbridge CDA Dawn Export 5,46696 0,00630 0,1860 0,2046 0							
Findings CDA	η,						
32 Enbridge CDA North Bay Junction 6,35205 0,00765 0,2165 0,2382 33 Enbridge CDA Enbridge SWDA 5,46996 0,00630 0,1880 0,2046 34 Enbridge CDA Union SWDA 5,69755 0,00672 0,1940 0,2134 35 Enbridge CDA Emerson 1 29,16596 0,04068 0,9996 1,0996 37 Enbridge CDA Emerson 2 29,16596 0,04068 0,9996 1,0996 38 Enbridge CDA B. Clair 5,82216 0,00682 0,1982 0,2180 39 Enbridge CDA Dawn Export 5,46996 0,00630 0,1860 0,2046 40 Enbridge CDA Kirkwall 2,65473 0,0022 0,0895 0,0985 41 Enbridge CDA Kirkwall 2,65473 0,0022 0,0895 0,0984 42 Enbridge CDA Chippawa 3,7290 0,00372 0,1246 0,1371 42 Enbridge CDA Chipawa <	. 8						
33 Enbridge CDA Enbridge SWDA 5.46896 0.00630 0.1860 0.2464 34 Enbridge CDA Union SWDA 5.87975 0.00672 0.1940 0.2134 35 Enbridge CDA Emerson 1 29.80382 0.04168 1.0216 1.1238 36 Enbridge CDA Emerson 1 29.16586 0.04068 0.9996 1.0996 37 Enbridge CDA St. Clair 5.82216 0.00682 0.1982 0.2180 39 Enbridge CDA St. Clair 5.82216 0.00632 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1384 43 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1331 45 Enbridge CDA Comwall 7.599		_					
34 Enbridge CDA Union SWDA 5.69755 0.00672 0.1940 0.2134 35 Enbridge CDA Spruce 29.80382 0.04168 1.0216 1.1238 36 Enbridge CDA Emerson 1 29.16586 0.04068 0.9996 1.0996 37 Enbridge CDA Emerson 2 29.16586 0.04068 0.9996 1.0996 38 Enbridge CDA St. Clair 5.82216 0.00682 0.1992 0.2180 39 Enbridge CDA Dawn Export 5.46996 0.0630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 43 Enbridge CDA Iroquois 7.01		-					
35 Enbridge CDA Spruce 29.80382 0.04168 1.0216 1.1238 36 Enbridge CDA Emerson 1 29.16586 0.04068 0.9996 1.0996 37 Enbridge CDA Emerson 2 29.16586 0.04068 0.9996 1.0996 38 Enbridge CDA St. Clair 5.82216 0.00682 0.1992 0.2180 39 Enbridge CDA Dawn Export 5.46696 0.00630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iraguois 7.01147 0.00682 0.2391 0.2652 45 Enbridge CDA Najeirville 9.		-					
36 Ehbridge CDA Emerson 1 29.16586 0.04068 0.9996 1.0996 37 Enbridge CDA Emerson 2 29.15586 0.04068 0.9996 1.0996 38 Enbridge CDA St. Clair 5.82216 0.00682 0.1382 0.2180 39 Enbridge CDA Dawn Export 5.66966 0.00630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0995 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 44 Enbridge CDA Comwall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg <td< td=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td></td<>		•					
37 Enbridge CDA Emerson 2 29.16586 0.04068 0.9996 1.0996 38 Enbridge CDA St. Clair 5.82216 0.00682 0.1982 0.2180 39 Enbridge CDA Dawn Export 5.46969 0.00630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0995 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.01147 0.00662 0.2391 0.2533 44 Enbridge CDA Romall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3332 47 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3332 48 Enbridge CDA East Hereford			· · · · · · · · · · · · · · · · · · ·				
38 Enbridge CDA St. Clair 5.82216 0.00682 0.1882 0.2180 39 Enbridge CDA Dawn Export 5.46696 0.00630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 44 Enbridge CDA Cornwall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.99325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 48 Enbridge EDA Empress 45.		-					
39 Enbridge CDA Dawn Export 5.46696 0.00630 0.1860 0.2046 40 Enbridge CDA Kirkwall 2.65473 0.00222 0.0895 0.0985 41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.71147 0.00862 0.2391 0.2630 44 Enbridge CDA Cornwall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
40 Enbridge CDA Kirkwall 2,65473 0,00222 0,085 0,985 41 Enbridge CDA Niagara Falls 3,67800 0,00372 0,1246 0,1371 42 Enbridge CDA Chippawa 3,72391 0,00379 0,1262 0,1388 43 Enbridge CDA Iroquois 7,01147 0,00862 0,2391 0,2630 44 Enbridge CDA Cornwall 7,55949 0,00948 0,2593 0,2852 45 Enbridge CDA Napierville 9,93325 0,01266 0,3395 0,3735 46 Enbridge CDA Philipsburg 10,15544 0,01324 0,3484 0,3882 47 Enbridge CDA East Hereford 12,95192 0,01724 0,4430 0,4873 48 Enbridge CDA Est Hereford 12,95192 0,01724 0,4430 0,4873 49 Enbridge CDA Empress 45,84410 0,06496 1,5722 1,7294 50 Enbridge EDA Transgas SDA		-					
41 Enbridge CDA Niagara Falls 3.67800 0.00372 0.1246 0.1371 42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 44 Enbridge CDA Cornwall 7.59948 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram MDA			•				
42 Enbridge CDA Chippawa 3.72391 0.00379 0.1262 0.1388 43 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 44 Enbridge CDA Cornwall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Empress 45.84410 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 49 Enbridge EDA Centram SSDA 36.59835 0.05155 1.3548 1.3803 51 Enbridge EDA Centram MDA		-					
43 Enbridge CDA Iroquois 7.01147 0.00862 0.2391 0.2630 44 Enbridge CDA Cornwall 7.59949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge EDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge EDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge EDA Embridge EDA Embridge EDA 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram SSDA 36.8935 0.05155 1.2548 1.3803 52 Enbridge EDA Centram MDA		-	-				
44 Enbridge CDA Cornwall 7.5949 0.00948 0.2593 0.2852 45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.8410 0.06496 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2939 52 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Union NDA		-	• • •				
45 Enbridge CDA Napierville 9.93325 0.01286 0.3395 0.3735 46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 50 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 51 Enbridge EDA Centram SDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Union NDA							
46 Enbridge CDA Philipsburg 10.19544 0.01324 0.3484 0.3832 47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram SSDA 35.59835 0.05155 1.2548 1.3803 52 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 66 Enbridge EDA Union NDA	45						
47 Enbridge CDA East Hereford 12.95192 0.01724 0.4430 0.4873 48 Enbridge EDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram SSDA 36.59835 0.05155 1.2548 1.3803 52 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Union NDA </td <td>46</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	46	-					
48 Enbridge CDA Welwyn 35.84726 0.05044 1.2289 1.3518 49 Enbridge EDA Empress 45.84410 0.06496 1.5722 1.7294 50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram SSDA 36.59835 0.05155 1.2548 1.3803 52 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Union NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA	47	Enbridge CDA	East Hereford				
50 Enbridge EDA Transgas SSDA 39.59108 0.05552 1.3571 1.4928 51 Enbridge EDA Centram SSDA 36.59835 0.05155 1.2548 1.3803 52 Enbridge EDA Centrat MDA 36.85710 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.065199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Union NDA 10.3625 0.01317 0.3432 0.3775 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA<	48	Enbridge CDA	Welwyn	35.84726	0.05044		
51 Enbridge EDA Centram SSDA 36.59835 0.05155 1.2548 1.3803 52 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 61 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA<	49	Enbridge EDA	Empress	45.84410	0.06496	1.5722	1.7294
52 Enbridge EDA Centram MDA 32.87570 0.04644 1.1272 1.2399 53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA	50	Enbridge EDA	Transgas SSDA	39.59108	0.05552	1.3571	1.4928
53 Enbridge EDA Centrat MDA 36.85711 0.05199 1.2637 1.3901 54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 4 Enbridge EDA Union EDA	51	Enbridge EDA	Centram SSDA	36.59835	0.05155	1.2548	1.3803
54 Enbridge EDA Union WDA 24.24450 0.03371 0.8308 0.9139 55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA	52	Enbridge EDA	Centram MDA	32.87570	0.04644	1.1272	1.2399
55 Enbridge EDA Nipigon WDA 21.03310 0.02897 0.7205 0.7926 56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA	53	Enbridge EDA	Centrat MDA	36.85711	0.05199	1.2637	1.3901
56 Enbridge EDA Union NDA 10.03625 0.01317 0.3432 0.3775 57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 62 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA	54	Enbridge EDA	Union WDA	24.24450	0.03371	0.8308	0.9139
57 Enbridge EDA Calstock NDA 16.10325 0.02182 0.5512 0.6063 58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 62 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA	55		Nipigon WDA	21.03310	0.02897	0.7205	0.7926
58 Enbridge EDA Tunis NDA 12.22185 0.01619 0.4180 0.4598 59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction	56	Enbridge EDA	Union NDA	10.03625	0.01317	0.3432	0.3775
59 Enbridge EDA GMIT NDA 9.61741 0.01236 0.3286 0.3615 60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		Enbridge EDA	Calstock NDA	16.10325	0.02182	0.5512	0.6063
60 Enbridge EDA Union SSMDA 20.53183 0.02825 0.7033 0.7736 61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 63 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 64 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		-	Tunis NDA	12.22185	0.01619	0.4180	0.4598
61 Enbridge EDA Union NCDA 9.39814 0.01213 0.3211 0.3532 62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 0.3532 63 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.296		<u> </u>					
62 Enbridge EDA Union CDA 8.46521 0.01037 0.2887 0.3176 3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		•					
3 Enbridge EDA Enbridge CDA 7.90059 0.00994 0.2696 0.2966 4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		•					
4 Enbridge EDA Union EDA 3.67770 0.00377 0.1247 0.1372 65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		- ·					
65 Enbridge EDA Enbridge EDA 1.08608 0.00000 0.0357 0.0393 66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		-	•				
66 Enbridge EDA GMIT EDA 5.31969 0.00611 0.1810 0.1991 67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715	Salar and the Salar and Sa	-					
67 Enbridge EDA KPUC EDA 3.88012 0.00405 0.1317 0.1449 68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		•	-				
68 Enbridge EDA North Bay Junction 7.23267 0.00895 0.2468 0.2715		-					
		-					
оэ Enonage EDA Enonage SWDA 11.46271 0.01509 0.3920 0.4312		-					
	OS	Enonage EDA	Endridge SWDA	11.462/7	0.01509	0.3920	0.4312



Transportation Tolls
Approved Final Mainline Tolls effective January 1, 2010

Refer to Schedule 5.2 for FT, STFT and Interruptible transportation tolls

Storage Transportation Service

Line No	Particulars	Demand Toll (\$/GJ/mo)	Commodity Toll (\$/GJ)
***************************************	(a)	(b)	(c)
1	Centra Gas Manitoba - MDA	3.16583	0.00330
2	Union Gas - WDA	23.37333	0.03242
3	Union Gas - NDA	8.93667	0.01154
4	Union Gas - EDA	5.78250	0.00692
5	Kingston PUC	5.61583	0.00657
6	Gaz Metropolitain - EDA	10.42417	0.01357
7	Enbridge - CDA	1.17750	0.00012
8	Enbridge - EDA	3.52250	0.00363
9	Cornwall	8.03083	0.01007
10	Philipsburg	10.62833	0.01384

Enhanced Capacity Release

Line		Commodity Toll
No	Particulars	(\$/GJ)
	(a)	(b)

11 ECR Surcharge

0.036

Delivery Pressure

Line No	Particulars	Demand Toll (\$/GJ/mo)	Commodity Toll (\$/GJ)	Daily Equivalent *(1) (\$/GJ)
	(a)	(b)	(c)	(d)
12	Emerson - 1 (Viking)	0.11697	0.00000	0.00385
13	Emerson - 2 (Great Lakes)	0.12218	0.00000	0.00402
14	Dawn	0.06338	0.00000	0.00208
15	Niagara Falls	0.16857	0.00000	0.00554
16	Iroquois	0.78572	0.00000	0.02583
17	Chippawa	0.81314	0.00000	0.02673
18	East Hereford	1.96558	0.03798	0.10260

^{*(1)} The Demand Daily Equivalent Toll is only applicable to STS Injections, IT, Diversions and STFT.

Bank of Canada

Attachment to Schedule 6B
New Hampshire Division
Commodity Rates
Page 17 of 23

SEE ALSO:

10-Year Currency Converter

SEE ALSO:

FREQUENTLY ASKED:

Why is the currency I'm looking for not listed here?

The Bank currently collects data for over 50 foreign currencies. These data are intended primarily for individuals with a research interest in foreign exchange markets and represent only a sampling of currencies.

More comprehensive currency converters include **CanadianForex** and **OANDA.com**.

Are the exchange rates shown here accepted by the Canada Revenue Agency?

Yes. The Agency accepts Bank of Canada exchange rates as the basis for calculations involving income and expenses that are denominated in foreign currencies.

kates and Statistics
Exchange Rates
Daily currency converter

Using rates for: 20 Jul 2010

xchange rate:	10,000	
Answer:	0.95	CONVERT
Use the:	• Nominal rate 1 Cash rate (4%)	
Convert:	• from \$Can	
Amount:	1.00	
Currency:	U.S. dollar	Ž.

Summary:

On 20 Jul 2010, 1.00 Canadian dollar(s) = 0.95 U.S. dollar(s), at an exchange rate of 0.9500 (using nominal rate.)

Effective 1 January 2009, the euro replaces the Slovak koruna.

Copyright © 1995 - 2010, Bank of Canada. Permission is granted to reproduce or cite portions herein, if attribution is given to the Bank of Canada. <u>Contact us</u>. Read our <u>privacy statement</u>.

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 18 of 23

Hi	storic	TransC	anada	Fuel	Loss	Percentages

		·			1 1101	one manse	anada i dei	LUSS I CICC	inages						
	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Last 12 Months	Last Nov - Mar	Last Apr - Oct
Union Dawn - Iroquois	0.69%	0.94%	1.00%	1.63%	1.41%	1.62%	1.60%	1.47%	1.36%	1.39%	1,35%	1.56%	1.34%	1.45%	1.25%
Union Dawn - East Hereford	0.00%	0.50%	0.49%	1.36%	1.14%	1.42%	1.31%	1.05%	1.01%	1.08%	1.03%	1.20%	0.97%	1,14%	0.84%
Empress - East Hereford	0.00%	2.01%	1.55%	3.84%	3.71%	4.43%	3.80%	2.78%	3.09%	3.43%	3.32%	3.23%	2.93%	3.47%	



DELIVERING CLEAN, SECURE NORTH AMER

Attachment to Schedule 6B
New Hampshire Division
Commodity Rates
Page 19 of 23

Superseding

bout Us

Shipper Info

Projects

Pipeline Safety

News

Informational Postings

STATEMENT OF RATES AND CHARGES

All rates are stated in U.S. \$

You are here: Vector > Informational Postings > Informational Postings > Tariff > Currently Effective Rates

Customer Activities

Eleventh Revised Sheet No. 20

Tenth Revised Sheet No. 20

INFORMATIONAL POSTINGS

Previous Next

FERC Gas Tariff

Vector Pipeline L.P.

Original Volume No. 1

Capacity

Gas Quality

Index of Customers

Notices

Posted Imbalances

Standards of Conduct

Tariff

Title Sheet

Table of Contents

Preliminary Statement

Мар

Currently Effective Rates

Rate Schedules

General Terms and Conditions

Form of Service Agreement

Entire Tariff

Sheet Index

Rate Schedule FT-1 1/

ctor - Canada Tariff

Ctor - Canada Tariii

Ansactional Reporting
Other

Downloads Search

Customer Activities

Site Map

Recourse Rates:

	Zone	1 2/	Zone	2 2/
	Maximum	Minimum	Maximum	Minimum
Reservation Charge				
(\$ per Dth per month)	\$1.2501	0.0000	\$7.7745	0.0000
Usage Charge (\$ per Dth)	0.0000	0.0000	0.0000	0.0000
ACA Charge	0.0019	0.0019	0.0019	0.0019
Usage and ACA Charge	0.0019	0.0019	0.0019	0.0019

Negotiated Rates:

The effective maximum negotiated charge for any negotiated rate transportation agreement is the charge agreed to by the parties, as set forth in the attached Tariff sheets.

Rate Schedule FT-L 1/

Recourse Rates:

Zone 1 2/

Zone 2 2/

Maximum

Minimum

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 20 of 23

Historic Vector Fuel Loss Rates

Receipt	Delivery	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Last 12 Months
W-10 Storage	Dawn	0.32%	0.30%	0.33%	0.30%	0.30%	0.48%	0.31%	0.30%	0.30%	0.32%	0.33%	0.47%	0.34%
Alliance	W-10 Storage	0.95%	0.91%	0.99%	0.91%	0.91%	1.11%	0.91%	0.90%	0.89%	0.95%	0.99%	1.40%	0.99%
Alliance	Dawn	0.95%	0.91%	0.99%	0.91%	0.91%	1.11%	0.91%	0.90%	0.89%	0.95%	0.99%	1.40%	0.99%

Attachment to Schedule 6B New Hampshire Division Commodity Rates Page 21 of 23

Tennessee Gas Pipeline Company FERC Gas Tariff Sixth Revised Volume No. 1

RATES PER DEKATHERM

FIRM STORAGE SERVICE RATE SCHEDULE FS

	=======				
Rate Schedule	Tariff	ADJUS	TMENTS	Current	Retention
and Rate	Rate	(ACA)	(PCB) 2/	Adjustment	Percent 1/
FIRM STORAGE SERVICE (FS) -					
PRODUCTION AREA					
Deliverability Rate	\$2.02		\$0.00	\$2.02	
Space Rate	\$0.0248		\$0.0000	\$0.0248	
Injection Rate	\$0.0053			\$0.0053	1,49%
Withdrawal Rate	\$0.0053			\$0.0053	
Overrun Rate	\$0.2427			\$0.2427	
FIRM STORAGE SERVICE (FS) -					
MARKET AREA					
	-				
Deliverability Rate	\$1.15		\$0.00	\$1.15	
Space Rate	\$0.0185		\$0.0000	\$0.0185	
Injection Rate	\$0.0102			\$0.0102	1.49%
Withdrawal Rate	\$0.0102			\$0.0102	
Overrun Rate	\$0.1380			\$0.1380	•

Issued: April 19, 2010 Effective: April 19, 2010

The quantity of gas associated with losses is 0.5%.

PCB adjustment surcharge originally effective for PCB Adjustment Period of July 1, 1995 - June 30, 2000, was revised and the PCB Adjustment Period has been extended until June 30, 2010 as required by the Stipulation and Agreement filed on May 15, 1995 and approved by Commission Orders Issued November 29, 1995 and February 20, 1996.

EXHIBIT I

Rates:

Monthly Deliverability Rate: \$2.4754 per Dth

Monthly Capacity Rate: \$ 0.0238 per Dth

Injection Rate: \$0.00 per Dth

Withdrawal Rate: \$0.00 per Dth

Authorized Overrun Rate: \$ 0.05 per Dth

Interruptible Rate: \$ 0.05 per Dth

Service Parameters:

Maximum Storage Quantity (MSQ): 3.400,000 Dth

Maximum Daily Injection Quantity (MDIO):

Inventory	MDIQ
April 1 through October 31	17,000 Dth/d Firm
November 1 through March 31	17,000 Dth/d Interruptible

Maximum Daily Withdrawal Quantity (MDWQ):

Inventory	MDWQ
November 1 through November 30	64,600 Dth/d Firm
December 1 through March 31	04,000 Dal/u i i ii
Inventory ≥ 680,000 Dth	34,000 Dth/d Firm
Inventory ≥ 340,000 Dth and < 680,000 Dth	22,780 Dth/d Firm
Inventory ≥ o Dth and < 340,000 Dth	13,600 Dth/d Firm
April 1 through October 31	34,000Dth/d Interruptible

Primary Receipt Point(s): W-10 / Vector Interconnect

Secondary Receipt Point(s): W-10 / MichCon Interconnect

Primary Delivery Point(s): W-10 / Vector Interconnect

Secondary Delivery Point(s): W-10 / MichCon Interconnect

Attachment to Schedule 6B New Hampshire Division Commodity Rates

Gas

Home	MichCon Storage & Tra	insportation	MichCon Pipeline	DTE Gas Storage	Page 23 of 23
r Services Notices	DTE Gas Storage	- Washington	10 Historic Fuel Rates		
Contact Us	Effective Date	Injection	Withdrawal	Wheel From Hub to Interconnect	
Forms	Apr 1, 2010	1.00%	0.40%	0.30%	
Tariffs	Mar 10, 2010	1.00%	0.40%	0.45%	
	Mar 3, 2010	1.00%	0.40%	0.00%	
	Mar 1, 2010	1.00%	0.40%	0.45%	
	Nov 1, 2009	0.00%	0.40%	n/a	
	Apr 1, 2009	0.95%	0.00%	n/a	
	Nov 1, 2008	0.00%	0.55%	n/a	
	Apr 1, 2008	0.70%	0.50%	n/a	
	Nov 1, 2007	0.00%	0.70%	n/a	
	Apr 1, 2007	0.70%	0.00%	n/a	
	Dec 1, 2006	0.00%	0.30%	n/a	
	Apr 1, 2006	0.50%	0.00%	n/a	
	Nov 1, 2005	0.00%	0.50%	n/a	
	Apr 1, 2005	0.72%	0.00%	п/а	
	Nov 1, 2004	0.00%	0.50%	n/a	
	Apr 1, 2004	0.58%	0.00%	n/a	

<u>DTEEnergy.com</u> | <u>Privacy Policy</u> | <u>Terms of Use</u> All contents © 2010 DTE Energy Company

				Utilities,						***************************************				
	Nov			through										
	,	As	of	7/22/201	0									I
Description	1	lov-10		Dec-10		Jan-11		eb-11	1	Mar-11	,	Apr-11	Se	eason
Time Triggered NYMEX Contracts		7	ĺ	8		4		5		5		9		38
Average Purchase Price	\$	6.385	\$	6.636	\$	6.991	\$	6.902	\$	6.713	\$	6.178	\$	6.564
Current NYMEX Price	\$	4.905	\$	5.172	\$	5.337	\$	5.306	\$	5.210	\$	5.018	\$	5.126
Hedging (Gains) or Losses - Allocate	\$ 1	03,600	\$	117,140	\$	66,170	S	79,800	\$	75.150	<u> </u>	104.380		46.240
Price Triggered NYMEX Contracts (NH Only)		6		5	· ·	3	Ť	4	<u> </u>	10,100 A		6	Ψ 0-	28
Average Purchase Price	\$	6.260	\$	6.647	\$	6.983	s	6.825	\$	6.730	¢	6.200	\$	6.542
Current NYMEX Price	\$	4.905	\$	5.172	\$	5.337	\$	5.306	\$	5.210	Ψ	5.018	\$	6.957
Hedging (Gains) or Losses - NH ONLY	\$	81,300	\$	73,750	\$	49,390	\$	60,760	\$	60.800	\$	70.920		96.920

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Northern Utilities, Inc. New Hampshire Division Schedule 8 Page 1 of 5

Typical Residential Heating Bill - 1,250 therms/year Comparison of Winter 2010-2011 vs. Winter 2009-2010

						parison o			vo. vilitoi	2009-2010	,						Page 1 of 5
	Typical Usa Winter 2010- 20	age: therms	Nov 109	Dec 150	Jan 187	Feb 188	Mar 166	Apr 132		May 90	June 55	July 30	August 30	Sept 42	October 71	Summer 318	Annual 1,250
Customer First Over	Charge units @ 50 units @ 50 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC Summer 2010	\$ 9.50 \$0.4102 \$0.2990 \$1.1177 \$1.1177 \$1.1177 \$1.1177 \$1.1177 \$1.1177	\$9.50 \$20.51 \$17.64 \$121.83	\$9.50 \$20.51 \$29.90 \$167.66	\$9.50 \$20.51 \$40.96 \$209.01	\$9.50 \$20.51 \$41.26 \$210.13	\$9.50 \$20.51 \$34.68 \$185.54	\$9.50 \$20.51 \$24.52 \$147.54 \$5.99	\$123.06 \$188.97 \$121.83 \$167.66 \$209.01 \$210.13 \$185.54								1,230
Customer (First Over		\$ 9.50 \$0.4102 \$0.2990 \$0.6545 \$0.5969 \$0.7280 \$0.7280 \$0.7280 \$0.7280 \$0.0297	\$174.43	\$234.38	\$288.47	\$289.93	\$257.77	\$208.06		\$ 9.50 \$20.51 \$11.96 \$58.91 \$2.67 \$103.55	\$9.50 \$20.51 \$1.50 \$32.83 \$1.63 \$65.97	\$9.50 \$12.31 \$0.00 \$21.84 \$0.89 \$44.54	\$9.50 \$12.31 \$0.00 \$21.84 \$0.89 \$44.54	\$ 9.50 \$17.23 \$0.00 \$30.58 \$1.25 \$58.55	\$9.50 \$20.51 \$6.28 \$51.69 \$2.11 \$90.09	\$57.00 \$103.37 \$19.73 \$58.91 \$32.83 \$21.84 \$21.84 \$30.58 \$51.69 \$9.44	\$1,860.26
	Typical Usa	ge: therms	Nov 109	Dec 150	Jan 187	Feb 188	M ar 166	Apr 132	Winter 932	May	June	July	August	Sept	October	Summer	Annual
	Winter 2009 - 201	• •			101	100										1	
Customer C First Over	Charge units @ 50 units @ 50 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC Summer 2009	\$ 9.50 \$0.4102 \$0.2990 \$1.0980 \$1.0980 \$1.0218 \$1.0758 \$1.0758 \$0.6693 \$ 0.0297	\$9.50 \$20.51 \$17.64 \$119.68	\$9.50 \$20.51 \$29.90 \$164.70 \$4.46	\$9.50 \$20.51 \$40.96 \$191.08	\$9.50 \$20.51 \$41.26 \$202.25 \$5.58	\$9.50 \$20.51 \$34.68 \$178.58 \$4.93	\$9.50 \$20.51 \$24.52 \$88.35 \$3.92	\$57.00 \$123.06 \$188.97 \$119.68 \$164.70 \$191.08 \$202.25 \$178.58 \$88.35 \$27.68	90	55	30	30	42	71	318	1,250
First	Charge units @ 50 units @ 50 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC Summer 2009	\$ 9.50 \$0.4102 \$0.2990 \$1.0980 \$1.0980 \$1.0758 \$1.0758 \$0.6693	\$20.51 \$17.64 \$119.68	\$20.51 \$29.90 \$164.70	\$20.51 \$40.96 \$191.08	\$9.50 \$20.51 \$41.26	\$9.50 \$20.51 \$34.68	\$9.50 \$20.51 \$24.52 \$88.35 \$3.92	\$57.00 \$123.06 \$188.97 \$119.68 \$164.70 \$191.08 \$202.25 \$178.58 \$88.35	\$9.50 \$20.51 \$11.96 \$66.47 \$2.30 \$110.73 (\$7.18)	\$9.50 \$20.51 \$1.50 \$40.62 \$1.40 \$73.53 (\$7.56)	\$9.50 \$12.31 \$0.00 \$22.16 \$0.77 \$44.73 (\$0.19)	\$9.50 \$12.31 \$0.00 \$22.16 \$0.77 \$44.73 (\$0.19)	\$9.50 \$17.23 \$0.00 \$31.02 \$1.07 \$58.82 (\$0.26)	\$9.50 \$20.51 \$6.28 \$65.54 \$1.81 \$103.64 (\$13.55)	\$57.00 \$103.37 \$19.73 \$66.47 \$40.62 \$22.16 \$31.02 \$65.54 \$8.11	1,250 \$1,777.51 \$82.75

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-40 Commercial & Industrial Bill - 2,000 therms/year Comparison of Winter 2010-2010 vs. Winter 2009-2010

								J. J. Z. J. J. J. J. J. J. J. J. J. J. J. J. J.	VS. WHITTE	2000 2							
Win	Typical Usag		Nov 193	Dec 269	Jan 298	Feb 262	Mar 234	Apr 171	Winter 1,427	May 117	June 81	July 72	August 72	Sept 89	October 142	Summer 573	Annual 2,000
Customer Charge First Over	units @ 75 units @ 75 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC	\$ 18.70 \$0.3077 \$0.2007 \$1.1398 \$1.1398 \$1.1398 \$1.1398 \$1.1398 \$1.1398 \$0.0259	\$18.70 \$23.08 \$23.68 \$219.98	\$18.70 \$23.08 \$38.94 \$306.61 \$6.97	\$18.70 \$23.08 \$44.76 \$339.66 \$7.72	\$18.70 \$23.08 \$37.53 \$298.63 \$6.79	\$18.70 \$23.08 \$31.91 \$266.71 \$6.06	\$18.70 \$23.08 \$19.27 \$194.91 \$4.43	\$112.20 \$138.47 \$196.08 \$219.98 \$306.61 \$339.66 \$298.63 \$266.71 \$194.91 \$36.96								
S Customer Charge First Over	ounts @ rounts @ rounts @ rounts @ rounts @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC	\$ 18.70 \$0.3077 \$0.2007 \$0.6905 \$0.6329 \$0.7640 \$0.7640 \$0.7640 \$ 0.0166 TOTAL	\$290.44	\$394.29	\$433.91	\$384.72	\$346.46	\$260.38	\$2,110.20	\$ 18.70 \$23.08 \$8.43 \$80.79 \$1.94 \$132.94	\$18.70 \$23.08 \$1.20 \$51.26 \$1.34 \$95.59	\$18.70 \$22.15 \$0.00 \$55.01 \$1.20 \$97.06	\$18.70 \$22.15 \$0.00 \$55.01 \$1.20 \$97.06	\$ 18.70 \$23.08 \$2.81 \$68.00 \$1.48 \$114.06	\$18.70 \$23.08 \$13.45 \$108.49 \$2.36 \$166.07	\$112.20 \$136.62 \$25.89 \$80.79 \$51.26 \$55.01 \$55.01 \$68.00 \$108.49 \$9.51	\$2,812.98
	Typical Usage		Nov 193	Dec 269	Jan 298	Feb 262	M ar 234	A pr 171	W inter 1,427	May 117	June 81	July 72	August 72	Sept 89	October 142	Summer 573	Annual 2,000
Customer Charge	iter 2009 - 2010	1													1		·
First Over	75 units @ 75 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC	\$ 18.70 \$0.3077 \$0.2007 \$1.1058 \$1.1058 \$1.0296 \$1.0836 \$1.0836 \$0.6771 \$ 0.0166	\$18.70 \$23.08 \$23.68 \$213.42 \$3.20	\$18.70 \$23.08 \$38.94 \$297.46 \$4.47	\$18.70 \$23.08 \$44.76 \$306.82 \$4.95	\$18.70 \$23.08 \$37.53 \$283.90 \$4.35	\$18.70 \$23.08 \$31.91 \$253.56 \$3.88	\$18.70 \$23.08 \$19.27 \$115.78 \$2.84	\$112.20 \$138.47 \$196.08 \$213.42 \$297.46 \$306.82 \$283.90 \$253.56 \$115.78 \$23.69								
Over	75 units @ 75 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC	\$ 18.70 \$0.3077 \$0.2007 \$1.1058 \$1.1058 \$1.0296 \$1.0836 \$1.0836 \$0.6771	\$23.08 \$23.68 \$213.42	\$23.08 \$38.94 \$297.46	\$23.08 \$44.76 \$306.82	\$23.08 \$37.53 \$283.90	\$23.08 \$31.91 \$253.56	\$23.08 \$19.27 \$115.78	\$138.47 \$196.08 \$213.42 \$297.46 \$306.82 \$283.90 \$253.56 \$115.78	\$18.70 \$23.08 \$8.43 \$97.75	\$18.70 \$23.08 \$1.20 \$67.68	\$18.70 \$22.15 \$0.00 \$60.16	\$18.70 \$22.15 \$0.00 \$60.16	\$18.70 \$23.08 \$2.81 \$74.36	\$18.70 \$23.08 \$13.45 \$148.30 \$3.00	\$112.20 \$136.62 \$25.89 \$97.75 \$67.68 \$60.16 \$60.16 \$74.36 \$148.30 \$12.09	

Northern Utilities, Inc. New Hampshire Division Schedule 8 Page 3 of 5

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-41 Commercial & Industrial Bill - 21,023 therms/year Comparison of Winter 2010-2011 vs. Winter 2009-2010

Wint	Typical Usag er 2010 - 201		Nov 1,553	Dec 2,578	Jan 3,265	Feb 4,103	Mar 3,402	Apr 2,473	Winter 17,374	May 1,258	June 701	July 414	August 213	Sept 364	October 699		Annual 21,023
Customer Charge All	units @ units @ CGA 1 CGA 2 CGA 3 CGA 4	\$ 60.30 \$0.1942 \$1.1398 \$1.1398 \$1.1398 \$1.1398	\$60.30 \$301.59 \$1,770.11	\$60.30 \$500.65 \$2,938.40	\$60.30 \$634.06 \$3,721.45	\$60.30 \$796.80	\$60.30 \$660.67	\$60.30 \$480.26	\$361.80 \$3,374.03 \$1,770.11 \$2,938.40 \$3,721.45						program		
Su	CGA 5 CGA 6 LDAC	\$1.1398 \$1.1398 \$0.0259	\$40.22	\$66.77	\$84.56	\$4,676.60 \$106.27	\$3,877.60 \$88.11	\$2,818.73 \$64.05	\$4,676.60 \$3,877.60 \$2,818.73 \$449.99	365							
Customer Charge All	units @ units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC	\$ 60.30 \$0.1124 \$0.6905 \$0.6329 \$0.7640 \$0.7640 \$0.7640 \$0.7640 \$0.7640								\$ 60.30 \$141.40 \$868.65	\$60.30 \$78.79 \$443.66	\$60.30 \$46.53 \$316.30	\$60.30 \$23.94 \$162.73	\$40.91 \$278.10	\$60.30 \$78.57 \$534.04	\$361.80 \$410.15 \$868.65 \$443.66 \$316.30 \$162.73 \$278.10 \$534.04	
		TOTAL	\$2,172.22	\$3,566.12	\$4,500.37	\$5,639.97	\$4,686.68	\$3,423.33	\$23,988.70	\$20.88 \$1,091.23	\$11.64 \$594.39	\$6.87 \$430.00	\$3.54 \$250.51	\$6.04 \$385.35	\$11.60 \$684.51	\$60.57 \$3,435.99	\$27,424.70
			Nov	Dec	Jan	Feb	Mar	Арг	Winter	Mari	June	Lada.	A	C4	0-1-1-	Summer	
Mint	Typical Usag		1,553	2,578	3,265	4,103	3,402	2,473	17,374	May 1,258	701	July 414	August 213	Sept 364	October 699	3,649	Annual 21,023
Winte Customer Charge All	Typical Usager 2009 - 201 units @ units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC		\$60.30 \$301.59 \$1,717.31			4,103 \$60.30 \$796.80 \$4,446.01	3,402 \$60.30 \$660.67 \$3,686.41	2,473 \$60.30 \$480.26 \$1,674.47	17,374 \$361.80 \$3,374.03 \$1,717.31 \$2,850.75 \$3,361.64 \$4,446.01 \$3,686.41 \$1,674.47								
Customer Charge All	er 2009 - 201 units @ units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6	0 \$ 60.30 \$0.1942 \$1.1058 \$1.1058 \$1.0296 \$1.0836 \$1.0836 \$0.6771	\$60.30 \$301.59 \$1,717.31 \$25.78	2,578 \$60.30 \$500.65 \$2,850.75	3,265 \$60.30 \$634.06 \$3,361.64	4,103 \$60.30 \$796.80 \$4,446.01 \$68.11	3,402 \$60.30 \$660.67	2,473 \$60.30 \$480.26 \$1,674.47 \$41.05	17,374 \$361.80 \$3,374.03 \$1,717.31 \$2,850.75 \$3,361.64 \$4,446.01 \$3,686.41 \$1,674.47 \$288.41	\$60.30 \$141.40 \$1,051.06							

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-51 Commercial & Industrial Bill - 20,489 therms/year Comparison of Winter 2010-2011 vs. Winter 2009-2010

	Typical Usag Winter 2010 - 201		Nov 1,722	Dec 2,086	Jan 2,330	Feb 2,333	Mar 2,291	Apr 1,872	Winter 12,634	May 1,510	June 1,374	July 1,247	August 1,190	Sept 1,210	October 1,324	Summer 7,855	Annual 20,489
Customer Ch First Over		\$ 60.30 \$0.1862 \$0.1467 \$1.0019 \$1.0019 \$1.0019 \$1.0019 \$1.0019 \$1.0019 \$0.0259	\$60.30 \$242.06 \$61.91 \$1,725.27	\$60.30 \$242.06 \$115.31 \$2,089.96	\$60.30 \$242.06 \$151.10 \$2,334.43 \$60.35	\$60.30 \$242.06 \$151.54 \$2,337.43	\$60.30 \$242.06 \$145.38 \$2,295.35 \$59.34	\$60.30 \$242.06 \$83.91 \$1,875.56 \$48.48	\$361.80 \$1,452.36 \$709.15 \$1,725.27 \$2,089.96 \$2,334.43 \$2,337.43 \$2,295.35 \$1,875.56 \$327.22								
Customer Ch First Over		\$ 60.30 \$0.1112 \$0.0780 \$0.6075 \$0.5499 \$0.6810 \$0.6810 \$0.6810 \$0.6810 \$0.0166	\$2,134.14	\$2,561.66	\$2,848.24	\$2,851.76	\$2,802.43	\$2,310.31	\$15,508.53	\$ 60.30 \$111.20 \$39.78 \$917.33 [\$25.07 \$1,153.67	\$60.30 \$111.20 \$29.17 \$755.56 \$22.81 \$979.04	\$60.30 \$111.20 \$19.27 \$849.21 \$20.70 \$1,060.67	\$60.30 \$111.20 \$14.82 \$810.39 \$19.75 \$1,016.46	\$ 60.30 \$111.20 \$16.38 \$16.38 \$20.09 \$1,031.98	\$60.30 \$111.20 \$25.27 \$901.64 \$21.98 \$1,120.39	\$361.80 \$667.20 \$144.69 \$917.33 \$755.56 \$849.21 \$810.39 \$824.01 \$901.64 \$130.39 \$6,362.22	\$21,870.75
			Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	Assessed	C4	October	Summer	Annual
	Typical Usag		1,722	2,086	2,330	2,333	2,291	1,872	12,634	1,510	1,374	1,247	August 1,190	Sept 1,210	1,324	7,855	20,489
Customer Ch First Over	Winter 2009 - 201 arge units @ 1,300 units @ 1,300 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC			2,086 \$60.30 \$242.06 \$115.31 \$2,217.42													
Customer Ch First	Winter 2009 - 201 arge units @ 1,300 units @ 1,300 units @ CGA 1 CGA 2 CGA 3 CGA 4 CGA 5 CGA 6 LDAC Summer 2009	\$ 60.30 \$0.1862 \$0.1467 \$1.0630 \$1.0630 \$0.9868 \$1.0408 \$1.0408 \$0.6343	1,722 \$60.30 \$242.06 \$61.91 \$1,830.49	2,086 \$60.30 \$242.06 \$115.31 \$2,217.42	2,330 \$60.30 \$242.06 \$151.10 \$2,299.24	2,333 \$60.30 \$242.06 \$151.54 \$2,428.19	2,291 \$60.30 \$242.06 \$145.38 \$2,384.47	1,872 \$60.30 \$242.06 \$83.91 \$1,187.41	12,634 \$361.80 \$1,452.36 \$709.15 \$1,830.49 \$2,217.42 \$2,299.24 \$2,428.19 \$2,384.47 \$1,187.41 \$209.72		\$60.30 \$111.20 \$29.17			\$60.30 \$111.20 \$16.38			

Northern Utilities, Inc. New Hampshire Division Schedule 8 Page 5 of 5

NORTHERN UTILITIES, INC. -- NEW HAMPSHIRE DIVISION

Impact of Rate Changes on Residential Heating Bills by Usage Level Forecast Winter 2010-2011 vs. Actual Winter 2009-2010

Residential Heatin	g	
	Winter 2009-2010	Winter 2010- 2011
Customer Charge	\$9.50	\$9.50
First 50 Therms	\$0.4102	\$0.4102
Over 50 therms	\$0.2990	\$0.2990
LDAC	\$0.0297	\$0.0454
CGA	\$1.0136	\$1.1177

Usage (Therms)	Winter 2009-2010 Bill Amount	Winter 2010-2011 Bill Amount	Total	Bill	Base I	Rate	CG.	A	LDA	C
5	\$16.77	\$17.37	\$0.60	3.6%	\$0.00	0.0%	\$0.52	3.1%	\$0.08	0.5%
10	\$24.04	\$25.23	\$1.20	5.0%	\$0.00	0.0%	\$1.04	4.3%	\$0.16	0.7%
20	\$38.57	\$40.97	\$2.40	6.2%	\$0.00	0.0%	\$2.08	5.4%	\$0.31	0.8%
25	\$45.84	\$48.83	\$3.00	6.5%	\$0.00	0.0%	\$2.60	5.7%	\$0.39	0.9%
30	\$53.11	\$56.70	\$3.59	6.8%	\$0.00	0.0%	\$3.12	5.9%	\$0.47	0.9%
45	\$74.91	\$80.30	\$5.39	7.2%	\$0.00	0.0%	\$4.68	6.2%	\$0.71	0.9%
Average 50 Monthly	\$82.18	\$88.17	\$5.99	7.3%	\$0.00	0.0%	\$5.20	6.3%	\$0.79	1.0%
75	\$115.73	\$124.72	\$8.98	7.8%	\$0.00	0.0%	\$7.81	6.7%	\$1.18	1.0%
125	\$182.85	\$197.82	\$14.98	8.2%	\$0.00	0.0%	\$13.01	7.1%	\$1.96	1.1%
150	\$216.41	\$234.38	\$17.97	8.3%	\$0.00	0.0%	\$15.62	7.2%	\$2.36	1.1%
200	\$283.52	\$307.48	\$23.96	8.5%	\$0.00	0.0%	\$20.82	7.3%	\$3.14	1.1%

Northern Utilities New Hampshire Division Period Covered: November 1, 2010 - April 30, 2011 Variance Analysis

		i	009 / 2010 Winto 6 months actual			110 / 2011 Wint					
1	Therm Sales	27,711,610			28,028,950						
2 3 4		THERM SENDOUT	COSTS	EFFECT ON COST OF GAS	THERM SENDOUT	COSTS	EFFECT ON COST OF GAS				
5 6 7	Demand Charges (Pipeline & Storage)		\$ 11,198,728	\$ 0.4041		\$15,483,102	\$ 0.5524				
8 9	Purchased Gas (Pipeline Commodity)		10,694,244	0.3859		5,408,538	0.1930				
10 11	Storage & Peaking Gas (Commodity)		2,920,424	0.1054		7,629,178	0.2722				
	Hedging (Gain)/Loss		2,884,703	0.1041		1,054,446	0.0376				
15 16	Total Volumes and Cost	\$ -	\$ 27,698,099	\$ 0.9995	\$ -	\$29,575,264	\$ 1.0552				
17 18 19 20 21	Prior Period Balance ATV Reconciliation Interest Refunds from Suppliers		\$2,464,908 \$ 105,685	\$ 0.0889 \$ - \$ 0.0038 \$ -		\$ 2,527,403 - 99,945 -	\$ 0.0902 \$ - \$ 0.0036 \$ -				
21 22 23 24 25 26 27 28 29 30 31	Prior Period Adjustment Interruptible Sales Margin Capacity Release, Asset Mgmt, PNGTS Working Capital Allowance Bad Debt Allowance Fuel Inventory Financing Local Production and Storage Misc Overhead		7,649 (1,665,775) (83,069) (2,655) 7,801 686,673 95,845	\$ (0.0030) \$ (0.0001) \$ 0.0003 \$ 0.0248 \$ 0.0035		(1,771,080) (30,222) 133,747 10,094 686,673 98,333	\$ (0.0011) \$ 0.0048 \$ 0.0004 \$ 0.0245 \$ 0.0035				
	Total Anticipated Indirect Cost of Gas Total Adjusted Cost		\$1,617,062 29,315,161	\$ 0.0584 \$ 1.0579		1,754,892 31,330,157	\$ 0.0626 \$ 1.1178				

Northern Utilities - NEW HAMPSHIRE DIVISION Allocation of Demand Costs to Customer Classes

Base Capacity Costs

1	BASE SENDOUT BY CLASS	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	WINTER
2	Total Therms							
3	Res Heat	390,983	404,016	404,016	364,917	404,016	390,983	2,358,930 Schedule 10B, LN 52
4	Res General	15,639	16,160	16,160	14,597	16,160	15,639	94,356 Schedule 10B, LN 53
5	G50 Low Annual-Low Winter	111,303	115,013	115,013	103,882	115,013	111,303	671,525 Schedule 10B, LN 54
6	G40 Low Annual-High Winter	65,573	67,759	67,759	61,201	67,759	65,573	395,622 Schedule 10B, LN 55
7	G51 Med Annual-Low Winter	143,292	148,068	148,068	133,739	148,068	143,292	864,526 Schedule 10B, LN 56
8	G41 Med Annual-High Winter	119,756	123,747	123,747	111,772	123,747	119,756	722,525 Schedule 10B, LN 57
9	G52 High Annual-Low Winter	8,488	11,047	11,968	10,859	10,482	9,159	62,003 Schedule 10B, LN 58
10	G42 High Annual-High Winter	11,459	11,841	11,841	10,695	11,841	11,459	69,136 Schedule 10B, LN 59
11	Total Firm Sales	866,491	897,651	898,572	811,662	897,086	867,162	5,238,625 Sum LN 3 : LN 10
12		1		1				
	% of Total	I		1				
14	Res Heat	45.12%	45.01%	44.96%	44.96%	45.04%	45.09%	LN 3 / LN 11
15	Res General	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	LN 4 / LN 11
16	G50 Low Annual-Low Winter	12.85%	12.81%	12.80%	12.80%	12.82%	12.84%	LN 5 / LN 11
17	G40 Low Annual-High Winter	7.57%	7.55%	7.54%	7.54%	7.55%	7.56%	LN 6 / LN 11
18	G51 Med Annual-Low Winter	16.54%	16.50%	16.48%	16.48%	16.51%	16.52%	LN 7 / LN 11
19	G41 Med Annual-High Winter	13.82%	13.79%	13.77%	13.77%	13.79%	13.81%	LN 8 / LN 11
20	G52 High Annual-Low Winter	0.98%	1.23%	1.33%	1.34%	1.17%	1.06%	LN 9 / LN 11
21	G42 High Annual-High Winter	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	LN 10 / LN 11
22	Total Firm Sales	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	LN 11 / LN 11

\$ 57,91 \$ 26,13			\$	57.910	0	57.040	•						
	0 \$	26.064			ΙΨ	57,910	5 5	57,910	\$	57,910	\$	347.460	Schedule 1A, LN 69
\$ 104		20,004	\$	26,037	\$	26,036	\$	26.081	\$	26,110			LN 25 * LN 14
Ψ 1,04	5 \$	1,043	\$	1,041	\$	1,041	\$	1,043	\$	1,044			LN 25 * LN 15
\$ 7,43	9 \$	7,420	\$	7,412	\$	7,412	\$	′ 1				•	LN 25 * LN 16
\$ 4,38	2 \$	4,371	\$	4,367	\$	4,367	\$	4,374	\$	4,379	\$	26,240	LN 25 * LN 17
\$ 9,57	7 \$	9,552	\$	9,542	\$	9,542	\$	9,558	\$	9,569	\$	57.341	LN 25 * LN 18
\$ 8,00	4 \$	7,983	\$	7,975	\$	7,975	\$	7,988	\$	7,997	\$	47,922	LN 25 * LN 19
\$ 56	7 \$	713	\$	771	\$	775	\$	677	\$	· 1		,	LN 25 * LN 20
\$ 76	3 \$	764	\$	763	\$	763	\$	764	\$	765	\$	4.586	LN 25 * LN 21
												.,	
	. .	,		27,079	\$	27,077	\$	27,124	\$	27,155	\$	162,717	LN 26 + LN 27
\$ 17,58	2 \$	17,685	\$	17,726	\$	17,728	\$	17,659	\$	17,614	\$	105.995	LN 28 + LN 30 + LN 32
\$ 13,15	2 \$	13,118	\$	13,105	\$	13,104	\$	13,127	\$	· · ·			LN 29 + LN 31 + LN 33
-	\$ 4,38: \$ 9,57 \$ 8,000 \$ 56: \$ 76: \$ 27,170 \$ 17,58:	\$ 4,382 \$ 9,577 \$ 8,004 \$ 567 \$ 766 \$ \$ 27,176 \$ 17,582 \$	\$ 4,382 \$ 4,371 \$ 9,577 \$ 9,552 \$ 8,004 \$ 7,983 \$ 567 \$ 713 \$ 766 \$ 764 \$ 27,176 \$ 27,107 \$ 17,582 \$ 17,685	\$ 4,382 \$ 4,371 \$ \$ 9,577 \$ 9,552 \$ \$ 8,004 \$ 7,983 \$ \$ 567 \$ 713 \$ \$ 766 \$ 764 \$ \$ 27,176 \$ 27,107 \$ \$ 17,582 \$ 17,685 \$	\$ 4,382 \$ 4,371 \$ 4,367 \$ 9,577 \$ 9,552 \$ 9,542 \$ 8,004 \$ 7,983 \$ 7,975 \$ 567 \$ 713 \$ 771 \$ 766 \$ 764 \$ 763 \$ 27,176 \$ 27,107 \$ 27,079 \$ 17,582 \$ 17,685 \$ 17,726	\$ 4,382 \$ 4,371 \$ 4,367 \$ \$ 9,577 \$ 9,552 \$ 9,542 \$ \$ 8,004 \$ 7,983 \$ 7,975 \$ \$ 567 \$ 713 \$ 771 \$ \$ 766 \$ 764 \$ 763 \$ \$ \$ 17,582 \$ 17,685 \$ 17,726 \$	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 4,367 \$ 4,367 \$ 4,367 \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,542 \$ 9,542 \$ 9,542 \$ 9,542 \$ 7,975 \$ 567 \$ 713 \$ 771 \$ 775 \$ 766 \$ 764 \$ 763 \$ 763 \$ 763 \$ 27,077 \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ \$ 9,542 \$ \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ \$ 567 \$ 713 \$ 771 \$ 775 \$ \$ 766 \$ 764 \$ 763 \$ 763 \$ 763 \$ \$ \$ 27,176 \$ 27,077 \$ \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728 \$	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 7,424 \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ 4,367 \$ 4,374 \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,558 \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ 7,988 \$ 567 \$ 713 \$ 771 \$ 775 \$ 677 \$ 766 \$ 764 \$ 763 \$ 763 \$ 764 \$ \$ 27,176 \$ 27,107 \$ 27,079 \$ 27,077 \$ 27,124 \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728 \$ 17,659	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 7,424 \$ \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ 4,367 \$ 4,374 \$ \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,542 \$ 9,558 \$ \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ 7,988 \$ \$ 567 \$ 713 \$ 771 \$ 775 \$ 677 \$ \$ 766 \$ 764 \$ 763 \$ 763 \$ 763 \$ 764 \$ \$ \$ 27,176 \$ 27,124 \$ \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728 \$ 17,659 \$	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 7,424 \$ 7,433 \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ 4,374 \$ 4,379 \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,558 \$ 9,569 \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ 7,988 \$ 7,997 \$ 567 \$ 713 \$ 771 \$ 775 \$ 677 \$ 612 \$ 766 \$ 764 \$ 763 \$ 763 \$ 763 \$ 764 \$ 765 \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728 \$ 17,659 \$ 17,614	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 7,424 \$ 7,433 \$ \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ 4,367 \$ 4,374 \$ 4,379 \$ \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,558 \$ 9,569 \$ \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ 7,988 \$ 7,997 \$ \$ 567 \$ 713 \$ 771 \$ 775 \$ 677 \$ 612 \$ \$ 766 \$ 764 \$ 763 \$ 763 \$ 764 \$ 765 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 7,439 \$ 7,420 \$ 7,412 \$ 7,412 \$ 7,424 \$ 7,433 \$ 44,540 \$ 4,382 \$ 4,371 \$ 4,367 \$ 4,367 \$ 4,374 \$ 4,374 \$ 26,240 \$ 9,577 \$ 9,552 \$ 9,542 \$ 9,542 \$ 9,558 \$ 9,569 \$ 57,341 \$ 8,004 \$ 7,983 \$ 7,975 \$ 7,975 \$ 7,988 \$ 7,997 \$ 47,922 \$ 567 \$ 713 \$ 771 \$ 775 \$ 677 \$ 612 \$ 4,114 \$ 766 \$ 764 \$ 763 \$ 763 \$ 763 \$ 764 \$ 765 \$ 4,586 \$ \$ 27,176 \$ 27,107 \$ 27,077 \$ 27,077 \$ 27,124 \$ 27,155 \$ 162,717 \$ 17,582 \$ 17,685 \$ 17,726 \$ 17,728 \$ 17,659 \$ 17,614 \$ 105,995

Northern Utilities, Inc. New Hampshire Division Schedule 10A Page 2 of 4

Re	maining Capacity Costs	Column A	Column B	Column C	Column D
				Remaining	% of Total
		Design Day	Avg Daily	Design Day	Remaining
		Demand	Base Use	Demand	Design Day
39		(MMBtu)	Load (MMBtu)	(MMBtu)	Demand
40	Res Heat	16,366	1,404	14,962	46.95%
	Res General	214	56	158	0.50%
	G50 Low Annual-Low Winter	880	346	534	1.67%
	G40 Low Annual-High Winter	7,688	263	7,425	23.30%
44	G51 Med Annual-Low Winter	1,388	492	896	2.81%
45	G41 Med Annual-High Winter	7,566	443	7.123	22.35%
46	G52 High Annual-Low Winter	42	24	17	0.05%
47	G42 High Annual-High Winter	846	94	753	2.36%
48	TOTAL	34,989	3,122	31,868	100.00%
49					

Company Analys	
Company Analys	is
Company Analys	is
Company Analys	is
Company Analys	is
Company Analys	is
Company Analys	is
Company Analys	is
Sum LN 40: LN	

50 REMAINING PIPELINE DEMAND

		Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Арг-11		WINTER	
NH DIVISION TOTAL - REMAINING PIPELINE	\$	98,866	\$	222,178	\$	577,963	\$	314,622	\$	275,764	\$				Schedule 1A, LN 70
			Ì		Ì			•	'	•		,		.,,	00.1000.00 17 (, 2.11 7 0
	\$	46,418	\$	104,314	\$	271,357	\$	147,717	\$	129,473	\$	50.445	\$	749 724	LN 40 Col D * LN 52
	\$	491	\$	1,103	\$	2,868	\$	1,561	\$,			•	LN 41 Col D * LN 52
	\$	1,656	\$	3,721	\$	9,679	\$	5,269	\$	· · · · · ·		1			LN 42 Col D * LN 52
	\$	23,036	\$	51,768	\$	134,666	\$	73,307	\$	· ' I		' 1			LN 43 Col D * LN 52
	\$	2,779	\$	6,244	\$	16,244	\$				\$, , , , , , , , , , , , , , , , , , ,			LN 44 Col D * LN 52
	\$	22,098	\$	49,661	\$	129,185	\$	70,324	\$, ,	\$	' 1			LN 45 Col D * LN 52
	\$	54	\$	122	\$	317	\$	172	\$	151	\$				LN 46 Col D * LN 52
	\$	2,335	\$	5,246	\$	13,648	\$	7,429	\$	6,512	\$				LN 47 Col D * LN 52
TOTAL	\$	98,866	\$	222,178	\$	577,963	\$	314,622	\$	275,764	\$				Sum LN 54 : LN 61
														.,,	
· · · · · · · · · · · · · · · · · · ·	\$	46,909	\$	105,416	\$	274,225	\$	149,278	\$	130,842	\$	50.978	S	757.649	LN 54 + LN 55
	\$	4,488	\$	10,087	\$	26,239	\$	14,284	\$	' '					LN 56 + LN 58 + LN 60
SALES LLF CLASSES	\$	47,469	\$	106,675	\$	277,498	\$	151,060	\$, ,		′ 1			LN 57 + LN 59 + LN 61
	NH DIVISION TOTAL - REMAINING PIPELINE Res Heat Res General 350 Low Annual-Low Winter 340 Low Annual-High Winter G51 Med Annual-Low Winter G41 Med Annual-Low Winter G41 Med Annual-High Winter G52 High Annual-Low Winter G42 High Annual-High Winter TOTAL Residential GALES HLF CLASSES GALES LLF CLASSES	Res Heat Res General S50 Low Annual-Low Winter G40 Low Annual-High Winter S51 Med Annual-Low Winter S41 Med Annual-Low Winter S42 High Annual-Low Winter S42 High Annual-High Winter S70 TOTAL Residential SALES HLF CLASSES	Res Heat Res General State Sen	Res Heat Res General State Sta	SALES HIEF CLASSES SALES	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ Res Heat \$ 46,418 \$ 104,314 \$ \$ Res General \$ 491 \$ 1,103 \$ \$ 350 Low Annual-Low Winter \$ 1,656 \$ 3,721 \$ \$ 340 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ \$ 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ \$ 341 Med Annual-High Winter \$ 22,098 \$ 49,661 \$ \$ 352 High Annual-Low Winter \$ 54 \$ 122 \$ \$ 342 High Annual-High Winter \$ 2,335 \$ 5,246 \$ \$ TOTAL \$ 98,866 \$ 222,178 \$ Residential \$ 46,909 \$ 105,416 \$ \$ 354 LES HLF CLASSES \$ 4,488 \$ 10,087 \$	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 Res Heat \$ 46,418 \$ 104,314 \$ 271,357 Res General \$ 491 \$ 1,103 \$ 2,868 350 Low Annual-Low Winter \$ 1,656 \$ 3,721 \$ 9,679 340 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ 134,666 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 341 Med Annual-High Winter \$ 22,098 \$ 49,661 \$ 129,185 352 High Annual-Low Winter \$ 54 \$ 122 \$ 317 342 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 TOTAL \$ 98,866 \$ 222,178 \$ 577,963 Residential \$ 46,909 \$ 105,416 \$ 274,225 3ALES HLF CLASSES \$ 4,488 \$ 10,087 \$ 26,239	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ Res Heat \$ 46,418 \$ 104,314 \$ 271,357 \$ 491 \$ 1,103 \$ 2,868 \$ 300 Low Annual-Low Winter \$ 1,656 \$ 3,721 \$ 9,679 \$ 491 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 351 Med Annual-Low Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 \$ 364 Med Annual-Ligh Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 352 High Annual-Low Winter \$ 54 \$ 122 \$ 317 \$ 364 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ TOTAL \$ 98,866 \$ 222,178 \$ 577,963 \$ 364 S SALES HLF CLASSES \$ 4,488 \$ 10,087 \$ 26,239 \$ 364 S SALES HLF CLASSES \$ 4,488 \$ 10,087 \$ 2	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 Res Heat \$ 46,418 \$ 104,314 \$ 271,357 \$ 147,717 Res General \$ 491 \$ 1,103 \$ 2,868 \$ 1,561 350 Low Annual-Low Winter \$ 1,656 \$ 3,721 \$ 9,679 \$ 5,269 340 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 73,307 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 \$ 8,843 341 Med Annual-High Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 352 High Annual-Low Winter \$ 54 \$ 122 \$ 317 \$ 172 342 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ 7,429 TOTAL \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 Residential \$ 46,909 \$ 105,416 \$ 274,225 \$ 149,278 304 ES HLF CLASSES \$ 4,488 \$ 10,087 \$ 26,239 \$ 14,284	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ Res Heat \$ 46,418 \$ 104,314 \$ 271,357 \$ 147,717 \$ Res General \$ 491 \$ 1,103 \$ 2,868 \$ 1,561 \$ 350 Low Annual-Low Winter \$ 1,665 \$ 3,721 \$ 9,679 \$ 5,269 \$ 340 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 73,307 \$ 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 \$ 8,843 \$ 361 Med Annual-High Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 \$ 352 High Annual-Low Winter \$ 54 \$ 122 \$ 317 \$ 172 \$ 3642 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ 7,429 \$ TOTAL \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ Residential \$ 46,909 \$ 105,416 \$ 274,225 \$ 149,278 \$ 36ALES HLF CLASSES \$ 4,488 \$ 10,087 \$ 26,239 \$ 14,284 \$	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 3 314,622 \$ 275,764 \$ 3 314,622 \$ 275,764 \$ 3 314,622 \$ 275,764 \$ 3 314,622 \$ 275,764 \$ 3 314,622 \$ 317,717 \$ 129,473 \$ 3 314,623 \$ 314,622 \$ 317,717 \$ 129,473 \$ 32,036 \$ 1,361 \$ 1,369 \$ 3,721 \$ 9,679 \$ 5,269 \$ 4,618 \$ 340,000 \$ 13,036 \$ 51,768 \$ 134,666 \$ 73,307 \$ 64,253 \$ 351 Med Annual-Low Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 73,307 \$ 64,253 \$ 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 \$ 8,843 \$ 7,751 \$ 3641 Med Annual-High Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 \$ 61,638 \$ 322,198 \$ 49,661 \$ 129,185 \$ 70,324 \$ 61,638 \$ 324,249 \$ 122 \$ 317 \$ 172 \$ 151 \$ 324,249 \$ 13,644 \$ 7,429 \$ 6,512 \$ 10,041 \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 32,335 \$ 5,246 \$ 13,648 \$ 7,429 \$ 6,512 \$ 10,041 \$ 10,0	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 107,443 Res Heat \$ 46,418 \$ 104,314 \$ 271,357 \$ 147,717 \$ 129,473 \$ 50,445 Res General \$ 491 \$ 1,103 \$ 2,868 \$ 1,561 \$ 1,369 \$ 533 350 Low Annual-Low Winter \$ 1,665 \$ 3,721 \$ 9,679 \$ 5,269 \$ 4,618 \$ 1,799 340 Low Annual-High Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 73,307 \$ 64,253 \$ 25,034 351 Med Annual-Low Winter \$ 2,779 \$ 6,244 \$ 16,244 \$ 8,843 \$ 7,751 \$ 3,020 3641 Med Annual-Ligh Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 \$ 61,638 \$ 24,015 352 High Annual-Low Winter \$ 54 \$ 122 \$ 317 \$ 172 \$ 151 \$ 59 3642 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ 7,429 \$ 6,512 \$ 2,537 TOTAL \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 107,443 Residential \$ 46,909 \$ 105,416 \$ 274,225 \$ 149,278 \$ 130,842 \$ 50,978 SALES HLF CLASSES \$ 4,888 \$ 10,087 \$ 26,239 \$ 14,284 \$ 12,520 \$ 4,878	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 107,443 \$ Res Heat \$ 46,418 \$ 104,314 \$ 271,357 \$ 147,717 \$ 129,473 \$ 50,445 \$ 350 Low Annual-Low Winter \$ 1,103 \$ 2,868 \$ 1,561 \$ 1,369 \$ 533 \$ 300 Low Annual-High Winter \$ 1,665 \$ 3,721 \$ 9,679 \$ 5,269 \$ 4,618 \$ 1,799 \$ 324,015 \$ 325 High Annual-Low Winter \$ 23,036 \$ 51,768 \$ 134,666 \$ 73,307 \$ 64,253 \$ 25,034 \$ 325 High Annual-Low Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 \$ 61,638 \$ 24,015 \$ 325 High Annual-Low Winter \$ 22,098 \$ 49,661 \$ 129,185 \$ 70,324 \$ 61,638 \$ 24,015 \$ 325 High Annual-Low Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ 7,429 \$ 6,512 \$ 2,537 \$ 107,443 \$ 325 High Annual-High Winter \$ 2,335 \$ 5,246 \$ 13,648 \$ 7,429 \$ 6,512 \$ 2,537 \$ 107 Log Figure 1	NH DIVISION TOTAL - REMAINING PIPELINE \$ 98,866 \$ 222,178 \$ 577,963 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 314,622 \$ 275,764 \$ 107,443 \$ 1,596,836 \$ 1,561 \$ 1,369 \$ 533 \$ 7,925 \$ 1,656 \$ 3,721 \$ 9,679 \$ 5,269 \$ 4,618 \$ 1,799 \$ 26,741 \$ 1,000 \$ 1

69			Nov-10		Dec-10	Г	Jan-11		Feb-11		Mar-11		Apr-11		WINTER	
70	NH DIVISION TOTAL - PEAKING & STORAGE	\$	838,236	\$	1,883,740	\$	4,900,270	\$	2,667,531	\$	2,338,074				13,538,806	Schedule 1A, LN 73
71	D. H. A														. ,	
	Res Heat Res General	\$	393,556				2,300,705			\$	1,097,739	\$	427,699	\$	6,356,546	LN 40 Col D * LN 70
	G50 Low Annual-Low Winter	\$	4,160	\$	9,349		24,320		,		11,604		4,521	\$	67,192	LN 41 Col D * LN 70
	G40 Low Annual-High Winter	\$	14,037	\$	31,546		,		44,671		39,154		15,255	\$	226,725	LN 42 Col D * LN 70
	G51 Med Annual-Low Winter	Ф					1,141,767		621,537		544,773		,	\$	3,154,553	LN 43 Col D * LN 70
	G41 Med Annual-High Winter	Φ	23,559 187,360	\$	52,944 421.049		,	-	74,973	,	65,713		25,603		380,517	LN 44 Col D * LN 70
	G52 High Annual-Low Winter	\$	459	Φ	1.032		1,095,296 2.684		596,240	- 1	522,600		203,614	\$	3,026,160	LN 45 Col D * LN 70
	G42 High Annual-High Winter	\$		\$	44,481				1,461 62,989	\$	1,281		499	\$	7,417	LN 46 Col D * LN 70
80	TOTAL	\$	838,236	\$			4,900,270				55,210	\$		\$	319,697	LN 47 Col D * LN 70
81		<u> </u>	000,200	Ψ.	1,000,740	Ψ	4,300,270	Ψ	2,007,331	Đ	2,330,014	D	910,955	<u>\$</u>	13,538,806	Sum LN 72 : LN 79
	Residential	\$	397,716	\$	893,775	\$	2,325,024	\$	1,265,660	s	1 109 342	\$	432,220	\$	6.423.737	LN 72 + LN 73
	SALES HLF CLASSES	\$	38,056	\$	85,521		222,471	,	121.105		106.148		,	\$	614.659	LN 74 + LN 76 + LN 78
	SALES LLF CLASSES	\$	402,464	\$	904,443	\$	2,352,775	\$		-	1,122,583	-		\$	6,500,410	LN 75 + LN 77 + LN 79
85										<u> </u>	1 11222			<u> </u>	3,000,410	CITTO - CITTO - CIVIS

86	CAPACITY RELEASE MARGINS & ASSET MANAGEM	1EN	T CREDIT	ΒY	CLASS									
87			Nov-10		Dec-10	Jan-11	Feb-11		Mar-11	Γ	Apr-11		WINTER	***************************************
88	NH DIVISION - MONTHLY CAP. RELEASE	\$	(118,194)	\$	(248,666)	\$ (625, 108)	\$ (346,478)	\$	(305,364)	\$	(127.269)	Si	(1,771,080)	Schedule 1A, LN 76
89			` 1		` ′ ′	(, , , , , , ,	(, ,		(,,	1	(127,200)	۳	(1,111,000)	Concado III, EN 10
90	Res Heat	\$	(55,493)	\$	(116,750)	\$ (293,492)	\$ (162,673)	\$	(143,370)	\$	(59,754)	\$	(831,532)	LN 40 Col D * LN 88
	Res General	\$	(587)	\$	(1,234)	\$ (3,102)	\$ (1,720)	\$	(1,515)		(632)		(8,790)	LN 41 Col D * LN 88
	G50 Low Annual-Low Winter	\$	(1,979)	\$	(4,164)	\$ (10,468)	\$ (5,802)	\$	(5,114)		(2,131)		(29,659)	LN 42 Col D * LN 88
	G40 Low Annual-High Winter	\$	(27,539)	\$	(57,939)	\$ (145,651)	\$ (80,730)	\$	(71,150)		(29,654)		(412,663)	LN 43 Col D * LN 88
	G51 Med Annual-Low Winter	\$	(3,322)	\$	(6,989)	\$ (17,569)	\$ (9,738)	\$	(8,582)	\$	(3,577)		(49,777)	
	G41 Med Annual-High Winter	\$	(26,419)	\$	(55,581)	\$ (139,723)	\$ (77,444)	\$	(68,254)		(28,447)		(395,867)	LN 45 Col D * LN 88
	G52 High Annual-Low Winter	\$	(65)	\$	(136)	\$ (342)	\$ (190)	\$	(167)		` '.ma(1		(970)	LN 46 Col D * LN 88
	G42 High Annual-High Winter	\$	(2,791)	\$	(5,872)	\$ (14,761)	\$ (8,182)	\$	(7,211)		(3,005)		(41,821)	LN 47 Col D * LN 88
98	TOTAL	\$	(118,194)	\$	(248,666)	\$ (625,108)	\$ (346,478)	\$	(305,364)	\$			(1,771,080)	Sum LN 90 : LN 97
99														
	Residential	\$	(56,080)	\$	(117,984)	\$ (296,594)	\$ (164,393)	\$	(144,886)	\$	(60,385)	\$	(840,322)	LN 90 + LN 91
	SALES HLF CLASSES	\$	(5,366)	\$	(11,289)	\$ (28,380)	\$ (15,730)	\$	(13,863)	\$	(5,778)		(80,407)	
	SALES LLF CLASSES	\$	(56,749)	\$	(119,393)	\$ (300,134)	\$ (166,355)	\$	(146,615)		(61,106)		, , ,	LN 93 + LN 95 + LN 97
103							 	***************************************					(,,	LITTO LITTO

104	INTERRUPTIBLE	READCING	DV OL ACC
104	INICKKUPIIBLE	MARGINS	BY CLASS

105 106 NH DIVISION - MONTHLY INTERR MARGINS 107	Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Apr-11		WINTER		I
	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	Schedule 1A, LN 77
08 Res Heat	\$	_	\$	-	\$	_	\$	_	\$	_	S	_	4	_	LN 40 Col D * LN 106
09 Res General	\$	-	\$	_	18	_	\$	_	\$	_	6		¢	_	LN 41 Col D * LN 106
10 G50 Low Annual-Low Winter	\$	_	ŝ	_	1 \$	_	1 \$	_	\$	_	1 &		6	-	LN 42 Col D * LN 106
11 G40 Low Annual-High Winter	\$	_	\$	_	Īš	-	İš	_	\$	_	J &		1 6	-	LN 43 Col D * LN 106
2 G51 Med Annual-Low Winter	\$	_	Š	_	ŝ	_	š	_	\$	_	6	-	🖁	-	LN 44 Col D * LN 106
3 G41 Med Annual-High Winter	\$	_	\$	_	ŝ	_	\$	_	\$	_	4	-	6	-	LN 45 Col D * LN 106
4 G52 High Annual-Low Winter	\$	-	\$	-	ŝ	_	Š	_	1 \$	_	\$	_	\$		LN 46 Col D * LN 106
5 G42 High Annual-High Winter	\$	_	1\$	-	\$	-	ŝ	_	s	_	1 \$	_	6	-	LN 47 Col D * LN 106
6 TOTAL	\$	-	\$		\$	-	\$		\$	_	\$		\$		Sum LN 108 : LN 115
7			1				1		 		+		Ψ		3011 LN 100 . LN 113
8 Residential	\$	-	\$	-	\$	_	\$	-	\$		\$		\$		LN 108 + LN 109
19 SALES HLF CLASSES	\$	-	\$	_	\$	-	\$	-	\$	-	\$	_	\$	_	LN 110 + LN 112 + LN 114
20 SALES LLF CLASSES 21	\$	-	\$		\$	-	\$	-	\$	-	\$	_	ŝ	_	LN 111 + LN 113 + LN 115

122 REMAINING RE-ENTRY FEE CREDIT															
123	Т	Nov-10		Dec-10		Jan-11	Π	Feb-11		Mar-11		Apr-11		WINTER	
124 NH DIVISION - RE-ENTRY FEE CREDITS	\$	-	\$	-	\$	-	\$	-	\$	_	\$	-	\$	-	Schedule 1A, LN 78
125							ļ								
126 Res Heat	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	_	LN 40 Col D * LN 124
127 Res General	\$	_	\$	-	\$	-	\$	-	\$	_	\$	-	\$	-	LN 41 Col D * LN 124
128 G50 Low Annual-Low Winter	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	LN 42 Col D * LN 124
129 G40 Low Annual-High Winter	\$	-	\$	_	\$	_	\$	-	\$	_	\$	-	\$	_	LN 43 Col D * LN 124
130 G51 Med Annual-Low Winter	\$	-	\$	_	\$	-	\$	-	\$	_	\$	-	\$	_	LN 44 Col D * LN 124
131 G41 Med Annual-High Winter	\$	_	\$		\$	-	\$	· -	\$		\$	_	\$	_	LN 45 Col D * LN 124
132 G52 High Annual-Low Winter	\$	_	\$	-	\$	-	\$	_	\$	_	\$	_	\$	_	LN 46 Col D * LN 124
133 G42 High Annual-High Winter	\$	_	\$	-	\$	_	\$	_	\$	_	\$	_	\$	_	LN 47 Col D * LN 124
134 TOTAL	\$	-	\$		\$	_	\$	-	\$	-	\$	-	\$	_	Sum LN 126 : LN 133
135			Ť.				<u> </u>		Ť		-		Ť		30111 211 123 : 211 133
136 Residential	\$	-	\$	_	\$	-	\$	_	\$	_	\$		\$	_	LN 126 + LN 127
137 SALES HLF CLASSES	\$	-	\$	_	\$		\$	_	\$	-	\$	_	\$	-	LN 128 + LN 130 + LN 132
138 SALES LLF CLASSES	\$	_	\$		\$	-	\$	_	\$	-	\$	_	\$	_	LN 129 + LN 131 + LN 133
139						***************************************					<u> </u>				4.1.120 2.1.107 2.11100
140 TOTAL NON-BASE CAPACITY COSTS															
141		Nov-10		Dec-10		Jan-11	Γ	Feb-11		Mar-11		Apr-11		WINTER	
142 Res Heat	\$	384,481	\$	871,990	\$	2,278,569	\$	1,237,465	\$	1,083,842	\$	418,390	\$	6,274,737	Sum of Ln 54, 72, 90, 108, 126
143 Res General	\$	4,064		9,217	\$	24,086			\$	11,457	\$	4,423	\$	66,327	Sum of Ln 55, 73, 91, 109, 127
144 G50 Low Annual-Low Winter	\$	13,714	\$	31,102	\$	81,272	\$	44,138	\$	38,658	\$		\$	223,808	Sum of Ln 56, 74, 92, 110, 128
145 G40 Low Annual-High Winter	\$	190,806	\$	432,741	\$		\$		\$	537,876	\$	207,634	\$	3,113,954	Sum of Ln 57, 75, 93, 111, 129
146 G51 Med Annual-Low Winter	\$	23,016		52,199			\$		\$	64.881	\$	25,046	\$	375,620	Sum of Ln 58, 76, 94, 112, 130
147 G41 Med Annual-High Winter	\$	183,040					\$	589,120	\$	515,984	\$	199,183	\$	2,987,213	Sum of Ln 59, 77, 95, 113, 131
148 G52 High Annual-Low Winter	\$	449		1,017	\$		\$	1,444	\$	1,265	\$	488	\$	7,321	Sum of Ln 60, 78, 96, 114, 132
149 G42 High Annual-High Winter	\$	19,337	\$	43,856			\$	62,237	\$	54,511	\$	21,043	\$	315,582	Sum of Ln 61, 79, 97, 115, 133
150 TOTAL	\$	818,907	\$	1,857,251				2,635,676		2,308,474	\$			13,364,562	Sum LN 142 : LN 149
151	1				Ť		<u> </u>	,,	_		Ť	00.,,20	<u> </u>	10,001,002	
152 Residential	\$	388,546	\$	881,207	S	2,302,655	\$	1,250,545	\$	1,095,298	\$	422,813	\$	6,341,064	LN 142 + LN 143
153 SALES HLF CLASSES	\$	37,178			\$		\$	119,659	\$	104.804	\$	40,457	\$	606,748	LN 144 + LN 146 + LN 148
154 SALES LLF CLASSES	\$	393,183						1,265,471	\$	1,108,372	\$	427,859		6,416,750	LN 145 + LN 147 + LN 149
155			·				·			, , , , , , , , , , , , , , , , , , , ,			<u> </u>		
156 TOTAL CAPACITY COSTS															
157		Nov-10		Dec-10		Jan-11		Feb-11		Mar-11		Apr-11		WINTER	
158 Res Heat	\$	410,612	\$	898,054	\$	2,304,607	\$	1,263,501	\$	1,109,922	\$	444,500	\$	6,431,196	LN 142 + LN 26
159 Res General	\$	5,109	\$		\$	25,127	\$	14,122	\$	12,500	\$	5,467	\$	72,585	LN 143 + LN 27
160 G50 Low Annual-Low Winter	\$	21,152	\$	38,522	\$	88,684	\$	51,550	\$	46,083	\$	22,356	\$	268,347	LN 144 + LN 28
161 G40 Low Annual-High Winter	\$	195,188	\$		\$	1,135,149	\$			542,250	\$	212,013		3,140,194	LN 145 + LN 29
162 G51 Med Annual-Low Winter	\$	32,592	\$	61,752			\$		\$	74,439	\$	34,615	\$	432,961	LN 146 + LN 30
163 G41 Med Annual-High Winter	\$	191,044	\$	423,111	\$	1,092,733	\$		\$	523,973	\$	207,180		3,035,136	LN 147 + LN 31
164 G52 High Annual-Low Winter	\$	1,016	\$		\$		\$		\$	1,941	\$	1,100		11,435	LN 148 + LN 32
165 G42 High Annual-High Winter	\$	20,103	\$		\$		\$	63,000	\$	55,275	\$		\$	320,168	LN 149 + LN 33
166 TOTAL	\$	876,817	\$	1,915,161	\$					2,366,384	\$			13,712,022	Sum LN 158 : LN 165
167					_	.,,	_			2,000,001		0 10,000	Ψ_	10,7 12,022	Odiff 214 100 : 214 100
168 Residential	\$	415,721	\$	908,314	\$	2,329,734	\$	1,277,623	\$	1,122,422	\$	449,967	\$	6,503,781	LN 158 + LN 159
169 SALES HLF CLASSES	\$	54,761	\$	· ·	\$		\$		\$	122,464	\$		\$	712,743	LN 160 + LN 162 + LN 164
170 SALES LLF CLASSES	\$	406,335	\$			2,343,244	\$	1,278,576	\$	1.121.498	\$			6.495.498	LN 161 + LN 163 + LN 165
171							· · ·	, ,	_ _	.,,	Ť	,001	Ψ_	3, 100, 100	2
172 % ALLOCATION BETWEEN SALES HLF AND LLF															
173 SALES HLF CLASSES								1						9.89%	LN 169 / (LN169 + LN 170)
174 SALES LLF CLASSES						l		1						90.11%	
						J				I				23.1170	

Northern Utilities, Inc. New Hampshire Division Schedule 10B Page 1 of 4

Northern Utilities - NEW HAMPSHIRE DIVISION

2010 - 2011 Period

	Forecasted Normal Sales By Class- Therms								
Line	Calendar Month Firm Sales Volumes								
No.	Normal Winter	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	TOTAL	Winter
1	Res Heat	1,386,117	2,028,539	2,940,793	2,483,851	2,462,475	1,513,652	15,976,924	12,815,427
2	Res General	28,367	33,694	45,558	40,897	40,603	30,695	333,007	219,813
3	Total Residential	1,414,484	2,062,233	2,986,351	2,524,748	2,503,078	1,544,347	16,309,931	13,035,240
4	G50 Low Annual-Low Winter	126,011	160,228	185,341	168,024	169,955	129,888	1,665,440	939,446
5	G40 Low Annual-High Winter	549,636	954,242	1,555,171	1,338,420	1,186,947	670,021	7,128,120	6,254,438
6	G51 Med Annual-Low Winter	216,377	253,938	268,531	229,592	249,273	184,512	2,368,685	1,402,223
7	G41 Med Annual-High Winter	629,249	1,127,812	1,221,751	1,030,698	1,035,822	594,798	6,950,395	5,640,131
8	G52 High Annual-Low Winter	8,288	10,781	11,698	10,614	10,245	8,952	202,215	60,577
9	G42 High Annual-High Winter	103,055	153,283	151,387	127,883	102,208	59,078	804,805	696,894
10	Total C&I	1,632,616	2,660,284	3,393,879	2,905,231	2,754,451	1,647,249	19,119,661	14,993,709
11	Total Sales	3,047,100	4,722,517	6,380,229	5,429,979	5,257,529	3,191,596	35,429,591	28,028,950
12									
13	Residential Heat & Non Heat	1,414,484	2,062,233	2,986,351	2,524,748	2,503,078	1,544,347	16,309,931	13,035,240
14	SALES HLF CLASSES	350,675	424,947	465,570	408,229	429,473	323,352	4,236,340	2,402,246
15	SALES LLF CLASSES	1,281,941	2,235,337	2,928,309	2,497,002	2,324,978	1,323,897	14,883,320	12,591,463
16	Total Firm Sales	3,047,100	4,722,517	6,380,229	5,429,979	5,257,529	3,191,596	35,429,591	28,028,950
17									
18	ESTIMATED SENDOUT BY CLASS - Therms								

17										
18	ESTIMATED SENDOUT BY CLASS - Therms									
19	Calendar Month Sendout Volumes (Includes Los	s & Unaccounted	For)							
20	Normal Winter		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	TOTAL	Winter
21	Res Heat		1,419,511	2,078,694	3,008,803	2,541,163	2,519,528	1,548,654	16,354,570	13,116,353
22	Res General		29,050	34,527	46,611	41,841	41,543	31,405	340,931	224,978
23	G50 Low Annual-Low Winter		129,046	164,189	189,628	171,901	173,892	132,892	1,705,286	961,548
24	G40 Low Annual-High Winter		562,878	977,836	1,591,136	1,369,303	1,214,448	685,515	7,295,923	6,401,115
25	G51 Med Annual-Low Winter		221,590	260,217	274,741	234,890	255,049	188,779	2,425,336	1,435,264
26	G41 Med Annual-High Winter		644,409	1,155,697	1,250,006	1,054,481	1,059,821	608,553	7,115,143	5,772,966
27	G52 High Annual-Low Winter	ł	8,488	11,047	11,968	10,859	10,482	9,159	207,099	62,003
28	G42 High Annual-High Winter		105,538	157,072	154,888	130,834	104,576	60,444	823,902	713,353
29	Subtotal									
30	Residential	ļ	1,448,561	2,113,221	3,055,414	2,583,004	2,561,072	1,580,059	16,695,501	13,341,331
31	SALES HLF CLASSES		359,124	435,454	476,336	417,649	439,423	330,829	4,337,721	2,458,815
32	SALES LLF CLASSES		1,312,825	2,290,605	2,996,030	2,554,617	2,378,845	1,354,512	15,234,968	12,887,434
33	Total Firm Sales		3,120,510	4,839,280	6,527,780	5,555,270	5,379,340	3,265,400	36,268,190	28,687,580

Northern Utilities, Inc. New Hampshire Division Schedule 10B Page 2 of 4

Northern Utilities - NEW HAMPSHIRE DIVISION

2010 - 2011 Period

	Forecasted Normal Sales By Class-Therms	
Line	Calendar Month Firm Sales Volumes	
No.	Firm Sales	
1	Res Heat	Company Analysis
2	Res General	Company Analysis
3	Total Residential	Sum LN 1 : LN 2
4	G50 Low Annual-Low Winter	Company Analysis
5	G40 Low Annual-High Winter	Company Analysis
6	G51 Med Annual-Low Winter	Company Analysis
7	G41 Med Annual-High Winter	Company Analysis
8	G52 High Annual-Low Winter	Company Analysis
9	G42 High Annual-High Winter	Company Analysis
10	Total C&I	Sum LN 4: LN 9
11	Total Sales	LN 3 + LN 10
12		
13	Residential Heat & Non Heat	LN 3
14	SALES HLF CLASSES	LN4+LN6+LN8
15	SALES LLF CLASSES	LN 5 + LN 7 + LN 9
16	Total Firm Sales	Sum LN 13 : LN 15
17		
18	ESTIMATED SENDOUT BY CLASS - Therms	
19	Calendar Month Sendout Volumes (Includes Loss & Unaccounted For)	
20	Normal Winter	
21	Res Heat	LN 1 x Adj factor (Company Use, LAUF, BTU) x 10
22	Res General	LN 2 x Adj factor (Company Use, LAUF, BTU) x 10
23	G50 Low Annual-Low Winter	LN 4 x Adj factor (Company Use, LAUF, BTU) x 10
24	G40 Low Annual-High Winter	LN 5 x Adj factor (Company Use, LAUF, BTU) x 10
25	G51 Med Annual-Low Winter	LN 6 x Adj factor (Company Use, LAUF, BTU) x 10
26	G41 Med Annual-High Winter	LN 7 x Adj factor (Company Use, LAUF, BTU) x 10
27	G52 High Annual-Low Winter	LN 8 x Adj factor (Company Use, LAUF, BTU) x 10
28	G42 High Annual-High Winter	LN 9 x Adj factor (Company Use, LAUF, BTU) x 10
29	Subtotal	
30	Residential	LN 21 + LN 22
31	SALES HLF CLASSES .	LN 23 + LN 25 + LN 27
32	SALES LLF CLASSES	LN 24 + LN 26 + LN 28
33	Total Firm Sales	Sum LN 30 : LN 32

Northern Utilities, Inc. New Hampshire Division Schedule 10B Page 3 of 4

Northern Utilities - NEW HAMPSHIRE DIVISION Sendout by Class - Allocation between Base & Remaining Sendout

35	DAILY BASE GAS ENTITLEMENT - Therms	day
36	Res Heat	13,033
37	Res General	521
38	G50 Low Annual-Low Winter	3,710
39	G40 Low Annual-High Winter	2,186
40	G51 Med Annual-Low Winter	4,776
41	G41 Med Annual-High Winter	3,992
42	G52 High Annual-Low Winter	721
43	G42 High Annual-High Winter	382
44	Subtotal	
45	Residential	13,554
46	SALES HLF CLASSES	9,208
47	SALES LLF CLASSES	6,560
48	Total Firm Sales	29,321

49	BASE SENDOUT BY CLASS - Therms								
50	Days per Month	30	31	31	28	31	30		į
51		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	TOTAL	WINTER
52	Res Heat	390,983	404,016	404,016	364,917	404,016	390,983	4,728,740	2,358,930
53	Res General	15,639	16,160	16,160	14,597	16,160	15,639	187,959	94,356
54	G50 Low Annual-Low Winter	111,303	115,013	115,013	103,882	115,013	111,303	1,335,873	671,525
55	G40 Low Annual-High Winter	65,573	67,759	67,759	61,201	67,759	65,573	776,363	395,622
56	G51 Med Annual-Low Winter	143,292	148,068	148,068	133,739	148,068	143,292	1,726,857	864,526
57	G41 Med Annual-High Winter	119,756	123,747	123,747	111,772	123,747	119,756	1,423,799	722,525
58	G52 High Annual-Low Winter	8,488	11,047	11,968	10,859	10,482	9,159	194,639	62,003
59	G42 High Annual-High Winter	11,459	11,841	11,841	10,695	11,841	11,459	139,220	69,136
60	Subtotal								
61	Residential	406,622	420,176	420,176	379,514	420,176	406,622	4,916,699	2,453,287
62	SALES HLF CLASSES	263,082	274,128	275,049	248,480	273,563	263,753	3,257,369	1,598,055
63	SALES LLF CLASSES	196,787	203,347	203,347	183,668	203,347	196,787	2,339,383	1,187,283
64	Total Firm Sales	866,491	897,651	898,572	811,662	897,086	867,162	10,513,451	5,238,625

65									
66	REMAINING SENDOUT BY CLASS - Therms		,						
67		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	TOTAL	WINTER
68	Res Heat	1,028,528	1,674,678	2,604,787	2,176,245	2,115,513	1,157,671	11,625,830	10,757,423
69	Res General	13,411	18,367	30,451	27,245	25,383	15,766	152,971	130,621
70	G50 Low Annual-Low Winter	17,744	49,177	74,615	68,018	58,880	21,589	369,413	290,022
71	G40 Low Annual-High Winter	497,305	910,077	1,523,378	1,308,102	1,146,689	619,942	6,519,560	6,005,493
72	G51 Med Annual-Low Winter	78,298	112,149	126,673	101,151	106,981	45,487	698,478	570,738
	G41 Med Annual-High Winter	524,653	1,031,950	1,126,258	942,709	936,073	488,797	5,691,344	5,050,441
74	G52 High Annual-Low Winter	-	-	-	-	-	-	12,460	-
	G42 High Annual-High Winter	94,079	145,231	143,047	120,139	92,735	48,985	684,682	644,217
76	Subtotal								
77	Residential	1,041,939	1,693,045	2,635,238	2,203,490	2,140,896	1,173,437	11,778,801	10,888,044
78	SALES HLF CLASSES	96,042	161,326	201,287	169,169	165,860	67,076	1,080,352	860,760
79	SALES LLF CLASSES	1,116,038	2,087,258	2,792,683	2,370,949	2,175,498	1,157,724	12,895,586	11,700,151
80	Total Firm Sales	2,254,019	3,941,629	5,629,208	4,743,608	4,482,254	2,398,238	25,754,739	23,448,955

Northern Utilities - NEW HAMPSHIRE DIVISION Sendout by Class - Allocation between Base & Remaining Sendout

34	,	tomaning condout
35	DAILY BASE GAS ENTITLEMENT - Therms/day	
36	Res Heat	Avg (LN 21 Jul : LN 21 Aug) / 31 days
37	Res General	Avg (LN 22 Jul : LN 22 Aug) / 31 days
38	G50 Low Annual-Low Winter	Avg (IN 22 Jul - IN 22 Aug) / 31 days
39	G40 Low Annual-High Winter	Avg (LN 23 Jul : LN 23 Aug) / 31 days
40	G51 Med Annual-Low Winter	Avg (LN 24 Jul : LN 24 Aug) / 31 days
41	G41 Med Annual-High Winter	Avg (LN 25 Jul : LN 25 Aug) / 31 days
42	G52 High Annual-Low Winter	Avg (LN 26 Jul : LN 26 Aug) / 31 days
43	G42 High Annual-High Winter	Avg (LN 27 Jul : LN 27 Aug) / 31 days
44	Subtotal	Avg (LN 28 Jul : LN 28 Aug) / 31 days
45	Residential	1,1,00 - 1,1,07
46	SALES HLF CLASSES	LN 36 + LN 37
47	SALES LLF CLASSES	LN 38 + LN 40 + LN 42
48	Total Firm Sales	LN 39 + LN 41 + LN 43
70	rotal i litti dales	Sum LN 45 : LN 47
49	BASE SENDOUT BY CLASS - Therms	
50	Days per Month	
51	is also per month	
52	Res Heat	MIN(LN 36 * LN 50, LN 21)
53	Res General	MIN(LN 37 * LN 50, LN 22)
54	G50 Low Annual-Low Winter	MIN(LN 38 * LN 50, LN 23)
55	G40 Low Annual-High Winter	MIN(LN 39 * LN 50, LN 24)
56	G51 Med Annual-Low Winter	, , , , , , , , , , , , , , , , , , , ,
57	G41 Med Annual-High Winter	MIN(LN 40 * LN 50, LN 25)
58	G52 High Annual-Low Winter	MIN(LN 41 * LN 50, LN 26) MIN(LN 42 * LN 50, LN 27)
59	G42 High Annual-High Winter	
60	Subtotal	MIN(LN 43 * LN 50, LN 28)
61	Residential	LN 52 + LN 53
62	SALES HLF CLASSES	LN 54 + LN 56 + LN 58
63	SALES LLF CLASSES	1
64	Total Firm Sales	LN 55 + LN 57 + LN 59 Sum LN 61 : LN 63
65		J Suit Livot . Livos
66	REMAINING SENDOUT BY CLASS - Therms	
67	The same of the second of the same	
68	Res Heat	LN 21 - LN 52
69	Res General	LN 22 - LN 53
70	G50 Low Annual-Low Winter	LN 23 - LN 54
71	G40 Low Annual-High Winter	LN 24 - LN 55
72	G51 Med Annual-Low Winter	LN 25 - LN 56
73	G41 Med Annual-High Winter	LN 26 - LN 57
74	G52 High Annual-Low Winter	LN 27 - LN 58
75	G42 High Annual-High Winter	LN 28 - LN 59
76	Subtotal	LIV 20 - LIV 33
77	Residential	LN 68 + LN 69
78	SALES HLF CLASSES	l.
	SALES LLF CLASSES	LN 70 + LN 72 + LN 74 LN 71 + LN 73 + LN 75
	Total Firm Sales	Sum LN 77 : LN 79
- •		Outh Liv / / . Liv / d

4	1		Total Division Metered Deliveries (Dth)											
1		2040 2044 1		0040 0044			n Metered Del	· · · · · · · · · · · · · · · · · · ·						
2		2010-2011		2010-2011	Compared to			2010-2011 Compared to 2008-2009						
3		Forecast	2009-2010 Normal	Change	Percent Change	Change Due to Meter	to Load	2008-2009 Normal	Change	Percent Change	Change Due to Meter	Change Due to Load		
						Count	Pattern	Homman		Onlange	Count	Pattern		
4	Column	1	2	3	4	5	6	7	8	9	10	11		
5	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)		
6	Nov	542,536	525,777	16,759	3.2%	6,843	9,916	549,450	-6,913	-1.3%	26,429	-33,342		
7	Dec	770,259	785,751	-15,492	-2.0%	10,178	-25,670	792,007	-21,748	-2.7%	18,404	-40,152		
8	Jan	1,015,419	1,050,941	-35,522	-3.4%	13,506	-49,029	990,236	25,183	2.5%	23,574	1,608		
9	Feb	1,015,501	974,983	40,518	4.2%	12,588	27,930	991,088	24,413	2.5%	23,136	1,277		
10	Mar	878,056	868,777	9,279	1.1%	11,220	-1,941	894,108	-16,052	-1.8%	22,156	-38,208		
11	Apr	677,756	697,010	-19,254	-2.8%	8,954	-28,208	678,954	-1,198	-0.2%	19,779	-20,977		
12	May	429,234	419,968	9,267	2.2%	5,386	3,880	437,655	-8,420	-1.9%	13,375	-21,795		
13	Jun	349,143	332,756	16,388	4.9%	4,237	12,151	317,236	31,907	10.1%	10,730	21,177		
14	Jul	284,277	274,405	9,872	3.6%	3,595	6,278	279,336	4,941	1.8%	7,374	-2,433		
15	Aug	281,167	270,407	10,760	4.0%	3,548	7,211	268,980	12,187	4.5%	7,084	5,103		
16	Sep	300,274	290,974	9,301	3.2%	3,821	5,480	. ,	15,440	5.4%	7,528	7,912		
17	Oct	376,496	367,722	8,774	2.4%			362,059	14,438	4.0%	9,435			
18	Peak	4,899,527	4,903,238	-3,712	-0.1%				3,685	0.1%	140,200			
19	Off-Peak	2,020,593	1,956,231	64,361	3.3%				70,492	3.6%		15,380		
20	Annual	6,920,119	6,859,469	60,650	0.9%			6,845,942	74,177	1.1%	194,757	-120,580		
24			301.001	30,000		00,002		5,5 10,5 12	. 7, 1, 7	1.170				

Note 1 Company Forecast

22

23

24

Pages 2 - 4; Sum of Column 2 of Billed Deliveries table. Actual Data is weather normalized. Note 2

Column 3 of Meter Counts table times Column 2 of Use Per Meter table. Note 3

24	Note 3			T (DIII LD									
25	Note 4	Pages 2 - 4; S						ather normaliz					
26	Note 5	Column 6 of M	ieter Counts ta	able times Col	umn 5 of Use I	Per Meter table	e.						
27													
28		0040 0044 1	Total Division Meter Counts										
29		2010-2011	Comp	ared to 2009-		Comp	pared to 2008-						
30		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change					
31	Column	1	2	3	4	5	6	7					
32	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)					
33	Nov	28,386	28,021	365	1.3%	27,083	1,303	4.8%					
34	Dec	28,522	28,157	365	1.3%	27,874	648	2.3%					
35	Jan	28,586	28,223	363	1.3%	27,921	665	2.4%					
36	Feb	28,613	28,248	365	1.3%	27,960	653	2.3%					
37	Mar	28,606	28,241	365	1.3%	27,914	692	2.5%					
38	Apr	28,675	28,311	364	1.3%	27,863	812	2.9%					
39	May	28,722	28,358	364	1.3%	27,870	852	3.1%					
40	Jun	28,693	28,332	361	1.3%	27,754	939	3.4%					
41	Jul	28,593	28,224	370	1.3%	27,858	735	2.6%					
42	Aug	28,543	28,174	370	1.3%	27,811	732	2.6%					
43	Sep	28,523	28,154	370	1.3%	27,789	734	2.6%					
44	Oct	28,917	28,548	370	1.3%	28,183	734	2.6%					
45	Peak	28,564	28,200	364	1.3%	27,769	795	2.9%					
46	Off-Peak	28,665	28,298	367	1.3%	27,878	788	2.8%					
47	Annual	28,615	28,249	366	1.3%	27,823	792	2.8%					
48													

49 Note 1 Company Forecast 50

Actual Data. Page 2 - 4; Sum of Column 2 of Meter Counts table. Note 2

JU	NOTE Z	Actual Data. I	-aye z - 4, Sui	m or Column 2	oi Meter Cou	nts table.								
51	Note 3	Actual Data. I	Page 2 - 4; Sui	m of Column 5	of Meter Cou	nts table.								
52														
53			Total Division Use Per Meter											
54		2010-2011	Comp	ared to 2009-	2010	Comp	pared to 2008-	2009						
55		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change						
56	Column	1	2	3	4	5	6	7						
57	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)						
58	Nov	19.11	18.76	0.35	1.9%	20.29	-1.17	-5.8%						
59	Dec	27.01	27.91	-0.90	-3.2%	28.41	-1.41	-5.0%						
60	Jan	35.52	37.24	-1.72	-4.6%	35.47	0.06	0.2%						
61	Feb	35.49	34.52	0.98	2.8%	35.45	0.04	0.1%						
62	Mar	30.70	30.76	-0.07	-0.2%	32.03	-1.34	-4.2%						
63	Apr	23.64	24.62	-0.98	-4.0%	24.37	-0.73	-3.0%						
64	May	14.94	14.81	0.14	0.9%	15.70	-0.76	-4.8%						
65	Jun	12.17	11.74	0.42	. 3.6%	11.43	0.74	6.5%						
66	Jul	9.94	9.72	0.22	2.3%	10.03	-0.09	-0.8%						
67	Aug	9.85	9.60	0.25	2.6%	9.67	0.18	1.8%						
68	Sep	10.53	10.34	0.19	1.9%	10.25	0.28	2.7%						
69	Oct	13.02	12.88	0.14	1.1%	12.85	0.17	1.3%						
70	Peak	171.53	173.87	-2.35	-1.3%	176.30	-4.55	-2.6%						
71	Off-Peak	70.49	69.13	1.36	2.0%	69.95	0.52	0.7%						
72	Annual	241.84	242.82	-0.98	-0.4%	246.05	-4.03	-1.6%						
73														

74 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.

75

Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.

Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

1	I				D	osidential Non	-Heat Metered	Deliveries (Dt	2)			
2		2010-2011		2010-2011	Compared to		-i leat Metered	Deliveries (Da		Compared to	2008-2009	
3		Forecast	2009-2010 Normal	Change	Percent Change		Change Due to Load Pattern	2008-2009 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
4	Column	1	2	3	4	5	6	7	8	9	10	11
5	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
6	Nov	2,705	2,628	77	2.9%	-61	138	2,542	163	6.4%		210
7	Dec	3,059	3,144	-84	-2.7%	-73	-11	3,151	-92	-2.9%		15
8	Jan	4,452	4,882	-430	-8.8%	-114	-317	4,430	21	0.5%		1
9	Feb	4,551	4,423	128	2.9%	-103	231	3,922	629	16.0%	-110	739
10	Mar	3,918	3,888	30	0.8%	-91	120	3,543	375	10.6%		466
11	Apr	3,379	3,566	-187	-5.2%	-81	-105	3,029	350	11.6%	-53	
12	May	2,490	2,558	-68	-2.7%	-58	-11	2,562	-72	-2.8%	-40	-33
13	Jun	2,126	2,076	50	2.4%	-46	96	2,457	-332	-13.5%		-323
14	Jul	1,352	1,384	-32	-2.3%	-32	0	1,507	-155	-10.3%	-68	
15	Aug	1,786	1,827	-42	-2.3%	-42	0	1,801	-16	-0.9%		66
16	Sep	1,634	1,672	-38	-2.3%	-39	1	1,695	-61	-3.6%	-77	16
17	Oct	1,881	1,926	-44	-2.3%	-45	0	1,963	-82	-4.2%		
18	Peak	22,065	22,531	-466	-2.1%	-522	56	20,618	1,447	7.0%	-529	
19	Off-Peak	11,269	11,443	-175	-1.5%	-262	88	11,986	-718	-6.0%		-317
20	Annual [33,334	33,974	-641	-1.9%	-783	143	32,604	729	2.2%	-964	1,694
21	·											
22	Note 1	Company For	ecast									

26

Actual, weather normalized data. 23 Note 2

24 Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table. 25

Actual, weather normalized data. Note 4

Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

28		Total Division Meter Counts												
29		2010-2011	Comp	ared to 2009-	2010	Com	pared to 2008-	2009						
30		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change						
31	Column	1	2	3	4	5	6	7						
32	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)						
33	Nov	1,601	1,639	-38	-2.3%	1,631	-30	-1.8%						
34	Dec	1,597	1,635	-38	-2.3%	1,653	-56	-3.4%						
35	Jan	1,593	1,631	-38	-2.3%	1,643	-50	-3.0%						
36	Feb	1,594	1,632	-38	-2.3%	1,640	-46	-2.8%						
37	Mar	1,591	1,629	-38	-2.3%	1,633	-42	-2.6%						
38	Apr	1,624	1,662	-38	-2.3%	1,653	-29	-1.8%						
39	May	1,648	1,686	-38	-2.3%	1,674	-26	-1.6%						
40	Jun	1,661	1,699	-38	-2.2%	1,667	-6	-0.4%						
41	Jul	1,605	1,643	-38	-2.3%	1,681	-76	-4.5%						
42	Aug	1,601	1,639	-38	-2.3%	1,677	-76	-4.5%						
43	Sep	1,587	1,625	-38	-2.3%	1,663	-76	-4.6%						
44	Oct	1,600	1,638	-38	-2.3%	1,676	-76	-4.5%						
45	Peak	1,600	1,638	-38	-2.3%	1,642	-42	-2.6%						
46	Off-Peak	1,617	1,655	-38	-2.3%	1,673	-56	-3.3%						
47	Annual	1,609	1,647	-38	-2.3%	1,658	-49	-3.0%						
40	•													

Company Forecast 49 Note 1 50

Note 2 Actual Data.

Note 3 Actual Data.

52												
53				Total D	ivision Use Pe	r Meter						
54		2010-2011	Comp	ared to 2009-	2010	Comp	ared to 2008-	2009				
55		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change				
56	Column	1	2	3	4	5	6	7				
57	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)				
58	Nov	1.69	1.60	0.09	5.4%	1.56	0.13	8.4%				
59	Dec	1.92	1.92	-0.01	-0.4%	1.91	0.01	0.5%				
60	Jan	2.79	2.99	-0.20	-6.6%	2.70	0.10	3.6%				
61	Feb	2.86	2.71	0.14	5.4%	2.39	0.46	19.4%				
62	Mar	2.46	2.39	0.08	3.2%	2.17	0.29	13.5%				
63	Apr	2.08	2.15	-0.06	-3.0%	1.83	0.25	13.5%				
64	May	1.51	1.52	-0.01	-0.4%	1.53	-0.02	-1.3%				
65	Jun	1.28	1.22	0.06	4.7%	1.47	-0.19	-13.2%				
66	Jul	0.84	0.84	0.00	0.0%	0.90	-0.05	-6.0%				
67	Aug	1.12	1.11	0.00	0.0%	1.07	0.04	3.8%				
68	Sep	1.03	1.03	0.00	0.1%	1.02	0.01	1.0%				
69	Oct	1.18	1.18	0.00	0.0%	1.17	0.00	0.4%				
70	Peak	13.79	13.76	0.04	0.3%	12.56	1.24	9.9%				
71	Off-Peak	6.97	6.91	0.05	0.8%	7.16	-0.21	-3.0%				
72	Annual	20.72	20.63	0.09	0.4%	19.67	1.03	5.2%				

73 74 Note 1 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.

Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.

75

Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

1	ſ	Residential Heat Metered Deliveries (Dth)										
2	į	2010-2011		2010-2011	Compared to				2010-2011	Compared to	2008-2009	
3		Forecast	2009-2010 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2008-2009 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
4	Column	1	2	3	4	5	6	7	8	9	10	11
5	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
6	Nov	120,827	112,682	8,145	7.2%	2,008	6,137	106,140	14,687	13.8%	5,768	8,919
7	Dec	170,645	171,593	-948	-0.6%	3,043	-3,991	181,356	-10,711	-5.9%	5,846	-16,557
8	Jan	282,229	293,494	-11,265	-3.8%	5,190	-16,455	285,999	-3,770	-1.3%	9,487	-13,256
9	Feb	289,307	271,764	17,544	6.5%	4,800	12,743	284,338	4,969	1.7%	9,201	-4,231
10	Mar	240,535	233,252	7,283	3.1%	4,119	3,164	. 242,924	-2,389	-1.0%	7,858	-10,247
11	Apr	182,901	191,201	-8,300	-4.3%	3,367	-11,666	169,833	13,068	7.7%	6,647	6,421
12	May	94,928	94,707	222	0.2%	1,664	-1,443	106,345	-11,416	-10.7%	4,364	-15,780
13	Jun	59,856	57,139	2,718	4.8%	1,005	1,713	37,302	22,554	60.5%	1,661	20,893
14	Jul	44,063	43,285	778	1.8%	765	13	44,040	23	0.1%	1,584	-1,561
15	Aug	34,745	34,139	605	1.8%	604	2	32,461	2,284	7.0%	1,169	1,115
16	Sep	33,080	32,504	576	1.8%	574	2	31,489	1,591	5.1%	1,132	459
17	Oct	44,397	43,637	760	1.7%	761	0	41,685	2,712	6.5%	1,479	1,233
18	Peak	1,286,445	1,273,986	12,459	1.0%	22,543	-10,084	1,270,590	15,855	1.2%	47,245	-31,390
19	Off-Peak	311,069	305,411	5,659	1.9%	5,375	284	293,321	17,748	6.1%	11,191	6,557
20	Annual	1,597,515	1,579,397	18,118	1.1%	27,872	-9,754	1,563,912	33,603	2.1%	58,911	-25,309
21												
22	Note 1	Company Fore	ecast									

23

26 27 28

29 30

Note 2 Actual, weather normalized data.

24 Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table. 25

Actual, weather normalized data. Note 4

Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

:		Total Division Meter Counts										
ا ا	2010-2011	Comp	pared to 2009-	2010	Comp	pared to 2008-	2009					
,	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change					
Column	1	2	3	4	5	6	7					
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)					
Nov	20,481	20,122	359	1.8%	19,425	1,056	5.4%					
Dec	20,581	20,222	359	1.8%	19,938	643	3.2%					
Jan	20,640	20,281	359	1.8%	19,977	663	3.3%					
Feb	20,663	20,304	359	1.8%	20,015	648	3.2%					
Mar	20,670	20,311	359	1.8%	20,022	648	3.2%					
Apr	20,728	20,369	359	1.8%	19,947	781	3.9%					
May	20,768	20,409	359	1.8%	19,949	819	4.1%					
Jun	20,749	20,390	359	1.8%	19,864	885	4.5%					
Jul	20,661	20,303	359	1.8%	19,944	717	3.6%					
Aug	20,641	20,283	359	1.8%	19,924	717	3.6%					
Sep	20,670	20,312	359	1.8%	19,953	717	3.6%					
Oct	20,930	20,572	359	1.7%	20,213	717	3.5%					
Peak	20,627	20,268	359	1.8%	19,887	739	3.7%					
Off-Peak	20,737	20,378	359	1.8%	19,975	762	3.8%					
Annual	20,682	20,323	359	1.8%	19,931	751	3.8%					

49 Company Forecast 50

Note 2 Actual Data.

50	14016 2	Actual Data.						
51	Note 3	Actual Data.						
52								
53				Total Di	vision Use Per	Meter		
54		2010-2011	Comp	ared to 2009-	2010	Comp	ared to 2008-2	2009
55		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
56	Column	1	2	3	4	5	6	7
57	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
58	Nov	5.90	5.60	0.30	5.4%	5.46	0.44	8.0%
59	Dec	8.29	8.49	-0.19	-2.3%	9.10	-0.80	-8.8%
60	Jan	13.67	14.47	-0.80	-5.5%	14.32	-0.64	-4.5%
61	Feb	14.00	13.38	0.62	4.6%	14.21	-0.20	-1.4%
62	Mar	11.64	11.48	0.15	12.13	-0.50	-4.1%	
63	Apr	8.82	9.39	-0.56	-6.0%	8.51	0.31	3.6%
64	May	4.57	4.64	-0.07	-1.5%	5.33	-0.76	-14.3%
65	Jun	2.88	2.80	0.08	2.9%	1.88	1.01	53.6%
66	Jul	2.13	2.13	0.00	0.0%	2.21	-0.08	-3.4%
67	Aug	1.68	1.68	0.00	0.0%	1.63	0.05	3.3%
68	Sep	1.60	1.60	0.00	0.0%	1.58	0.02	1.4%
69	Oct	2.12	2.12	0.00	0.0%	2.06	0.06	2.9%
70	Peak	62.37	62.86	-0.49	-0.8%	63.89	-1.40	-2.2%
71	Off-Peak	15.00	14.99	0.01	0.1%	14.68	0.31	2.1%
72	Annual	77.24	77.71	-0.47	-0.6%	78.47	-1,10	-1.4%
73		•						
74	Note 1	Column 1 of Bi	lled Deliveries	table divided	by Column 1 o	f Meter Count	s table.	
75	Note 2	Column 2 of Bi	lled Deliveries	table divided	by Column 2 o	f Meter Count	s table.	
~~								

76 Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

1												
2		2010-2011		2010-2011	Compared to		C&I Metered D			Compared to	2008-2009	
3		Forecast	2009-2010 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2008-2009 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
4	Column	1	2	3	4	5	6	7	8	9	10	11
5	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
6	Nov	419,004	410,467	8,537	2.1%	2,887	5,650	440,768	-21,764	-4.9%	20,259	-42,024
7	Dec	596,555	611,015	-14,460	-2.4%	4,270	-18,730	607,499	-10,945	-1.8%	5,901	-16,845
8	Jan	728,738	752,564	-23,827	-3.2%	5,011	-28,838	699,807	28,931	4.1%	5,778	1 1
9	Feb	721,642	698,796	22,846	3.3%	4,874	17,972	702,827	18,815	2.7%	5,688	
10	Mar	633,603	631,636	1,967	0.3%	4,413	-2,447	647,641	-14,038	-2.2%	8,901	-22,940
11	Apr	491,476	502,243	-10,767	-2.1%	3,441	-14,208	506,092	-14,616	-2.9%	4,850	
12	May	331,816	322,703	9,114	2.8%	2,217	6,897	328,748	3,068	0.9%	3,106	
13	Jun	287,161	273,541	13,620	5.0%	1,754	11,867	277,477	9,684	3.5%	2,676	
14	Jul	238,862	229,736	9,126	4.0%	1,794	7,332	233,789	5,073	2.2%	3,528	
15	Aug	244,636	234,440	10,196	4.3%	1,838	8,358	234,718	9,919	4.2%	3,441	6,477
16	Sep	265,561	256,798	8,763	3.4%	2,025	6,738	251,650	13,910	5.5%		10,117
17	Oct [330,218	322,160	8,058	2.5%	2,492	5,566	318,411	11,807	3.7%		7,100
18	Peak	3,591,017	3,606,721	-15,705	-0.4%	24,942	-40,647	3,604,634	-13,617	-0.4%		
19	Off-Peak	1,698,255	1,639,377	58,877	3.6%	12,174	46,703	1,644,792	53,462	3.3%		31,890
20	Annual	5,289,271	5,246,098	43,173	0.8%	37,615	5,557	5,249,426	39,845	0.8%	75,594	-35,749
21												

Note 1 Company Forecast

Note 2 Actual, weather normalized data.

Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table.

21 22 23 24 25 26 27 Note 4 Actual, weather normalized data.

Column 6 of Meter Counts table times Column 5 of Use Per Meter table. Note 5

28			Total Division Meter Counts											
29		2010-2011	Comp	ared to 2009-	2010	Comp	ared to 2008-	2009						
30		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change						
31	Column	1	2	3	4	5	6	7						
32	Reference		Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)						
33	Nov	6,304	6,260	44	0.7%	6,027	277	4.6%						
34	Dec	6,344	6,300	44	0.7%	6,283	61	1.0%						
35	Jan	6,353	6,311	42	0.7%	6,301	52	0.8%						
36	Feb	6,356	6,312	44	0.7%	6,305	51	0.8%						
37	Mar	6,345	6,301	44	0.7%	6,259	86	1.4%						
38	Apr	6,323	6,280	43	0.7%	6,263	60	1.0%						
39	May	6,306	6,263	43	0.7%	6,247	59	0.9%						
40	Jun	6,283	6,243	40	0.6%	6,223	60	1.0%						
41	Jul	6,327	6,278	49	0.8%	6,233	94	1.5%						
42	Aug	6,301	6,252	49	0.8%	6,210	91	1.5%						
43	Sep	6,266	6,217	49	0.8%	6,173	93	1.5%						
44	Oct [6,387	6,338	49	0.8%	6,294	93	1.5%						
45	Peak	6,338	6,294	44	0.7%	6,240	98	1.6%						
46	Off-Peak	6,312	6,265	47	0.7%	6,230	82	1.3%						
47	Annual	6,325	6,280	45	0.7%	6,235	90	1.4%						
48														

49 Note 1 Company Forecast 50 Note 2 Actual Data.

51 Note 3 Actual Data.

52								
53				Total Di	vision Use Per	r Meter		
54		2010-2011	Comp	ared to 2009-	2010	Comp	ared to 2008-	2009
55		Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
56	Column	1	2	3	4	5	6	7
57	Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
58	Nov	66.47	65.57	0.90	1.4%	73.13	-6.67	-9.1%
59	Dec	94.03	96.99	-2.95	-3.0%	96.69	-2.66	-2.7%
60	Jan	114.71	119.25	-4.54	-3.8%	111.06	3.64	3.3%
61	Feb	113.54	110.71	2.83	2.6%	111.47	2.07	1.9%
62	Mar	99.86	100.24	-0.39	-0.4%	103.47	-3.62	-3.5%
63	Apr	77.73	79.98	-2.25	-2.8%	80.81	-3.08	-3.8%
64	May	52.62	51.53	1.09	2.1%	52.62	-0.01	0.0%
65	Jun	45.70	43.82	1.89	4.3%	44.59	1.12	2.5%
66	Jul	37.75	36.59	1.16	3.2%	37.51	0.24	0.7%
67	Aug	38.82	37.50	1.33	3.5%	37.80	1.03	2.7%
68	Sep	42.38	41.31	1.08	2.6%	40.77	1.61	4.0%
69	Oct	51.70	50.83	0.87	1.7%	50.59	1.11	2.2%
70	Peak [566.63	573.04	-6.41	-1.1%	577.70	-10.31	-1.8%
71	Off-Peak	269.06	261.66	7.40	2.8%	264.01	5.11	1.9%
72	Annual [836.30	835.42	0.88	0.1%	841.95	-5.20	-0.6%
72								

Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table. Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table. 74 Note 1 75

Note 2 Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

Northern Utilities, Inc. New Hampshire Division Sales Service Deliveries Forecast by Rate Class

Forecast Calendar Month Sales Service Usage (Dth)

	Forecast Calendar Month Sales Service Usage (Dth) (Total Forecast Deliveries times Sales Service Percentage)									
	Res Non- Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-10	2,837	138,612	54,964	12,601	62,925	21,638	10,306	829	0	304,710
Dec-10	3,369	202,854	95,424	16,023	112,781	25,394	15,328	1,078	0	472,252
Jan-11	4,556	294,079	155,517	18,534	122,175	26,853	15,139	1,170	0	638,023
Feb-11	4,090	248,385	133,842	16,802	103,070	22,959	12,788	1,061	0	542,998
Mar-11	4,060	246,248	118,695	16,995	103,582	24,927	10,221	1,024	0	525,753
Apr-11	3,070	151,365	67,002	12,989	59,480	18,451	5,908	895	0	319,160
May-11	2,348	76,297	26,657	13,117	25,507	16,654	1,449	2,491	0	164,519
Jun-11	1,950	43,422	12,120	11,436	17,546	14,630	1,275	2,289	0	104,668
Jul-11	1,352	42,206	4,523	9,443	8,839	12,845	1,175 1,136	2,189 2,175	0	82,572 94,844
Aug-11 Sep-11	1,802 1,716	36,657 45,020	8,701 11,800	13,005 12,499	15,312 22,054	16,055 16,041	2,256	2,173	0	113,688
Oct-11	2,151	72,546	23,568	13,100	41,768	20,421	3,500	2,719	0	179,773
Nov-11	2,770	141,044	55,567	12,364	64,850	21,570	9,750	924	0	308,838
Dec-11	3,295	206,394	96,463	15,720	116,207	25,315	14,376	1,180	0	478,951
Jan-12	4,581	302,685	166,543	18,761	125,096	26,853	15,875	1,417	0	661,812
Feb-12	4,259	264,966	148,732	17,614	109,478	23,779	12,917	1,331	0	583,076
Mar-12	4,084	254,019	128,606	17,223	106,493	24,927	10,010	1,267	0	546,629
Apr-12	3,093	157,228	75,115	13,214	62,291	18,451	6,285	1,093	0	336,770
Peak	21,981	1,281,543	625,444	93,945	564,013	140,222	69,689	6,058		2,802,895
Off-Peak	11,319	316,150	87,368	72,599	131,026	96,646	10,791	14,164	0	740,064
Annual	33,301	1,597,692	712,812	166,544	695,040	236,869	80,481	20,222	0	3,542,959
		I	Forecast Cal	lendar Mon	th Distributio	n Service Us	age (Dth)			
	Res Non- Heat	Res Heat	G/T40	G/T50	G/T41	G/T51	G/T42	G/T52	Special Contracts	Total Division
Nov-10	2,837	138,612	62,459	17,221	104,182	36,010	50,052	94,648	80,622	586,642
Dec-10	3,369	202,854	108,436	21,897	186,726	42,262	74,447	123,115	88,545	851,652
Jan-11	4,556	294,079	176,724	25,329	202,280	44,690	73,526	133,586		1,045,034
Feb-11	4,090	248,385	152,093	22,962	170,648	38,210	62,111	121,206	92,758	912,462
Mar-11	4,060	246,248	134,880	23,226	171,496	41,485	49,641	116,996	104,626	892,658
Apr-11	3,070	151,365	76,139	17,750	98,478	30,707	28,693	102,228	90,932	599,363
May-11	2,348	76,297	33,415	15,596	43,149	26,645	15,975	88,645	81,151	383,221
Jun-11	1,950	43,422	15,192	13,597	29,683	23,406	14,061	81,464	85,379	308,155
Jul-11	1,352	42,206	5,670	11,228	14,953	20,550	12,963	77,893	92,725	279,541
Aug-11	1,802	36,657	10,907	15,463	25,904	25,687	12,526	77,402	79,567	285,914
Sep-11	1,716	45,020	14,791	14,862	37,309	25,665	24,884	81,873	83,308	329,429
Oct-11 Nov-11	2,151 2,770	72,546 141,044	29,543 63,144	15,576 16,896	70,659 107,369	32,671 35,898	38,595 47,352	96,774 105,507	88,790 80,622	447,305 600,602
Dec-11	3,295	206,394	109,617	21,483	192,398	42,131	69,824	134,798	88,545	868,484
Jan-12	4,581	302,685	189,253	25,638	207,115	44,690	77,104	161,856		1,103,189
Feb-12	4,259	264,966	169,013	24,071	181,258	39,574	62,734	152,002	92,758	990,635
Mar-12	4,084	254,019	146,143	23,537	176,315	41,485	48,618	144,652	104,626	943,479
Apr-12	3,093	157,228	85,358	18,059	103,133	30,707	30,523	124,799	90,932	643,831
Peak	21,981	1,281,543	710,730	128,384	933,810	233,365	338,471	691,779		4,887,810
Off-Peak	11,319	316,150	109,518	86,321	221,657	154,624	119,005	504,051	510,920	2,033,565
Annual	33,301	1,597,693	820,248	214,705	1,155,466	387,989	457,476	1,195,830	1,058,667	6,921,375
			F	orecast Sa	les Service F	Percentage				
	Res Non- Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-10	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	51.9%
Dec-10	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	55.5%
Jan-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	61.1%
Feb-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	59.5%
Mar-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	58.9%
Apr-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	53.2%
May-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	42.9%
Jun-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	34.0%
Jul-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	29.5%
Aug-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	33.2%
Sep-11 Oct-11	100.0% 100.0%	100.0% 100.0%	79.8% 79.8%	84.1% 84.1%	59.1% 59.1%	62.5% 62.5%	9.1% 9.1%	2.8% 2.8%	0.0% 0.0%	34.5% 40.2%
000-11	100.076	100.076	1 3.070	04.170	JJ. 170	UZ.U 70	3.170	2.076	0.076	₩U.Z./0

Northern Utilities, Inc. New Hampshire Division Sales Service Deliveries Forecast by Rate Class

Forecast Billed Sales Service Usage (Dth)

		/=				ce Usage (Dt				
	Day Mari	(Fore	ecast Billed L	Distribution	Usage times	Sales Servi	ce Percent	age)		***
	Res Non- Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-10	2,705	120,827	48,573	12,053	53,061	20,528	10,306	829	0	268,881
Dec-10	3,059	170,645	83,329	14,680	95,211	22,868	15,328	1,078	0	406,199
Jan-11	4,452	282,229	151,198	18,093	115,709	25,985	15,139	1,170	0	613,974
Feb-11	4,551	289,307	151,073	18,728	123,618	26,218	12,788	1,061	0	627,345
Mar-11	3,918	240,535	115,202	16,405	101,938	24,177	10,221	1,024	0	513,420
Apr-11	3,379	182,901	78,520	14,312	76,152	20,883	5,908	895	0	382,950
May-11	2,490	94,928	32,612	13,797	35,544	17,895	1,449	2,491	. 0	201,206
Jun-11	2,126	59,856	17,365	12,329	26,096	16,054	1,275	2,289	0	137,389
Jul-11	1,352	44,063	5,274	9,406	10,026	12,828	1,175	2,189	0	86,314
Aug-11	1,786	34,745	8.082	12,918	14,302	15,911	1,136	2,175	0	91,055
Sep-11	1,634	33,080	7,909	12,148	15,703	15,359	2,256	2,301	0	90,390
Oct-11	1,881	44,397	14,423	11,701	26,684	18,080	3,500	2,719	0	123,386
Nov-11	2,641	122,948	49,106	11,826	54,684	20,464	9,750	924	0	272,343
Dec-11	2,992	173,624	84,236	14,403	98,103	22,798	14,376	1,180	0	411,711
Jan-12	4,477	290,579	162,094	18,319	118,630	25,985	15,875	1,417	0	637,377
Feb-12	4,653	302,793	164,399	19,264	128,534	26,662	12,690	1,317	0	660,313
Mar-12	4,008	252,268	126,814	16,904	106,482	24,586	10,172	1,278	0	542,513
Apr-12	3,403	189,485	87,084	14,542	79,010	20,883	6,287	1,096	ō	401,791
Peak	22,065	1,286,445	627,894	94,271	565,688	140,659	69,689	6,058		2,812,769
Off-Peak	11,269	311,069	85,665	72,299	128,354	96,128	10,791	14,164	0	729,739
Annual	33,334		713,559	166,570	694,042	236,787	80,481	20,222	0	3,542,509
7	55,55	1,001,011	1 10,000	100,010	001,012	200,707	00,101	LO,LLL	ŭ	0,012,000
			Foreca	st Billed Dis	stribution Se	rvice Usage ((Dth)			
	Res Non- Heat	Res Heat	G/T40	G/T50	G/T41	G/T51	G/T42	G/T52	Special	Total Division
Nov-10	2,705	120,827	55,197	16 471	87,850	34,164	50,052	94,648	Contracts	
Dec-10	3,059	170,645	94,691	16,471	•		74,447	-	80,622	542,536
Jan-11	4,452	282,229	171,816	20,061	157,636	38,059	73,526	123,115	88,545	770,259 1,015,419
				24,725	191,574	43,246		133,586		
Feb-11	4,551	289,307	171,674	25,593	204,668	43,633	62,111	121,206		1,015,501
Mar-11	3,918	240,535	130,911	22,419	168,774	40,236	49,641	116,996	104,626	878,056
Apr-11	3,379	182,901	89,227	19,559	126,081	34,755	28,693	102,228	90,932	677,756
May-11	2,490	94,928	40,880	16,405	60,129	28,631	15,975	88,645	81,151	429,234
Jun-11	2,126	59,856	21,767	14,659	44,146	25,685	14,061	81,464	85,379	349,143
Jul-11	1,352	44,063	6,611	11,184	16,961	20,524	12,963	77,893	92,725	284,277
Aug-11	1,786	34,745	10,131	15,360	24,194	25,456	12,526	77,402	79,567	281,167
Sep-11	1,634	33,080	9,914	14,444	26,564	24,573	24,884	81,873	83,308	300,274
Oct-11	1,881	44,397	18,080	13,912	45,141	28,926	38,595	96,774	88,790	376,496
Nov-11	2,641	122,948	55,802	16,161	90,538	34,058	47,352	105,507	80,622	555,629
Dec-11	2,992	173,624	95,722	19,683	162,424	37,941	69,824	134,798	88,545	785,553
Jan-12	4,477	290,579	184,198	25,035	196,409	43,246	77,104	161,856		1,073,170
Feb-12	4,653	302,793	186,817	26,326	212,808	44,372	61,634	150,395		1,082,557
Mar-12	4,008	252,268	144,107	23,101	176,297	40,918	49,406	145,956	104,626	940,687
Apr-12	3,403	189,485	98,959	19,873	130,814	34,755	30,535	125,175	90,932	723,931
Peak	22,065	1,286,445	713,515	128,830	936,582	234,092	338,471	691,779		4,899,527
Off-Peak	11,269	311,069	107,383	85,965	217,136	153,795	119,005	504,051		2,020,593
Annual	33,334	1,597,515	820,898	214,795	1,153,719	387,887	457,476	1,195,830	1,058,667	6,920,119
			F	orecast Sa	les Service F	Percentage				_
	Res Non- Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-10	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	49.6%
Dec-10	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	52.7%
Jan-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	60.5%
Feb-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	61.8%
Mar-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	58.5%
Apr-11	100.0%	100.0%	88.0%	73.2%	60.4%	60.1%	20.6%	0.9%	0.0%	56.5%
May-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	46.9%
Jun-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	39.4%
Jul-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	30.4%
Aug-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	32.4%
Sep-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	30.1%
Oct-11	100.0%	100.0%	79.8%	84.1%	59.1%	62.5%	9.1%	2.8%	0.0%	32.8%

Northern Utilities, Inc. New Hampshire Division Attachment 2 to Schedule 10B Page 3 of 3

Northern Utilities, Inc. New Hampshire Division

Estimation of Northern City-Gate Receipts Required to Meet Sales Service Deliveries Forecast

Calendar Month Distribution Service Usage (Dth)	Estimated Company Use Factor	Estimated Company Use (Dth)	Billed Sales Service Deliveries (Dth)	Unbilled Sales Service Deliveries (Dth)	Calendar Sales Service Deliveries (Dth)	Sales Service plus Company Use (Dth)	Lost and Unaccounted For (Percent)	Lost and Unaccounted For (Dth)	Estimated Division City- Gate Receipts (Dth)
586,642	0.07%	413	268,881	35.829	304.710	305.123	2 22%	6 928	312,051
851,652	0.11%	933	406,199		·	,		•	483,928
1,045,034	0.03%	263	613,974	24,049		,		•	652,778
912,462	0.02%	197	627,345	-84,347	•	•			555,527
892,658	0.03%	239	513,420	12,333	525,753	•			537,934
599,363	0.02%	131	382,950	-63,791	319,160	319,291			326,540
383,221	0.02%	59	201,206	-36,687	164,519	164,577	2.22%		168,314
308,155	0.07%	208	137,389	-32,722	104,668	104,876	2.22%	•	107,258
279,541	0.04%	112	86,314	-3,742	82,572	82,684	2.22%		84,562
•	0.08%	227	91,055	3,789	94,844	95,071	2.22%	2,159	97,230
329,429	0.09%	296	90,390	23,299	113,688	113,985	2.22%	2.587	116,572
447,305	0.06%	264	123,386	56,388	179,773	180,038	2.22%	4,087	184,125
4,887,810 2,033,565 6,921,375	0.04% 0.06% 0.05%	2,175 1,167 3,343	2,812,769 729,739 3,542,509	-9,874 10,325 450	2,802,895 740,064 3,542,959	2,805,070 741,231 3,546,302	2.22% 2.22% 2.22%	63,688 16,830 80,517	2,868,758 758,061 3,626,819
	Distribution Service Usage (Dth) 586,642 851,652 1,045,034 912,462 892,658 599,363 383,221 308,155 279,541 285,914 329,429 447,305 4,887,810 2,033,565	Distribution Service Usage (Dth) 586,642 0.07% 851,652 0.11% 1,045,034 0.03% 912,462 0.02% 892,658 0.03% 599,363 0.02% 383,221 0.02% 308,155 0.07% 279,541 0.04% 285,914 0.08% 329,429 0.09% 447,305 0.06% 14,887,810 0.04% 2,033,565 0.06%	Distribution Service Usage (Dth) Estimated Company Use Factor Estimated Company Use (Dth) Estimated Company Use (Dth) 851,652 0.07% 413 851,652 0.11% 933 1,045,034 0.03% 263 912,462 0.02% 197 892,658 0.03% 239 599,363 0.02% 131 383,221 0.02% 59 308,155 0.07% 208 279,541 0.04% 112 285,914 0.08% 227 329,429 0.09% 296 447,305 0.06% 264 4,887,810 0.04% 2,175 2,033,565 0.06% 1,167	Distribution Service Usage (Dth) Estimated Company Use Factor Estimated Company Use (Dth) Estimated Service Deliveries (Dth) 586,642 (Dth) 0.07% 413 268,881 851,652 (Dth) 0.11% 933 406,199 1,045,034 (Dth) 0.03% (Dth) 263 (Dth) 613,974 912,462 (Dth) 0.02% (Dth) 197 (Dth) 627,345 892,658 (Dth) 0.03% (Dth) 239 (Dth) 513,420 599,363 (Dth) 0.03% (Dth) 239 (Dth) 513,420 383,221 (Dth) 0.02% (Dth) 59 (Dth) 201,206 308,155 (Dth) 0.07% (Dth) 208 (Dth) 137,389 279,541 (Dth) 0.04% (Dth) 112 (Dth) 86,314 285,914 (Dth) 0.08% (Dth) 227 (Dth) 91,055 329,429 (Dth) 0.09% (Dth) 296 (Dth) 90,390 447,305 (Dth) 0.06% (Dth) 2,175 (Dth) 2,812,769 2,033,565 (Dth) 0.06% (Dth) 1,167 (Dth) 729,739	Distribution Service Usage (Dth) Estimated Company Use Factor Estimated Company Use (Dth) Estimated Service (Dth) Billed Sales Service (Dth) Unbilled Sales Service (Dth) 851,652 0.07% 413 268,881 35,829 851,652 0.11% 933 406,199 66,053 1,045,034 0.03% 263 613,974 24,049 912,462 0.02% 197 627,345 -84,347 892,658 0.03% 239 513,420 12,333 599,363 0.02% 131 382,950 -63,791 383,221 0.02% 59 201,206 -36,687 308,155 0.07% 208 137,389 -32,722 279,541 0.04% 112 86,314 -3,742 285,914 0.08% 227 91,055 3,789 329,429 0.09% 296 90,390 23,299 447,305 0.06% 264 123,386 56,388 4,887,810 0.04% 2,175 2,812,769	Distribution Service Usage (Dth) Estimated Company Use (Dth) Estimated Company Use (Dth) Estimated Service (Dth) Service Service (Dth) Calendar Sales Service Deliveries (Dth) 586,642 (Dth) 0.07% 413 268,881 35,829 304,710 851,652 (Dth) 0.11% 933 406,199 66,053 472,252 1,045,034 (Dth) 0.03% (Dth) 263 613,974 (Dth) 24,049 (Dth) 638,023 912,462 (Dth) 0.02% (Dth) 197 (Dth) 627,345 (Dth) -84,347 (Dth) 542,998 (Dth) 892,658 (Dth) 0.03% (Dth) 239 (Dth) 513,420 (Dth) 12,333 (Dth) 525,753 (Dth) 599,363 (Dth) 0.02% (Dth) 131 (Dth) 382,950 (Dth) -63,791 (Dth) 319,160 (Dth) 383,221 (Dth) 0.02% (Dth) 59 (Dth) 201,206 (Dth) -36,687 (Dth) 164,519 (Dth) 308,155 (Dth) 0.07% (Dth) 208 (Dth) 137,389 (Dth) -32,722 (Dth) 104,668 (Dth) 279,541 (Dth) 0.08% (Dth) 227 (Dth) 91,055 (Dth) 3,789 (Dth) 94,844 (Dth) 329,429 (Dth) </td <td> Distribution Service Usage (Dth) Company Use (Dth) Company Use (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Use (</td> <td> Distribution Service Usage (Dth) Estimated Company Use (Dth) Deliveries (Dth) D</td> <td> Distribution Service Usage (Dth) Deliveries (</td>	Distribution Service Usage (Dth) Company Use (Dth) Company Use (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Deliveries (Dth) Use (Distribution Service Usage (Dth) Estimated Company Use (Dth) Deliveries (Dth) D	Distribution Service Usage (Dth) Deliveries (

Northern Utilities, Inc. New Hampshire Division Schedule 10C Page 1 of 6

- м Northern Utilities MAINE DIVISION
- M Allocation of Commodity Costs to Customer Classes
- Northern Utilities NEW HAMPSHIRE DIVISION
- N Allocation of Commodity Costs to Customer Classes

и Ва	se Commodity Costs																
N 1	BASE SENDOUT BY CLASS	1	Nov-10		Dec-10	Γ	Jan-11	Γ	Feb-11	Г	Mar-11		Apr-11		TOTAL		WINTER
м 2	Total Therms								,		***************************************			·			
м 3	Res Heat		390,983		404,016		404,016	\vdash	364,917		404,016		390,983		4,728,740	_	2,358,930
м 4	Res General	1	15,639		16,160		16,160		14,597		16,160		15,639		187,959		94,356
N 5	G50 Low Annual-Low Winter	l	111,303		115,013		115,013		103,882		115,013		111,303		1,335,873		671,525
м 6	G40 Low Annual-High Winter	l	65,573		67,759		67,759		61,201		67,759		65,573		776,363		395,622
N 7	G51 Med Annual-Low Winter	ł	143,292		148,068		148,068		133,739		148,068		143,292		1,726,857		864,526
и 8	G41 Med Annual-High Winter	į	119,756		123,747		123,747	İ	111,772		123,747		119,756		1,423,799		722,525
и 9	G52 High Annual-Low Winter		8,488		11,047		11,968		10,859		10,482		9,159		194,639		62,003
N 10	G42 High Annual-High Winter		11,459		11,841		11,841		10,695		11,841		11,459		139,220		69,136
N 11	Total Firm Sales		866,491		897,651		898,572		811,662		897,086		867,162		10,513,451		5,238,625
N 12	% of Total					ļ											
N 13	Res Heat		45.12%		45.01%		44.96%	l	44.96%		45.04%		45.09%				
n 14	Res General		1.80%		1.80%		1.80%		1.80%		1.80%		1.80%				1
N 15	G50 Low Annual-Low Winter	l	12.85%		12.81%		12.80%		12.80%		12.82%		12.84%				1
N 16	G40 Low Annual-High Winter		7.57%		7.55%		7.54%		7.54%		7.55%		7.56%				
N 17	G51 Med Annual-Low Winter	i	16.54%		16.50%		16.48%		16.48%		16.51%		16.52%				1
N 18	G41 Med Annual-High Winter	1	13.82%		13.79%		13.77%		13.77%		13.79%		13.81%				1
N 19	G52 High Annual-Low Winter		0.98%		1.23%		1,33%		1.34%		1.17%		1.06%				1
N 20	G42 High Annual-High Winter	Ì	1.32%		1.32%	ĺ	1.32%		1.32%		1.32%		1.32%				1
N 21	Total Firm Sales		100.00%		100.00%		100.00%		100.00%		100.00%		100.00%				
N			100.0076		100.0076	L	100.0076		100.0076	L	100.0078		100.0078				
N 22	BASE COMMODITY COSTS Excld Hedging		Nov-10		Dec-10	Γ-	Jan-11		Feb-11	Г	Mar-11		Apr-11		TOTAL		WINTER
м 23	TOTAL BASE COMMODITY Excld Hedging	\$	402,615	\$	448,307	\$	469,215	\$	425,755	\$	459,002	\$	418,489	\$	5,226,141	\$	2,623,383
N 24	Res Heat	\$	181,670	\$	201,774	\$	210,968	\$	191,416	\$	206,718	\$	188,687	\$	2,350,316	\$	1,181,234
N 25	Res General	\$	7,267	\$	8,071	\$	8,439	\$	7,657	\$	8,269	\$	7,547	\$	93,440	\$	47,249
N 26	G50 Low Annual-Low Winter	\$	51,717	\$	57,440	\$	60,057	\$	54,491	\$	58,847	\$	53,714	\$	664,119	\$	336,266
N 27	G40 Low Annual-High Winter	\$	30,468	\$	33,840	\$	35,382	\$	32,103	\$	34,669	\$	31,645	\$	386,060	\$	198,108
м 28	G51 Med Annual-Low Winter	\$	66,580	\$	73.948	\$	77,318	\$	70,152	\$	75,760	\$	69,152	\$	858,430	\$	432,911
м 29	G41 Med Annual-High Winter	\$	55,644	\$	61,802	\$	64,618	\$	58,630	\$	63,316	\$	57,794	\$	707,954	\$	361,804
и 30	G52 High Annual-Low Winter	\$	3,944	\$	5,517	\$	6,250	\$	5,696	\$	5,363	\$	4,420	\$	96,626	\$	31,190
N 31	G42 High Annual-High Winter	\$	5,324	\$	5,914	\$	6,183	\$	5,610	\$	6,059	\$	5,530	\$	69,196	\$	34,620
и 32	January Market M	1	0,02	Ψ	0,011	Ψ.	0,100	*	0,010	۳	0,000	Ψ	0,000	Ψ.	00,100	Ψ	04,020
и 33	Residential	\$	188,937	\$	209,845	\$	219,407	\$	199,073	\$	214,987	\$	196,234	\$	2,443,757	\$	1,228,483
N 34	SALES HLF CLASSES	\$	122,241	\$	136,906	\$	143,625		130,339	\$	139,971	\$	127,286	\$	1,619,175	\$	800,368
и 35	SALES LLF CLASSES	ŝ	91,437	\$	101,556	\$	106,183		96,343	\$	104,044	\$	94,969	\$	1,163,209	\$	594,532
N				Ť	.01,000		.00,.00		00,010	Ψ	101,011	Ψ_	01,000	Ψ_	1,100,200	Ψ	001,002
	NEW HAMPSHIRE BASE HEDGING COMMODITY							Г		l							
и 36	COSTS																1
и 37	TOTAL BASE HEDGING COMMODITY	\$	72,841	\$	142,684	\$	106,985	\$	143,041	\$	67,367	\$	54,475	\$	605,987	\$	587,394
и 38	Res Heat	\$	32,868	\$	64,219	\$	48,103	\$	64,310	\$	30,340	\$	24,561	\$	272,666	\$	264,401
и 39	Res General	\$	1,315	\$	2,569	\$	1,924	\$	2,572	\$	1,214	\$	982	\$	10,907	\$	10,576
N 40	G50 Low Annual-Low Winter	\$	9,357	\$	18,282	\$	13,694	\$	18,307	\$	8,637	\$	6,992	\$	77,621	\$	75,268
N 41	G40 Low Annual-High Winter	\$	5,512	\$	10,770	\$	8,067	\$	10,786	\$	5,088	\$	4,119	\$	45,729	\$	44,343
N 42	G51 Med Annual-Low Winter	\$	12,046	\$	23,536	\$	17,629	s	23,569	\$	11,119	\$	9,002	\$	99,929	\$	96,901
N 43	G41 Med Annual-High Winter	\$	10,067	\$	19,670	\$	14,734	\$	19,698	\$	9,293	\$	7,523	\$	83,516	\$	80,984
N 44	G52 High Annual-Low Winter	\$	714	\$	1,756	\$	1,425	\$	1,914	\$	787	\$	575	\$	7,628	\$	7,171
N 45	G42 High Annual-High Winter	\$	963	\$	1,882	\$	1,410	\$	1,885	\$	889	\$	720	\$	7,991	\$	7,749
N 46	g unidat i ligit i i litta	۱۳	500	Ψ	1,002	۳	1,710	"	1,000	Ψ	000	Ψ	, 20	Ψ	7,001	Ψ	',' +3
N 47	Residential	\$	34,183	\$	66,788	\$	50,027	\$	66,882	\$	31,553	\$	25,544	\$	283,572	\$	274,977
N 48	SALES HLF CLASSES	\$	22,116	\$	43,573	\$	32,748	1		\$		\$	16,569	\$	185,178	\$	179,339
n 49	SALES LLF CLASSES	\$	16,543	\$	32,323	\$	24,211		32,368	\$	15,270	\$	12,362	\$	137,237	\$	133,077
		<u> </u>	, 0, 0, 0	<u> </u>	02,020		- · · · · ·		02,000		.0,2.0		,	•	,0,,20,	*	100,011

Northern Utilities, Inc. New Hampshire Division Schedule 10C Page 2 of 6

Northern Utilities - MAINE DIVISION Allocation of Commodity Costs to Customer Classes

Northern Utilities - NEW HAMPSHIRE DIVISION Allocation of Commodity Costs to Customer Classes

Base Commodity Costs

Da	se Commodity Costs	
1	BASE SENDOUT BY CLASS	
2	Total Therms	
3	Res Heat	Schedule 10B, LN 52
4	Res General	Schedule 10B, LN 53
5	G50 Low Annual-Low Winter	Schedule 10B, LN 54
6	G40 Low Annual-High Winter	Schedule 10B, LN 55
7	G51 Med Annual-Low Winter	Schedule 10B, LN 56
8	G41 Med Annual-High Winter	Schedule 10B, LN 57
9	G52 High Annual-Low Winter	Schedule 10B, LN 58
10	G42 High Annual-High Winter	Schedule 10B, LN 59
11	Total Firm Sales	Sum LN 3 : LN 10
12	% of Total	
13	Res Heat	LN 3 / LN 11
14	Res General	LN 4 / LN 11
15	G50 Low Annual-Low Winter	LN 5 / LN 11
16	G40 Low Annual-High Winter	LN 6 / LN 11
17	G51 Med Annual-Low Winter	LN 7 / LN 11
18	G41 Med Annual-High Winter	LN 8 / LN 11
19	G52 High Annual-Low Winter	LN 9 / LN 11
20	G42 High Annual-High Winter	LN 10 / LN 11
21	Total Firm Sales	LN 11 / LN 11

22	BASE COMMODITY COSTS Excld Hedging		
23	TOTAL BASE COMMODITY Excld Hedging	Schedule 1B, LN 37	
24	Res Heat	LN 23 * LN 13	
25	Res General	LN 23 * LN 14	
26	G50 Low Annual-Low Winter	LN 23 * LN 15	
27	G40 Low Annual-High Winter	LN 23 * LN 16	
28	G51 Med Annual-Low Winter	LN 23 * LN 17	
29	G41 Med Annual-High Winter	LN 23 * LN 18	
30	G52 High Annual-Low Winter	LN 23 * LN 19	
31	G42 High Annual-High Winter	LN 23 * LN 20	
32			
33	Residential	LN 24 + LN 25	
34	SALES HLF CLASSES	LN 26 + LN 28 + LN 30	
35	SALES LLF CLASSES	LN 27 + LN 29 + LN 31	

	NEW HAMPSHIRE BASE HEDGING COMMODITY								
36	COSTS								
37	TOTAL BASE HEDGING COMMODITY	Schedule 1B, LN 38							
38	Res Heat	LN 13 * LN 37							
39	Res General	LN 14 * LN 37							
40	G50 Low Annual-Low Winter	LN 15 * LN 37							
41	G40 Low Annual-High Winter	LN 16 * LN 37							
42	G51 Med Annual-Low Winter	LN 17 * LN 37							
43	G41 Med Annual-High Winter	LN 18 * LN 37							
44	G52 High Annual-Low Winter	LN 19 * LN 37							
45	G42 High Annual-High Winter	LN 20 * LN 37							
46									
47	Residential	LN 38 + LN 39							
48	SALES HLF CLASSES	LN 40 + LN 42 + LN 44							
49	SALES LLF CLASSES	LN 41 + LN 43 + LN 45							

Northern Utilities, Inc. New Hampshire Division Schedule 10C Page 3 of 6

M Northern Utilities - MAINE DIVISION

м Allocation of Commodity Costs to Customer Classes

Remaining Commodity Costs

N Re	emaining Commodity Costs																
N 50	REMAINING SENDOUT BY CLASS	T 1	lov-10	T	Dec-10	Г	Jan-11	ī	Feb-11	T	Mar-11		Apr-11		TOTAL	_	WINTER
м 51	Total Therms	<u> </u>		\vdash		-		├	100 11	\vdash	ma n	-	Apr-11		TOTAL		WINTER
и 52	Res Heat	1	,028,528		1,674,678		2,604,787	l	2,176,245	1	2,115,513	l	1,157,671		11,625,830		10 757 400
и 53		'	13,411	1	18,367		30,451		27,245		25,383		15,766		152,971		10,757,423
n 54	1		17,744		49,177		74,615		68,018						•		130,621
N 55			497,305	1	910,077		1,523,378				58,880		21,589		369,413		290,022
N 56		Ì	78,298						1,308,102		1,146,689		619,942		6,519,560	1	6,005,493
N 57	G41 Med Annual-High Winter		524,653		112,149 1,031,950		126,673	1	101,151	l	106,981		45,487		698,478	ĺ	570,738
N 58			324,033		1,031,950		1,126,258		942,709	ĺ	936,073		488,797		5,691,344		5,050,441
N 59	1 Ingrit without most tritted.		94.079		145,231	1	142 047		420 420	l			40.005		12,460		
N 60	Total Firm Sales	1 -	254,019		3,941,629	ĺ	143,047 5,629,208		120,139	1	92,735		48,985		684,682		644,217
N 61	% of Total		,,204,013	\vdash	3,341,023	├	5,029,206	├	4,743,608	⊢	4,482,254		2,398,238		25,754,739		23,448,955
n 62	Res Heat		45.63%	i	42.49%	İ	46 279/		4E 000/	Ì	47 2007		40.070/				
N 63	Res General		0.59%		0.47%		46.27% 0.54%		45.88% 0.57%		47.20%		48.27%				
n 64	G50 Low Annual-Low Winter		0.79%		1.25%	ł		l			0.57%		0.66%				
и 65	G40 Low Annual-High Winter	1	22.06%	1	23.09%		1.33% 27.06%		1.43%		1.31%		0.90%				
и 66	G51 Med Annual-Low Winter		3.47%						27.58%		25.58%		25.85%				
N 67	G41 Med Annual-High Winter	}	23.28%	1	2.85%		2.25%	l	2.13%		2.39%		1.90%				
N 68	G52 High Annual-Low Winter		0.00%		26.18%		20.01%		19.87%		20.88%		20.38%				
N 69			4.17%		0.00%		0.00%		0.00%		0.00%		0.00%				
N 70	1 3 3	1			3.68%		2.54%		2.53%		2.07%		2.04%				1
N PO	Total Fill Gales	<u> </u>	100.00%	<u></u>	100.00%	L	100.00%	L	100.00%		100.00%	L	100.00%				
14	REMAINING COMMODITY COSTS EXCLD	1		т		ı —				_							
n 71	HEDGING	١.	lov-10		D 40		1 44		- 1 44	i							
N 72	REMAINING COMMODITY Excld Hedging			<u></u>	Dec-10	_	Jan-11	-	Feb-11		Mar-11		Apr-11	_	TOTAL	-	WINTER
N 73	Res Heat		,018,400	1	1,721,760		2,449,559		2,055,564		2,032,520		1,146,625		11,571,544		10,424,427
N 74	Res General	\$	464,705	\$			1,133,477	\$	943,040	\$	959,299	\$	553,496	\$	5,216,126	\$	4,785,540
N 75	G50 Low Annual-Low Winter	\$	6,059	\$	8,023	\$	13,251	\$	11,806	\$	11,510	\$	7,538	\$	69,224	\$	58,187
N 76	G40 Low Annual-High Winter	\$	8,017	\$	21,481	\$	32,469	\$	29,475	\$	26,700	\$	10,322	\$	167,947	\$	128,463
N 77	G51 Med Annual-Low Winter	\$	224,690	\$	397,535	\$	662,900	\$	566,844	\$	519,977	\$	296,401	\$	2,922,863	\$	2,668,347
N 78	G41 Med Annual-High Winter	\$	35,376	\$	48,988	\$	55,122	\$	43,832	\$	48,511	\$	21,748	\$	317,673	\$	253,577
N 79	G52 High Annual-Low Winter	\$	237,046	\$	450,770	\$	490,093	\$	408,507	\$	424,471	\$	233,700	\$	2,565,325	\$	2,244,588
N 80	G42 High Annual-High Winter	\$	40 500	\$	60.400	\$		\$	-	\$	-	\$		\$	6,213	\$	
N 81	G42 High Annual-High Wilker) D	42,506	\$	63,439	\$	62,247	\$	52,060	\$	42,052	\$	23,420	\$	306,173	\$	285,725
N 82	Residential	\$	470,764	\$	739,546	0	1 146 700	•	054.046	-	070.000	•	504.004	•	5 005 050	Φ.	1.040.707
N 83	SALES HLF CLASSES	\$	43,393				1,146,728	\$		\$	970,809			\$	5,285,350	\$	4,843,727
N 84	SALES LLF CLASSES	\$	504,243		70,469	\$	87,591	\$	73,307	\$	75,211	\$	32,070	\$	491,833	\$	382,040
N	JONEED EEL OBAGGEG	ĮΦ	304,243	ĮΦ	911,744	Ф	1,215,241	1 2	1,027,412	1 3	986,500	Ф	553,521	Ъ	5,794,361	\$	5,198,660
и 85	REMAINING COMMODITY HEDGING COSTS	1				_											
N 86	TOTAL REMAINING COMMODITY HEDGING	\$	148,273	\$	63,999	\$	10 510	,	10.540	,	02.000	Φ.	440.054	æ	400.040		107.050
N 87	Res Heat	\$	67,658	\$		9	18,519	\$	12,542	\$	83,669	\$	140,051	\$	483,848	\$	467,052
N 88	Res General	\$	882	\$	27,191	\$	8,569	\$	5,754	\$	39,489	\$	67,605	\$	223,637	\$	216,267
N 89	G50 Low Annual-Low Winter	\$		\$	298		100	\$	72	\$	474	\$	921	\$	2,893	\$	2,747
N 90	G40 Low Annual-High Winter	\$	1,167	\$	798	\$ 6	245	\$	180	\$	1,099	\$	1,261	\$	5,139	\$	4,751
N 90	G51 Med Annual-Low Winter	\$	32,714 5,151	\$	14,777	\$	5,012	\$	3,459	\$	21,405	\$	36,203	\$	117,504	\$	113,568
N 92	G41 Med Annual-High Winter	\$	34,513	\$	1,821 16,755	\$	417 3,705	\$	267	\$	1,997	\$	2,656	\$	13,032	\$	12,309
N 93	G52 High Annual-Low Winter	\$	34,313	\$	10,755	\$	3,705		2,493		17,473	\$	28,545	\$	107,430	\$	103,483
N 94	G42 High Annual-High Winter	\$	6 100	\$	2 250		474	\$	240	\$	1 704	\$	2 004	\$	80	\$	- 10.007
N 94	OTZ i ngri Annual-ringri vvinter	٦	6,189	1 3	2,358	\$	471	\$	318	\$	1,731	\$	2,861	\$	14,134	\$	13,927
N 96	Residential	\$	68,540	ď	27,489	•	0.000	-	E 000	-	20.002	σ.	60.500	\$		\$	210.011
	SALES HLF CLASSES	1 '		\$		\$	8,669	\$	5,826	\$	39,963			\$	226,530	\$	219,014
и 97 и 98	SALES ILF CLASSES	\$ \$	6,318		2,619	\$	662		447	\$	3,096			\$	18,251	\$	17,060
N 30	ONLLO LEI CLAGGES	ĮΦ	73,415	3	33,890	\$	9,187	\$	6,269	1.5	40,609	\$	67,608	\$	239,067	\$_	230,978

Northern Utilities - MAINE DIVISION Allocation of Commodity Costs to Customer Classes

Remaining Commodity Costs

	manning Commodity Costs	
50	REMAINING SENDOUT BY CLASS	
51	Total Therms	
52	Res Heat	Schedule 10B, LN 68
53	Res General	Schedule 10B, LN 69
54	G50 Low Annual-Low Winter	Schedule 10B, LN 70
55	G40 Low Annual-High Winter	Schedule 10B, LN 71
56	G51 Med Annual-Low Winter	Schedule 10B, LN 72
57	G41 Med Annual-High Winter	Schedule 10B, LN 73
58	G52 High Annual-Low Winter	Schedule 10B, LN 74
59	G42 High Annual-High Winter	Schedule 10B, LN 75
60	Total Firm Sales	Sum LN 52 : LN 59
61	% of Total	
62	Res Heat	LN 52 / LN 60
63	Res General	LN 53 / LN 60
64	G50 Low Annual-Low Winter	LN 54 / LN 60
65	G40 Low Annual-High Winter	LN 55 / LN 60
66	G51 Med Annual-Low Winter	LN 56 / LN 60
67	G41 Med Annual-High Winter	LN 57 / LN 60
68	G52 High Annual-Low Winter	LN 58 / LN 60
69	G42 High Annual-High Winter	LN 59 / LN 60
70	Total Firm Sales	LN 60 / LN 60

74	DEMANDING COMMODITY COORS SHOW	
71	REMAINING COMMODITY COSTS EXCLD HEL	DGING
	REMAINING COMMODITY Excld Hedging	Schedule 1B, LN 39
73	Res Heat	LN 72 * LN 62
74	Res General	LN 72 * LN 63
75	G50 Low Annual-Low Winter	LN 72 * LN 64
76	G40 Low Annual-High Winter	LN 72 * LN 65
77	G51 Med Annual-Low Winter	LN 72 * LN 66
78	G41 Med Annual-High Winter	LN 72 * LN 67
79	G52 High Annual-Low Winter	LN 72 * LN 68
80	G42 High Annual-High Winter	LN 72 * LN 69
81		
82	Residential	LN 73 + LN 74
83	SALES HLF CLASSES	LN 75 + LN 77 + LN 79
84	SALES LLF CLASSES	LN 76 + LN 78 + LN 80

85	REMAINING COMMODITY HEDGING COSTS	
86	TOTAL REMAINING COMMODITY HEDGING	Schedule 1B. LN 40
87	Res Heat	LN 62 * LN 86
88	Res General	LN 63 * LN 86
89	G50 Low Annual-Low Winter	LN 64 * LN 86
90	G40 Low Annual-High Winter	LN 65 * LN 86
91	G51 Med Annual-Low Winter	LN 66 * LN 86
92	G41 Med Annual-High Winter	LN 67 * LN 86
93	G52 High Annual-Low Winter	LN 68 * LN 86
94	G42 High Annual-High Winter	LN 69 * LN 86
95		
96	Residential	LN 87 + LN 88
97	SALES HLF CLASSES	LN 89 + LN 91 + LN 93
98	SALES LLF CLASSES	LN 90 + LN 92 + LN 94

Northern Utilities, Inc. New Hampshire Division Schedule 10C Page 5 of 6

M Northern Utilities - MAINE DIVISION M Allocation of Commodity Costs to Customer Classes

ŧ	T	otal	Com	modit	y Costs
---	---	------	-----	-------	---------

N Total Commodity Costs																
N 99 TOTAL COMMODITY COSTS Excluding Hedging	Γ	***************************************	Г				Т		Т		Г		Γ-	***************************************		
N 100 TOTAL COMMODITY Excld Hedging	\$	1,421,015	\$	2,170,067	\$	2,918,774	s	2,481,319	1 \$	2,491,522	s	1,565,114	\$	16,797,685	\$	13,047,810
N 101 Res Heat	\$	646,375	\$	933,298		1,344,446		1,134,456		1,166,017		742,183		7,566,442	\$	5,966,774
N 102 Res General	\$	13,326	\$	16,094	\$	21.689	\$	19,463				15,085		162,664	\$	105,435
и 103 G50 Low Annual-Low Winter	\$	59,734	\$	78,921	\$	92,526	\$	83,966				64,036	-	832,067	\$	464,729
и 104 G40 Low Annual-High Winter	\$	255,158	\$	431,375	\$	698,282	\$	598,947		554,646		328,046	\$	3,308,923	\$	2,866,455
N 105 G51 Med Annual-Low Winter	\$	101,957	\$	122,937	\$	132,440	\$	113,984		124,272		90,900		1,176,103	\$	686,489
и 106 G41 Med Annual-High Winter	\$	292,691	\$	512,572	\$	554,711		467,137		487,788		291,493		3,273,279	\$	2,606,392
и 107 G52 High Annual-Low Winter	\$	3,944	\$	5,517	\$	6,250	\$	5,696				4,420	-	102,839	\$	31,190
и 108 G42 High Annual-High Winter	\$	47,831	\$	69,353	\$	68,430		57,670		48,110		28,951	\$	375,369	\$	320,345
N 109								,		,	,	,	*	0,0,000	•	020,010
N 110 Residential	\$	659,701	\$	949,391	\$	1,366,135	\$	1,153,919	\$	1,185,796	\$	757,268	\$	7,729,106	\$	6,072,210
N 111 SALES HLF CLASSES	\$	165,634	\$	207,375	\$	231,215		203,646	\$	215,182	\$	159,356	\$	2,111,009	\$	1,182,408
N 112 SALES LLF CLASSES	\$	595,680	\$	1,013,300	\$	1,321,424	\$	1,123,754	\$	1,090,544	\$	648,490	\$	6,957,570	\$	5,793,192
N	,			W-5	,											
N 113 TOTAL HEDGING COMMODITY COSTS	ĺ															
N 114 TOTAL HEDGING COMMODITY	\$	221,115	\$	206,683	\$	125,504	\$	155,583	\$	151,036	\$	194,526	\$	1,089,835	\$	1,054,446
N 115 Res Heat	\$	100,526	\$	91,410	\$	56,672	\$	70,064	\$	69,829	\$	92,167	\$	496,303	\$	480,668
N 116 Res General	\$	2,197	\$	2,867	\$	2,024	\$	2,644	\$	1,687	\$	1,903	\$	13,799	\$	13,323
N 117 G50 Low Annual-Low Winter	\$	10,524	\$	19,080	\$	13,939	\$	18,487	\$	9,736	\$	8,253	\$	82,760	\$	80,019
N 118 G40 Low Annual-High Winter	\$	38,226	\$	25,547	\$	13,079		14,244	\$	26,493	\$	40,322	\$	163,233	\$	157,912
N 119 G51 Med Annual-Low Winter	\$	17,196	\$	25,357	\$	18,046	\$	23,837	\$	13,116	\$	11,658	\$	112,961	\$	109,210
N 120 G41 Med Annual-High Winter	\$	44,580	\$	36,425	\$	18,439	\$	22,190	\$	26,766	\$	36,068	\$	190,945	\$	184,468
N 121 G52 High Annual-Low Winter	\$	714	\$	1,756	\$	1,425	\$	1,914	\$	787	\$	575	\$	7,708	\$	7,171
N 122 G42 High Annual-High Winter	\$	7,152	\$	4,240	\$	1,880	\$	2,202	\$	2,620	\$	3,580	\$	22,125	\$	21,676
N 123																, i
N 124 Residential	\$	102,723	\$	94,277	\$	58,696	\$	72,709	\$	71,517	\$	94,070	\$	510,102	\$	493,991
N 125 SALES HLF CLASSES	\$		\$	46,193	\$	33,410	\$	44,237	\$	23,639		20,486	\$		\$	196,399
N 126 SALES LLF CLASSES	\$	89,958	\$	66,212	\$	33,398	\$	38,637	\$	55,880	\$		\$	376,304	\$	364,055
N																

N																
N 127 TOTAL COMMODITY	L.	Nov-10		Dec-10		Jan-11	Г	Feb-11		Mar-11		Apr-11	TO	DTAL	WI	NTER
N 128 Res Heat	\$	746,901	\$	1,024,708	\$	1,401,117	\$	1,204,520	\$	1,235,846	\$	834,350	\$	8,062,745	\$	6,447,443
N 129 Res General	\$	15,523	\$	18,961	\$	23,714	\$	22,107	\$	21,466	\$	16,988	\$	176,463	\$	118,759
N 130 G50 Low Annual-Low Winter	\$	70,257	\$	98,001	\$	106,465	\$	102,453	\$	95,283	\$	72,289	\$	914,827	\$	544,748
и 131 G40 Low Annual-High Winter	\$	293,384	\$	456,922	\$	711,361	\$	613,191	 \$	581,139	\$	368,369	\$	3,472,156	\$	3,024,367
N 132 G51 Med Annual-Low Winter	\$	119,153	\$	148,293	\$	150,486	\$	137,821	۱\$	137,388	\$	102,558	\$	1,289,065	\$	795,698
N 133 G41 Med Annual-High Winter	\$	337,271	\$	548,998	\$	573,150	\$	489,327	\$	514,554	\$	327,561	\$	3,464,224	\$	2.790.860
и 134 G52 High Annual-Low Winter	\$	4,657	\$	7,273	\$	7,675	\$	7,609	\$	6,151	\$	4.995	\$	110,546	\$	38,361
и 135 G42 High Annual-High Winter	\$	54,983	\$	73,593	\$	70,311	\$	59,873	\$	50,731	\$	32,531	\$	397,494	\$	342,021
N 136 Total Firm Sales	\$	1,642,129	\$	2,376,749	\$	3,044,278	\$	2,636,902	\$	2,642,557	\$	1,759,640	\$	17,887,520	\$	14,102,256
N 137										 			Ė	, , , , , , , , , , , , , , , , , , , ,	Ť	
N 138 Residential	\$	762,424	\$	1,043,669	\$	1,424,831	\$	1,226,627	\$	1,257,312	\$	851,338	\$	8,239,208	\$	6,566,201
N 139 SALES HLF CLASSES	\$	194,068	\$	253,568				247,883			\$	179,842	s	2,314,438	š	1,378,807
N 140 SALES LLF CLASSES	\$	685,638	\$	1,079,513		1,354,822		1,162,391		1.146.424	\$	728,461	\$	7,333,874	\$	6,157,247
n 141			Ì	,	1	.,	Ť	.,,	ľ	.,,	•	. 20, 10 .	•	1,000,011	*	0,101,211
N 142 % ALLOCATION BETWEEN SALES HLF AND LLF									_			~~				
N 143 SALES HLF CLASSES													İ			18.30%
N 144 SALES LLF CLASSES								i								81.70%

Northern Utilities, Inc. New Hampshire Division Schedule 10C Page 6 of 6

Northern Utilities - MAINE DIVISION Allocation of Commodity Costs to Customer Classes

Total	Comm	odity	Costs
	90111111	-uity	0000

99	TOTAL COMMODITY COSTS Excluding Hedging	
100	TOTAL COMMODITY Excld Hedging	Schedule 1B, LN 41
101	Res Heat	LN 24 + LN 73
102	Res General	LN 25 + LN 74
103	G50 Low Annual-Low Winter	LN 26 + LN 75
104	G40 Low Annual-High Winter	LN 27 + LN 76
105	G51 Med Annual-Low Winter	LN 28 + LN 77
106	G41 Med Annual-High Winter	LN 29 + LN 78
107	G52 High Annual-Low Winter	LN 30 + LN 79
108	G42 High Annual-High Winter	LN 31 + LN 80
109		
110	Residential	LN 101 + LN 102
	SALES HLF CLASSES	LN 103 + LN 105 + LN 107
112	SALES LLF CLASSES	LN 104 + LN 106 + LN 108

113 TOTAL HEDGING COMMODITY COSTS	
114 TOTAL HEDGING COMMODITY	Schedule 1B, LN 42
115 Res Heat	LN 38 + LN 87
116 Res General	LN 39 + LN 88
117 G50 Low Annual-Low Winter	LN 40 + LN 89
118 G40 Low Annual-High Winter	LN 41 + LN 90
119 G51 Med Annual-Low Winter	LN 42 + LN 91
120 G41 Med Annual-High Winter	LN 43 + LN 92
121 G52 High Annual-Low Winter	LN 44 + LN 93
122 G42 High Annual-High Winter	LN 45 + LN 94
123	
124 Residential	LN 115 + LN 116
125 SALES HLF CLASSES	LN 117 + LN 119 + LN 121
126 SALES LLF CLASSES	LN 118 + LN 120 + LN 122

127	TOTAL COMMODITY	
128	Res Heat	LN 101 + LN 115
129	Res General	LN 102 + LN 116
130	G50 Low Annual-Low Winter	LN 103 + LN 117
131	G40 Low Annual-High Winter	LN 104 + LN 118
132	G51 Med Annual-Low Winter	LN 105 + LN 119
133	a the same and a same a same a same a same a same a same a same a same a same a same a same a same a same a sa	LN 106 + LN 120
134	G52 High Annual-Low Winter	LN 107 + LN 121
135		LN 108 + LN 122
	Total Firm Sales	Sum LN 128 : LN 135
137		
138	Residential	LN 128 + LN 129
	SALES HLF CLASSES	LN 130 + LN 132 + LN 134
140	SALES LLF CLASSES	LN 131 + LN 133 + LN 135
141		
	% ALLOCATION BETWEEN SALES HLF AND LLF	
143		LN 139 / (LN 139 + LN 140)
144	SALES LLF CLASSES	LN 140 / (LN 139 + LN 140)

						•	,				
No. of the Control of		Northe	ern Utilities, In	C.							
<i>(</i>	Con	nmodity Volum	nes by Supply	Source (Dth)							
November 2010 through April 2011											
Description Nov-10 Dec-10 Jan-11 Feb-11 Mar-11 Apr-11 Se											
Pipeline											
Chicago	73,841	0	1,773	12,562	39,178	174,508	301,862				
Pittsburgh, NH	33,000	34,100	34,100	30,800	34,100	33,000	199,100				
Niagara	68,184	0	0	8,953	23,563	83,993	184,693				
Tennessee Production	324,343	222,595	161,528	110,471	274,333	281,822	1,375,093				
Subtotal Pipeline Volumes	499,368	256,695	197,401	162,786	371,174	573,323	2,060,747				
Storage											
Tennessee Storage	0	0	64,297	33,094	47,753	2,536	147,681				
Washington 10 Storage	0	571,056	832,121	714,242	442,476	0	2,559,895				
Subtotal Storage Volumes	0	571,056	896,418	747,336	490,230	2,536	2,707,576				
Peaking											
Peaking Supply 1	91,721	126,202	127,231	112,960	117,031	26,895	602,041				
Peaking Supply 2	0	0	0	0	2,670	0	2,670				
LNG	1,350	1,395	1,395	1,260	11,646	1,826	18,872				
Subtotal Peaking Volumes	93,071	127,597	128,626	114,220	131,348	28,722	623,584				
Total Delivered (Dth)	592,439	955,348	1,222,446	1,024,342	992,752	604,580	5,391,907				

	***************************************		ern Utilities, In									
	Commodity Volumes by Supply Source (Dth)											
November 2010 through April 2011												
Description Nov-10 Dec-10 Jan-11 Feb-11 Mar-11 Apr-11 Se												
Pipeline												
Chicago	175,173	180,435	180,435	162,974	174,615	175,782	1,049,415					
PNGTS - Delivered	33,000	34,100	34,100	30,800	34,100	33,000	199,100					
Niagara	98,411	101,691	101,691	91,850	98,411	96,562	588,615					
Tennessee Production	392,668	405,757	405,757	366,490	404,093	374,722	2,349,486					
Subtotal Pipeline Volumes	699,251	721,983	721,983	652,114	711,219	680,066	4,186,616					
Storage		1										
Tennessee Storage	1,147	23,758	56,487	34,317	57,300	67,929	240,938					
Washington 10 Storage	134,434	663,155	960,392	694,251	576,676	122,937	3,151,846					
Subtotal Storage Volumes	135,581	686,913	1,016,879	728,568	633,976	190,867	3,392,784					
Peaking												
Peaking Supply 1	132,990	124,141	141,421	113,574	78,712	119,882	710,722					
Peaking Supply 2	0	2,706	56,522	48,071	31,774	0	139,073					
LNG	1,350	1,395	1,395	1,260	1,395	20,029	26,824					
Subtotal Peaking Volumes	134,340	128,242	199,339	162,905	111,881	139,911	876,619					
Total Delivered (Dth)	969,173	1,537,138	1,938,201	1,543,587	1,457,076	1,010,844	8,456,019					

Northern Utilities, Inc. Capacity Utilization

Normal Winter Scenario (Includes Only Sales Service Customers)

	Peak Period	Coorier o Amorae	Nov Mar MDO	Apr MDQ (Less		
Description	Normal Year	Capacity Path		, ,	Seasonal	Utilization Rate
Description		MDQ	(Less Capacity		Quantity (Dth)	Utilization Rate
	Use (Dth)		Assignment)	Assignment)	,	
Pipeline						
Chicago	301,862	6,433	5,314	6,025	983,164	31%
Pittsburgh, NH	199,100	1,100	1,100	1,100	199,100	100%
Niagara	184,693	3,280	2,709	3,072	501,219	37%
Tennessee Production	1,375,093	13,089	10,812	12,259	2,000,382	69%
Subtotal Pipeline Volumes	2,060,747	23,902	19,935	22,456	3,683,865	56%
Storage						
Tennessee Storage	147,681	2,640	2,158	2,450	206,360	72%
Washington 10 Storage	2,559,895	32,835	26,843	30,471	2,684,300	95%
Subtotal Storage Volumes	2,707,576	35,475	29,001	32,921	2,890,660	94%
Peaking				1		
Peaking Supply 1	602,041	4,975	4,116	3,860	614,126	98%
Peaking Supply 2	2,670	57,113	47,250	44,311	1,339,014	0%
LNG	18,872	10,000	8,273	7,758	9,669	195%
Subtotal Peaking Volumes	623,584	72,088	59,639	55,929	1,962,809	32%
Tatal Balling at (DII)	5 004 007	404 405	100 575	444.000	0 507 005	000/
Total Delivered (Dth)	5,391,907	131,465	108,575	111,306	8,537,335	63%

Northern Utilities, Inc. New Hampshire Division Schedule 11C Page 2 of 2

Northern Utilities, Inc. Capacity Utilization

Design Cold Winter Scenario (Includes All Customers Eligible for Sales Service)

Description	Peak Period Design Year Use (Dth)	Capacity Path MDQ	Seasonal Quantity (Dth)	Utilization Rate
Pipeline				
Chicago	1,049,415	6,433	1,164,373	90%
Pittsburgh, NH	199,100	1,100	199,100	100%
Niagara	588,615	3,280	593,680	99%
Tennessee Production	2,349,486	13,089	2,369,109	, ,
Subtotal Pipeline Volumes	4,186,616	23,902	4,326,262	97%
Storage				
Tennessee Storage	240,938	2,640	252,452	l i
Washington 10 Storage	3,151,846	32,835	3,283,500	96%
Subtotal Storage Volumes	3,392,784	35,475	3,535,952	96%
Peaking				
Peaking Supply 1	710,722	4,975	751,225	95%
Peaking Supply 2	139,073	57,113	1,427,825	10%
LNG	26,824	10,000	9,669	277%
Subtotal Peaking Volumes	876,619	72,088	2,188,719	40%
Total Delivered (Dth)	8,456,019	131,465	10,050,933	84%

Northern Utilities, Inc. New Hampshire Division Schedule 11D Page 1 of 1

Northern Utilities Inc. Forecast of Upcomming Winter Period Design Day Report 2010-2011 Winter (Therms)

Demand Firm Sales Interruptible Sales Capacity Exempt Transportation Non-Capacity Exempt Transportation Interruptible Transportation	645,003 0 260,631 248,920 0
Total	1,154,554
Supplies Capacity Exempt Transportation Pipeline Storage On-System LNG Off-System Peaking On-System Propane	260,631 238,970 354,750 100,000 620,880 0
Total	1,575,231
Effective Degree Day New Hampshire Maine Probability	80 81 1 in 30

Francis X. Wells

Sr. Energy Trader

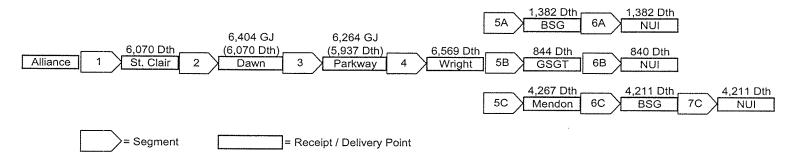
Report Prepared By

Title

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 1 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Chicago (Interconnection of Alliance and Vector Pipelines)

Capacity Path Diagram



Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Vector	FT-1-NUI-0122	FT-1	3/31/2016	6,070	Dth	Year-Round	Alliance Pipeline Interconnect	St. Clair	
2	Transportation	Vector	FT-1-NUI-C0122	FT-1	3/31/2016	6,404	GJ	Year-Round	St. Clair	Dawn	TransCanada
3	Transportation	TransCanada	29594	FT	10/31/2016	6,264	GJ	Year-Round	Dawn	Parkway	Iroquois
4	Transportation	Iroquois	R181001	RTS-1	10/31/2013	6,569	Dth	Year-Round	Parkway	Wright	Tennessee
5A	Transportation	Tennessee	31861	NET-284	10/31/2012	1,382	Dth	Year-Round	Wright	Bay State City Gate	
6A	Exchange	Bay State Gas	NA	NA	Renewal Clause	1,382	Dth	Year-Round	Bay State City Gate	Northern City Gates	
5B	Transportation	Tennessee	31861	NET-284	10/31/2012	844	Dth	Year-Round	Wright	Pleasant St.	Granite
6B	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	840	Dth	Year-Round	Pleasant St.	Northern City Gates	
5C	Transportation	Tennessee	41099	FT-A	10/31/2017	4,267	Dth	Year-Round	Wright	Mendon	Algonquin
6C	Transportation	Algonquin	93200F	AFT-1	10/31/2012	4,211	Dth	Year-Round	Mendon	Bay State City Gate	
7C	Exchange	Bay State Gas	NA	NA	Renewal Clause	4,211	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path	Deliverable					6,433	Dth				

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 2 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Pittsburgh, NH (Interconnection of TransCanada and PNGTS Pipelines)

Capacity Path Diagram

Pittsburgh, NH 1 Westbrook, ME 2	1,095 Dth NUI
= Segment	= Receipt / Delivery Point

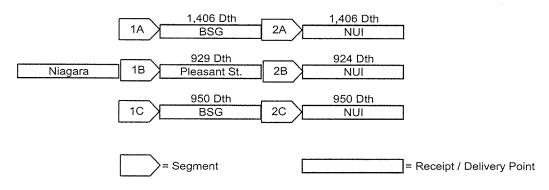
Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	PNGTS	1997-003	FT	3/9/2019	1,100	Dth	Year-Round	Pittsburgh, NH	Westbrook, ME	Granite
2	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	1,095	Dth	Year-Round	Westbrook, ME	Northern City Gates	
Total Path	Deliverable				1,095	Dth					

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 3 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Niagara (Interconnection of TransCanada and Tennessee Pipelines)

Capacity Path Diagram



Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1A	Transportation	Tennessee	5292	FT-A	3/31/2015	1,406	Dth	Year-Round	Niagara	Bay State City Gate	
2A	Exchange	Bay State Gas	NA	INA	Renewal Clause	1,406	Dth	Year-Round	Bay State City Gate	Northern City Gates	
1B	Transportation	Tennessee	39735	FT-A	3/31/2015	929	Dth	Year-Round	Niagara	Pleasant St.	Granite
2B	Transportation	Granite	10-010-FT-NN	I-I-NN	Renewal Clause	924	Dth	Year-Round	Pleasant St.	Northern City Gates	
1C	Transportation	Tennessee	46314	FT-A	3/31/2012	950	Dth	Year-Round	Niagara	Bay State City Gate	
2C	Exchange	Bay State Gas	NA	INA	Renewal Clause	950	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Pati	Total Path Deliverable										

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Tennessee Production Area

Capacity Path Diagram

TGP Zone 0 1A Pleasant St.	4,582 Dth NUI
8,550 Dth TGP Zone L 1B Pleasant St.	8,507 Dth 2B NUI
= Segment	= Receipt / Delivery Point

Capacity Path Detail

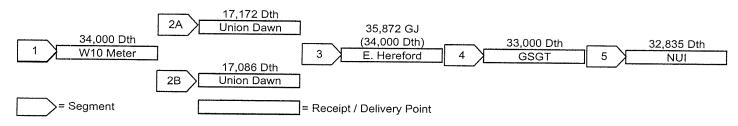
Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1A ¹	Transportation	Tennessee	5083	FT-A	10/31/2018	4,605	Dth	Year-Round	Zone 0, 100 Leg	Pleasant St.	Granite
2A	Transportation	Granite	10-010-FT-NN	IFI-NN	Renewal Clause	4,582	Dth	Year-Round	Pleasant St.	Northern City Gates	
1B ¹	Transportation	Tennessee	5083	FT-A	10/31/2018	8,550	Dth	Year-Round	Zone L, 500 & 800 Legs	Pleasant St.	Granite
2B	Transportation	Granite	10-010-FT-NN	1 - 1 - NIN	Renewal Clause	8,507	Dth	Year-Round	Pleasant St.	Northern City Gates	
Total Path	otal Path Deliverable										

Note 1: Tennessee Contract No. 5083 also allows for firm delivery rights to Bay State Gas city gates. As such, Tennessee Production could also be delivered to Northern City Gates via the Bay State Exchange.

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 5 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Washington 10 Storage

Capacity Path Diagram



Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1 ¹	Storage	Washington 10	01052	Firm Storage	3/31/2018	34,000	Dth	Year-Round		W10 Withdrawal Meter	Vector
2A ²	Transportation	Vector	CRL-NUI-0725	FT	10/31/2017	17,172	Dth	Year-Round	W10 Withdrawal Meter	Union Dawn	TransCanada
2B	Transportation	Vector	CRL-NUI-0727	FT	3/31/2017	17,086	Dth		W10 Withdrawal Meter	Union Dawn	TransCanada
3	Transportation	TransCanada	33322	FT	3/31/2018	35,872	GJ	Year-Round	Union Dawn	East Hereford	PNGTS
4	Transportation	PNGTS	1997-004	FT	3/9/2019	33,000	1)th	Winter Only (Nov - Mar)	Pittsburgh, NH	Granite	Granite
5	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	32,835	Dth	Year-Round	Granite	Northern City Gates	
Total Path	Total Path Deliverable					32,835	Dth				

Note 1: Washington 10 Contract 01052 has a maximum storage quantity of 3,400,000 Dth.

Note 2: Vector Contract No. CRL-NUI-0725 allows for receipt from the Alliance Interconnect (Chicago). Gas is received on this contract at the W10 Withdrawal meter on a secondary, firm basis. This capacity is used for summer refill of the Washington 10 storage contract.

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Tennessee Firm Storage - Market Area

Capacity Path Diagram

	4,243 Dth		2,653 D	th		2,640 Dth
1 1	TGP Zone 4] 2)	Pleasant	St. 3		NUI
	Segment		<u> </u>		ooint /	Delivery Point
/-	Segment		L		ceipt /	Delivery Politi

Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1 ¹	Storage	Tennessee	5195	FS-MA	10/31/2013	4,243	Dth	Year-Round	NA	TGP Zone 4	Tennessee
2 ²	Transportation	Tennessee	5265	FT-A	10/31/2013	2,653	Dth	Year-Round	TGP Zone 4	Pleasant St.	Granite
3	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	2,640	Dth	Year-Round	Pleasant St.	Northern City Gates	
Total Path	n Deliverable					2,640	Dth				

Note 1: Tennessee Contract No. 5195 has a maximum storage quantity of 259,337 Dth.

Note 2: Tennessee Contract No. 5265 also allows for firm delivery rights to Bay State Gas city gates. As such, Tennessee Production could also be delivered to Northern City Gates via the Bay State Exchange.

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 7 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Peaking Supply 1

Capacity Path Diagram

5,000 Dth Pleasant St.	4,975 Dth NUI City Gates	
= Segment	= R	eceipt / Delivery Point

Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract	Northern MDQ		Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1 ¹	Peaking Supply	Distrigas	NA	NA	10/31/2011	5,000	Dth	Year-Round	NA	Pleasant St.	Granite
2	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	4,975	Dth	Year-Round	Pleasant St.	Northern City Gates	
Total Path	Deliverable					4,975	Dth				

Note 1: Peaking Supply 1 Contract allows Northern to nominate an additional 5,000 Dth per Day of liquified LNG, which Northern delivers to its Lewiston LNG facility via truck. Annual maximum take is 755,000 Dth.

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Peaking Supply 2

Capacity Path Diagram

53,000 Dth Newington or Westbrook 2	52,735 Dth NUI City Gates
= Segment	= Receipt / Delivery Point

Capacity Path Detail

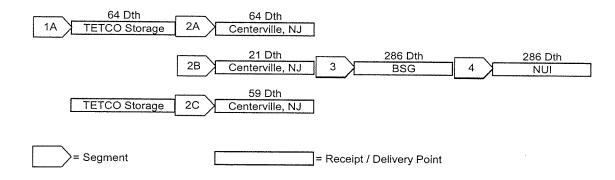
Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	/GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1 ¹	Peaking Supply	FPL Energy	NA	NA	3/31/2011	57,400	Dth	Winter Only (Nov-Mar)	NA	Newington, NH or Westbrook, ME	Granite
2	Transportation	Granite	10-010-FT-NN	FT-NN	Renewal Clause	57,113	Dth	Year-Rolling I	Newington, NH or Westbrook, ME	Northern City Gates	
Total Path	n Deliverable					57,113	Dth				

Note 1. Effective November 1, 2010, the Peaking Supply 2 Contract MDQ increases from 53,000 Dth to 57,400 Dth. The annual maximum take is 1,272,000 Dth, which increases to 1,435,000 Dth effective November 1, 2010.

Northern Utilities, Inc. New Hampshire Division Schedule 12 Page 9 of 10

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Texas Eastern Production and Storage & Algonquin (Centerville, NJ)

Capacity Path Diagram



Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1A ¹	Storage	Texas Eastern	400513	FSS-1	4/30/2012	64	Dth	Year-Round		Texas Eastern M3 Storage	
2A	Transportation	Texas Eastern	800436	CDS	10/31/2012	64	Dth	Year-Round	Texas Eastern M3 Storage	Centerville, NJ	Algonquin
2B ²	Storage	Texas Eastern	400215	SS-1	4/30/2013	21	Dth	Year-Round	Texas Eastern M3 Storage	Centerville, NJ	Algonquin
2C	Transportation	Texas Eastern	800464	CDS	10/31/2012	59	Dth	Year-Round	Texas Eastern Production Area	Centerville, NJ	Algonquin
3 ³	Transportation	Algonquin	93201A1C	AFT-1	10/31/2012	286	Dth	Year-Round	Centerville, NJ	Bay State City Gate	
4	Exchange	Bay State Gas	NA	INA	Renewal Clause	286	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path	n Deliverable					286	Dth				

Note 1: Texas Eastern Contract No. 400513 has a maximum storage quantity of 3,840 Dth.

Note 2: Texas Eastern Contract No. 400215 has a maximum storage quantity of 1,470 Dth.

Note 3: Northern has entered into a permanent release of Algonquin Contract No. 93201A1C. As such, these supplies are not deliverable to Northern City Gates. Northern plans to continue to seek permanent release of the other Texas Eastern contracts in this capacity path.

Northern Utilities, Inc. Capacity Path Diagram and Detail Source of Supply: Texas Eastern Zone M3

Capacity Path Diagram

	965 Dth	965 Dth		965 Dth
TETCO M3 1	Lambertville, NJ 2	BSG	3	NUI
=	Segment		= Receipt / D	elivery Point

Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ		Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1 ¹	Transportation	Texas Eastern	800384	FT-1	10/31/2017	965	Dth	Year-Round	Texas Eastern M3 Storage	Lambertville, NJ	Algonquin
2 ¹	Transportation	Algonquin	93201A1C	AFT-1 (F-2/F-3)	10/31/2012	965	Dth	Year-Round	Lambertville, NJ	Bay State City Gate	
3	Exchange	Bay State Gas	NA	NA	Renewal Clause	965	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path	Deliverable					965	Dth				

Note 1: Northern has entered into a permanent release of both Texas Eastern Contract No. 800384 and Algonquin Contract No. 93201A1C. As such, these supplies are not deliverable to Northern City Gates.

Northern Utilities, Inc. New Hampshire Division Migration to Transportation Only Service by Rate Class November 2010 through October 2011

		rough October 2011	
C&I Rate Class	Annual Sales Service Deliveries (Dth)	Percentage of Sales Service Total by Rate Class	Sales Service Percentage by Rate Class
G40	712,812	37%	87%
G50	166,544	9%	
G41	695,040	36%	1
G51	236,869	12%	
G42	80,481	4%	
G52	20,222	1%	2%
Special Contracts	-	0%	1
Total C&I	1,911,966	100%	36%

C&I Rate Class	Annual Transport- Only Deliveries (Dth)	Percentage of Transport Only Total by Rate Class	Transportation Service Percentage by Rate Class
T40	107,436	3%	13%
T50	48,161	1%	22%
T41	460,427	14%	1
T51	151,120	4%	39%
T42	376,995	11%	82%
T52	1,175,609	35%	98%
Special Contracts	1,058,667	31%	100%
Total C&I	3,378,416	100%	64%

C&I Rate Class	Annual Total Deliveries (Dth)	Percentage of Total by Rate Class					
G/T40	820,248	16%					
G/T50	214,705	4%					
G/T41	1,155,466	22%					
G/T51	387,989	7%					
G/T42	457,476	9%					
G/T52	1,195,830	23%					
Special Contracts	1,058,667	20%					
Total C&I	5,290,382	100%					

Northern Utilities, Inc. Storage Analysis Northern Utilities, Inc. New Hampshire Division Schedule 14 Page 1 of 1

Tennessee Storage

Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cos	fl ""	nning ntory ate	Injection Rate	ı	injected Value	V	/ithdrawal Rate	W	/ithdrawn Value	Ending Inventory Value	Interest Rate	1	arrying Costs	,	Ending Inventory Value Excluding rrying Costs	\ (/ithdrawn alue plus Charges
Nov-10	212,008	-	-	212,008	\$ 915,940	\$	4.32	NA	\$	-	\$	4.32	\$	-	\$ 915,940	2.35%	\$	1,793		915,940		-
Dec-10	212,008	-	-	212,008	\$ 915,940	\$	4.32	NA	\$	-	\$	4.32	\$	-	\$ 915,940	2.35%	\$	1,793	\$	915,940	\$	-
Jan-11	212,008	-	66,054	145,954	\$ 915,940	\$	4.32	NA	\$	-	\$	4.32	\$	285,373	\$ 630,567	2.35%	\$	1,514	\$	630,567	\$	285,373
Feb-11	145,954	-	33,998	111,956	\$ 630,567	\$	4.32	NA	\$	-	\$	4.32	\$	146,883	\$ 483,685	2.35%	\$	1,091	\$	483,685	\$	146,883
Mar-11	111,956	-	49,058	62,898	\$ 483,685	\$	4.32	NA	\$	-	\$	4.32	\$	211,945	\$ 271,740	2.35%	\$	739	\$	271,740	\$	211,945
Apr-11	62,898	30,389	2,599	90,688	\$ 271,740	\$	4.32	\$ 4.80	\$	145,843	\$	4.48	\$	11,632	\$ 405,951	2.35%	\$	663	\$	405,951	\$	11,632
May-11	90,688	53,599	-	144,287	\$ 405,951	\$	4.48	\$ 4.81	\$	258,011	\$	4.60	\$	-	\$ 663,962	2.35%	\$	1,047	\$	663,962	\$	-
Jun-11	144,287	51,870	-	196,157	\$ 663,962	\$	4.60	\$ 4.87	\$	252,685	\$	4.67	\$	-	\$ 916,647	2.35%	\$	1,547	\$	916,647	\$	-
Jul-11	196,157	5,250	-	201,408	\$ 916,647	\$	4.67	\$ 4.95	\$	25,968	\$	4.68	\$	-	\$ 942,615	2.35%	\$	1,820	\$	942,615	\$	-
Aug-11	201,408	-	-	201,408		1 '	4.68	NA	\$	-	\$	4.68	\$	-	\$ 942,615	2.35%	\$	1,845	\$	942,615	\$	-
Sep-11	201,408	-	-	201,408		1 '	4.68	NA	\$	-	\$	4.68	\$	-	\$ 942,615	2.35%	\$	1,845	\$	942,615	\$	-
Oct-11	201,408		-	201,408	\$ 942,615	\$	4.68	NA	\$		\$	4.68	\$	-	\$ 942,615	2.35%	\$	1,845	\$	942,615	\$	- 1

Washington 10 Storage

Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cost	Beginning Inventory Rate	Injection Rate	Injected Value	Wi	thdrawal Rate	Withdrawn Value	Ending Inventory Value	Interest Rate	Carrying Costs	Ending Inventory Value Excluding Carrying Costs	Withdrawn Value plus Charges
Nov-10	2,779,500	-	-	2,779,500	\$11,629,662	\$ 4.18	NA	\$ -	\$	4.18	\$ -	\$ 11,629,662	2.35%		\$ 11,629,662	\$ -
Dec-10	2,779,500	-	584,864	2,194,636	\$11,629,662	\$ 4.18	NA	\$ -	\$	4.18	\$2,447,119	\$ 9,182,544	2.35%		\$ 9,182,544	\$2,447,119
Jan-11	2,194,636	-	852,241	1,342,395	\$ 9,182,544	\$ 4.18	NA	\$ -	\$	4.18	\$3,565,850	\$ 5,616,694	2.35%		\$ 5,616,694	\$3,565,850
Feb-11	1,342,395	-	731,512	610,883	\$ 5,616,694	\$ 4.18	NA	\$ -	\$	4.18	\$3,060,707	\$ 2,555,987	2.35%		\$ 2,555,987	\$3,060,707
Mar-11	610,883	-	453,175	157,708	\$ 2,555,987	\$ 4.18	NA	\$ -	\$	4.18	\$1,896,124	\$ 659,863	2.35%		\$ 659,863	\$1,896,124
Apr-11	157,708	-	- 1	157,708	\$ 659,863	\$ 4.18	NA	\$ -	\$	4.18	\$ -	\$ 659,863	2.35%		\$ 659,863	\$ -
May-11	157,708	484,222	- 1	641,930	\$ 659,863	\$ 4.18	\$ 4.58	\$2,217,535	\$	4.48	\$ -	\$ 2,877,399	2.35%		\$ 2,877,399	\$ -
Jun-11	641,930	468,602	-	1,110,533	\$ 2,877,399	\$ 4.48	\$ 4.64	\$2,172,154	\$	4.55	\$ -	\$ 5,049,552	2.35%		\$ 5,049,552	\$ -
Jul-11	1,110,533	484,222	-		\$ 5,049,552		\$ 4.71	\$2,279,428	\$	4.60	\$ -	\$ 7,328,980	2.35%		\$ 7,328,980	\$ -
Aug-11	1,594,755	484,222	-		\$ 7,328,980		\$ 4.76	\$2,305,008	\$	4.63	\$ -	\$ 9,633,988	2.35%		\$ 9,633,988	
Sep-11	2,078,977	468,602	-	2,547,580	\$ 9,633,988	\$ 4.63	\$ 4.79	\$2,242,595	\$	4.66	\$ -	\$ 11,876,583	2.35%		\$ 11,876,583	
Oct-11	2,547,579	231,921	-	2,779,500	\$11,876,583	\$ 4.66	\$ 4.87	\$1,129,761	\$	4.68	\$ -	\$ 13,006,344	2.35%		\$ 13,006,344	\$ -

LNG Storage

	LNG Storage														
Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cost	Beginning Inventory Rate	HBIECHOR	Injected Value	Withdrawal Rate	Withdrawn Value	Ending Inventory Value	Interest Rate	Carrying Costs	Ending Inventory Value Excluding Carrying Costs	Withdrawn Value plus Charges
Nov-10	9,669	2,023	1,350	10,341	\$ 71,486	\$ 7.39	\$ 4.77	\$ 9,638	\$ 6.94	\$ 9,368	\$ 71,757	2.35%	\$ 140	\$ 71,757	\$ 9,368
Dec-10	10,341	1,395	1,395	10,341	\$ 71,757	\$ 6.94	\$ 4.77	\$ 6,648	\$ 6.68	\$ 9,319	\$ 69,085	2.35%	\$ 138	\$ 69,085	\$ 9,319
Jan-11	10,341	361	1,395	9,307	\$ 69,085	\$ 6.68	\$ 4.77	\$ 1,720	\$ 6.62	\$ 9,229	\$ 61,576	2.35%	\$ 128	\$ 61,576	\$ 9,229
Feb-11	9,307	2,294	1,260	10,341	\$ 61,576	\$ 6.62	\$ 4.77	\$ 10,932	\$ 6.25	\$ 7,875	\$ 64,633	2.35%	\$ 124		
Mar-11	10,341	10,612	11,646	9,307	\$ 64,633	\$ 6.25	\$ 4.77	\$ 50,570	\$ 5.50	\$ 64,032	\$ 51,171	2.35%	\$ 113	\$ 51,171	\$ 64,032
Apr-11	9,307	2,860	1,826	10,341	\$ 51,171	\$ 5.50	\$ 4.77	\$ 13,631	\$ 5.33	\$ 9,726	\$ 55,075	2.35%	\$ 104	\$ 55,075	\$ 9,726
May-11	10,341	-	1,395	8,946	\$ 55,075	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,429	\$ 47,646	2.35%	\$ 101	\$ 47,646	\$ 7,429
Jun-11	8,946	-	1,350	7,596	\$ 47,646	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,190	\$ 40,456	2.35%	\$ 86	\$ 40,456	\$ 7,190
Jul-11	7,596	-	1,395	6,201	\$ 40,456	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,429	\$ 33,027	2.35%	\$ 72	\$ 33,027	\$ 7,429
Aug-11	6,201	-	1,395	4,806	\$ 33,027	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,429	\$ 25,597	2.35%	\$ 57	\$ 25,597	\$ 7,429
Sep-11	4,806	-	1,350	3,456	\$ 25,597	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,190	\$ 18,407	2.35%	\$ 43	\$ 18,407	\$ 7,190
Oct-11	3,456	-	1,395	2,061	\$ 18,407	\$ 5.33	NA	\$ -	\$ 5.33	\$ 7,429	\$ 10,978	2.35%	\$ 29	\$ 10,978	\$ 7,429

FORM III

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION 2009-2010 WINTER PERIOD RECONCILIATION SCHEDULE 1: SUMMARY OF WINTER PERIOD BALANCE November 2009 - April 2010

	AMOUNT	
Winter Period Beg. Balance	\$2,464,908	SCHEDULE 2
Less: Reported Collections Less: Billing Adjustment Add: Cost of Firm Gas Allowable Add: Interest	(\$26,875,520) \$0 \$26,833,523 \$104,492	SCHEDULE 2 SCHEDULE 2 SCHEDULE 4 SCHEDULE 2
Winter Period Ending Balance	\$2,527,403	

NORTHERN UTILTIES, INC. - NEW HAMPSHIRE DIVISION 2009-10 WINTER PERIOD RECONCILIATION SCHEDULE 2: ADJUSTMENTS TO REPORTED SUMMER PERIOD ACCOUNTS May 2009 - April 2010 Acct 191.10

	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	<u>Total</u>
WINTER PERIOD Winter Period Account Beginning Balance(1) Plus: Cost of Firm Gas (Schedule 4) Less: Reported Collections (Schedule 3) Less: Billing Adjustment	\$ 2,066,133 \$ 324,218 \$ 68,430		\$ 202,141	\$ 463,098	\$ 583,812	\$ 340,706	\$ 3,461,034	\$ 5,515,279	\$ 5,457,786 \$ \$ 5,103,627 \$ \$ (7,496,388) \$	4,387,573	3,966,842	2,310,122	\$ 2,464,908 \$ 26,833,523 \$ (26,875,520)
Winter Period Account Ending Balance	\$ 2,458,781	\$ 2,951,670	\$ 3,157,082	\$ 3,625,596	\$ 4,202,548	\$ 4,545,631	\$ 5,381,303	\$ 5,443,110	\$ 3,065,025	1,869,733	1,797,238	2,521,548	\$ 2,422,912
Month's Average Balance Interest Rate (Prime Rate) Interest Applied	3.25%	\$ 2,708,289 3.25% \$ 7,335	3.25%	3.25%	3.25%		3.25%	3.25%		3.25%	3.25%	3.25% 5,855	\$ 104,492
Winter Period Account Ending Balance w/int	\$ 2,464,908	\$ 2,959,005	\$ 3,165,364	\$ 3,634,792	\$ 4,213,161	\$ 4,557,492	\$ 5,394,762	\$ 5,457,786	\$ 3,076,567	1,876,432	1,802,213	2,527,403	\$ 2,527,403

⁽¹⁾ Beginning balance for May-09 from Revised 2008-09 Winter Period Cost of Gas Adjustment Reconciliation in docket DG 08-115, dated March 4, 2009.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION 2009-10 WINTER PERIOD RECONCILIATION SCHEDULE 3: REVENUE BACKUP TO REPORTED COLLECTIONS(1) May 2009 - April 2010

FORM III Schedule 3

	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	<u>Total</u>
Accrued Revenue	\$ (1,311,072)						\$ 1,671,036	\$ 1,496,137	\$ 140,433	\$ (343,134)	\$ (716,828)	\$ (1,425,408)	\$ 822,237
Billed Revenue	\$ 1,242,642	\$ 12,527	\$ 4,064	\$ 2,866	\$ 16,056	\$ 8,236	\$ 966,188	\$ 3,970,794	\$ 7,355,955	\$ 5,937,540	\$ 4,762,863	\$ 3,016,194	\$ 26,053,283
Calendarized Revenue	\$ (68,430)	\$ 12,527	\$ 4,064	\$ 2,866	\$ 16,056	\$ 8,236	\$ 2,637,223	\$ 5,466,931	\$ 7,496,388	\$ 5,594,406	\$ 4,046,036	\$ 1,590,786	\$ 26,875,520

⁽¹⁾ Revenue figures reflect the transition to accrual accounting as required by Commission Order No. 25,038, dated October 30, 2009 in DG 07-033.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION 2009-10 WINTER PERIOD RECONCILIATION SCHEDULE 4: PURCHASED GAS COSTS ALLOCATED TO WINTER PERIOD May 2009 - April 2010

Second S	Commodity Costs:	May-09 (Actual)	Jun-09 (Actual)		Aug-09 (Actual)	Sep-09 (Actual)	Oct-0		Nov-09 (Actual)	Dec-09 (Actual)	Jan-10 (Actual)	Feb-10 (Actual)	Mar-10 (Actual)	Apr-10 (Actual)	Total Winter
Bose S			(* (5144)	(/ totali)	riotaan	(Motual)	(Aotac	,	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	Vinter
P		\$ 34,182	\$ -	\$ - \$	-	\$ -	\$	- \$	- 9	\$ - :	8,662 \$	· -	\$ -	\$ 31,403	\$ 40,065
Dasigis S		\$ -	\$ -	\$ - \$		\$ -	\$	- \$	- 9	š - :	12,928 \$		\$ -	\$ - :	\$ 12,928
Distrigue of Mess S	BP	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 9	52,755	615,705 \$	1,520,629	\$ 823,812	\$ - :	\$ 3,012,900
Distriguis of Mass S	Classic	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 5		5 - 9	92		\$ - :	
DTE	Distrigas of Mass	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 9	100.357	251.243		\$ 299.197	\$ 333.212	
Emers S	DTE	\$ -	\$ -	\$ - \$		\$ -	\$	- \$	- 5						
FPLINMEITER \$ 62,778 \$ \$ \$ \$ \$ \$ \$ \$ \$	Emera Energy	\$ 67 194	\$ -	\$ - \$		\$ -	\$	- \$					*		
Ibertrofic S - S - S - S - S - S - S - S - S -			*	\$ - \$	_	\$ -	•	. \$							
Inlegrys \$ 5,032 \$			*	\$ - \$	_	¢ -	•	- \$		•	,		*	•	•
J.P. Morapa		*	*	¢ - ¢	=	•	•	- y	- ;	•	,	• -		· -	, ,
Loub Dreyfus Electric Power S		9 3,032	•	.	•	φ - e	•	- 4	- 3	•		-	*	•	•
Macloral Energy S		. ·	•	5 - 5	-	3 -	•	- 3				-	*	•	
National Energy S		\$ -	\$ -	\$ - 5	•	\$ -	•	- \$		•					
Northeast Gas Marketing Sequent Energy Management, LP Sayang Saya, 997 Saya Saya, 987		\$ -	\$ -	\$ - \$	-	\$ -	*	- \$		•			*	•	
Sequent Energy Management, LP S 394,997 S - S - S - S - S - S - S - S - S - S	5,	•	*	\$ - \$. •	\$ -	\$	- \$	- 9	•		•	•	•	•
South Jersey Spark			•	\$ - \$	•	\$ -	\$	- \$	- 5			269,427	\$ 222,108	\$ - :	\$ 878,081
Spark S	Sequent Energy Management, LP	\$ 394,997	\$ -	\$ - \$	-	\$ -	\$	- \$	- \$	3,970	\$ - \$	-	\$ -	\$ - :	\$ 3,970
Second Second	South Jersey	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 5	214,587	\$ - \$	-	\$ -	\$ -	\$ 214,587
Female Sea S	Spark	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 5	•	\$ 13,004 \$	-	\$ -	\$ -	\$ 13,004
Subtotal \$ 664.769 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,082,000 \$ 3,078,330 \$ 2,975,947 \$ 2,161,725 \$ 478,042 \$ 9,786,044 \$ Commodity Cost Estimates \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,080,518 \$ 2,970,078 \$ 2,999,574 \$ 2,210,204 \$ 472,450 \$ 908,200 \$ 10,641,024 \$ Commodity Cost Reversals \$ (617,082) \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,080,518 \$ 2,991,078 \$ 2,999,574 \$ 2,210,204 \$ 472,450 \$ 908,200 \$ 10,641,024 \$ 1,040,045 \$ 1,040,0	Sprague Energy	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- 9	\$ -	\$ - \$; <u>-</u>	\$ 38,977	\$ -	\$ 38,977
Subtotal \$ 664.769 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,082,000 \$ 3,078,330 \$ 2,975,947 \$ 2,161,725 \$ 478,042 \$ 9,786,044 \$ Commodity Cost Estimates \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,080,518 \$ 2,970,078 \$ 2,999,574 \$ 2,210,204 \$ 472,450 \$ 908,200 \$ 10,641,024 \$ Commodity Cost Reversals \$ (617,082) \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,080,518 \$ 2,991,078 \$ 2,999,574 \$ 2,210,204 \$ 472,450 \$ 908,200 \$ 10,641,024 \$ 1,040,045 \$ 1,040,0	Tennessee	\$ 885	\$ -	\$ - \$	_	\$ -	\$	- \$	- 5	7,333	\$ 7,809 \$	7,964	\$ 25,260	\$ 12,304	\$ 60,669
Commodity Cost Reversals \$ (517,082) \$ - \$ - \$ - \$ - \$ - \$ 5	Subtotal	\$ 564,769	\$ -	\$ - \$	-	\$ -	\$	- \$	- 9	1,092,000	\$ 3,078,330 \$	2,975,947	\$ 2,161,725	\$ 478,042	\$ 9,786,044
Commodity Cost Reversals \$ (517,082) \$ - \$ - \$ - \$ - \$ - \$ 5		_													
Subtotal \$ 47,686 \$ - \$ - \$ - \$ - \$ - \$ 1,080,518 \$ 2,981,560 \$ 3,107,825 \$ 2,186,577 \$ 423,971 \$ 913,792 \$ 10,694,244 \$ Withdrawal Charges \$ 108 \$ 2,801 \$ 2,273 \$ 3,064 \$ - \$ 4,088 \$ 5,007 \$ 100,799 \$ 1,171,362 \$ 1,644,641 \$ 1,125,338 \$ 10,539 \$ 4,069,912 Interruptible Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$					-					<u> </u>					
Withdrawal Charges \$ 108 \$ 2,801 \$ 2,273 \$ 3,064 \$ - \$ 4,088 \$ 5,007 \$ 100,799 \$ 1,171,362 \$ 1,644,641 \$ 1,125,338 \$ 10,539 \$ 4,068,912					-										
Interruptible Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Subtotal	\$ 47,686	\$ -	\$ - \$	-	\$ -	\$	- \$	1,080,518	\$ 2,981,560	\$ 3,107,825	2,186,577	\$ 423,971	\$ 913,792	\$ 10,694,244
Interruptible Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Withdrawal Charges	\$ 108	\$ 2.801	\$ 2273 \$	3.064	¢ _	\$ 4	088 \$	5.007	\$ 100.799	\$ 1.171.362 ¶	1 644 641	\$ 1 125 338	\$ 10.539	\$ 4.069.912
Non Traditional Sales \$ (58,807) \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ (71,930) \$ (958,751) \$ (1,694,948) \$ - \$ (2,725,629) \$ Not OBA Adj \$ - \$ - \$ - \$ - \$ - \$ - \$ 9,022 \$ 13,478 \$ 7,907 \$ (4,850) \$ (3,845) \$ (81) \$ 21,632 \$ (200,000) \$ (3,845) \$ (3,84	-	+			3,004	φ -									
Net OBA Adj \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 9,022 \$ 13,478 \$ 7,907 \$ (4,850) \$ (3,845) \$ (81) \$ 21,632 \$ (20mpany Managed \$ - \$ - \$ (8,779) \$ - \$ - \$ - \$ - \$ (13,437) \$ (283,247) \$ (273,692) \$ (235,583) \$ (243,681) \$ (1,058,418) \$ (1,058,					•	Φ -	•						•		,
Company Managed \$ - \$ - \$ (8,779) \$ - \$ - \$ - \$ - \$ - \$ (13,437) \$ (283,247) \$ (273,692) \$ (235,583) \$ (243,681) \$ (1,058,418) \$ LNG Boiloff \$ - \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 3,706 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		\$ (50,007)		•	•	ф -	•	-		•					
LNG Boiloff Transportation Charges \$ - \$ - \$ - \$ - \$ - \$ - \$ 101,847 \$ 593,753 \$ 834,653 \$ 703,532 \$ 500,280 \$ 278,881 \$ 3,012,946 Hedging Costs \$ - \$ - \$ - \$ - \$ - \$ 391,680 \$ 497,797 \$ 359,604 \$ 415,832 \$ 551,773 \$ 668,016 \$ 2,884,703 Propane Inventory Finance Charges \$ 512 \$ 431 \$ 514 \$ 815 \$ 898 \$ 938 \$ 1,088 \$ 1,130 \$ 920 \$ 556 \$ 302 \$ 209 \$ 7,801 Prior Period Adjustment \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	•	a -	*	•	-	5 -	•	•	• •					· ·	•
Transportation Charges \$ - \$ - \$ - \$ - \$ - \$ 101,847 \$ 593,753 \$ 834,653 \$ 703,532 \$ 500,280 \$ 278,881 \$ 3,012,946 Hedging Costs \$ - \$ - \$ - \$ - \$ 391,680 \$ 497,797 \$ 359,604 \$ 415,832 \$ 551,773 \$ 668,016 \$ 2,884,703 Propane \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		\$ -	-		-	\$ -	•	•							
Hedging Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ 391,680 \$ 497,797 \$ 359,604 \$ 415,832 \$ 551,773 \$ 668,016 \$ 2,884,703 Propane \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		\$ -	•		-	\$ -	-			•					,
Propane \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Transportation Charges	\$ -	•	\$ - \$	-	\$ -	-	-			,				
Inventory Finance Charges S S S S S S S S S S	Hedging Costs	\$ -	\$ -	\$ - \$	-	\$ -	•	- \$	391,680	\$ 497,797	\$ 359,604 \$	415,832			\$ 2,884,703
Prior Period Adjustment Subtotal \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Propane	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- !	\$ -	\$ - \$	-	\$ -	\$ -	\$-
Subtotal \$ (58,187) \$ 3,231 \$ (5,991) \$ 3,879 \$ 898 \$ 5,027 \$ 512,351 \$ 1,193,520 \$ 2,026,918 \$ 1,527,268 \$ 243,317 \$ 713,885 \$ 6,224,302 \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (34	Inventory Finance Charges	\$ 512	\$ 431	\$ 514 \$	815	\$ 898	3 \$	938 \$	1,088	\$ 1,130	\$ 920 \$	556	\$ 302	\$ 209	\$ 7,801
Subtotal \$ (58,187) \$ 3,231 \$ (5,991) \$ 3,879 \$ 898 \$ 5,027 \$ 512,351 \$ 1,193,520 \$ 2,026,918 \$ 1,527,268 \$ 243,317 \$ 713,885 \$ 6,224,302 \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (24,301) \$ (34	Prior Period Adjustment	\$ -	\$ -	\$ - \$	-	\$ -	\$	- \$	- :	\$ -	\$ - 9	-	\$ -	\$ - :	\$ -
Commodity Cost Reversals \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,243,562 \$ 1,932,442 \$ 243,681 \$ 3,419,685 \$ Subtotal \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		\$ (58,187)	\$ 3,231	\$ (5,991) \$	3,879	\$ 898	3 \$ 5,	027 \$	512,351	\$ 1,193,520	\$ 2,026,918 \$	1,527,268	\$ 243,317	\$ 713,885	\$ 6,224,302
Commodity Cost Reversals \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 1,243,562 \$ 1,932,442 \$ 243,681 \$ 3,419,685 \$ Subtotal \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Commodity Cost Estimates	6	•	•		¢.	ø			c	¢ (4.040.560) \$. (4 022 442)	¢ (2/2 694)	\$ (400 40E)	¢ /2 920 190\
Subtotal \$ - \$ - \$ - \$ - \$ - \$ - \$ (1,243,562) \$ (688,880) \$ 1,688,761 \$ (156,814) \$ (400,495)		3 -													
	· · · · · · · · · · · · · · · · · · ·	3 -									-				
Total Commodity Costs \$ (10,501) \$ 3,231 \$ (5,991) \$ 3,879 \$ 898 \$ 5,027 \$ 1,592,869 \$ 4,175,080 \$ 3,891,181 \$ 3,024,966 \$ 2,356,050 \$ 1,470,863 \$ 16,518,052	Subtotal	<u> </u>	3 -	\$ - \$	-	3 -	<u> </u>	- \$	- ;	-	b (1,243,562) \$	(088,880)	\$ 1,088,761	Φ (100,814)	ə (400,495 <u>)</u>
	Total Commodity Costs	\$ (10,501)	\$ 3,231	\$ (5,991) \$	3,879	\$ 898	8 \$ 5,	027 \$	1,592,869	\$ 4,175,080	\$ 3,891,181 \$	3,024,966	\$ 2,356,050	\$ 1,470,863	\$ 16,518,052

NORTHERN UTILITIES, INC. - NEW MPSHIRE DIVISION 2009-10 WINTER PERIOD RECONCILIATION SCHEDULE 4: PURCHASED GAS COSTS ALLOCATED TO WINTER PERIOD May 2009 - April 2010

Demand Costs													Total
	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	Winter
	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	Wille
Pipeline Reservation	·····			(()	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(Fiotala)	() totali,	(Fioladi)	(Motoria)	(Actual)	(Actual)	
Algonquin	\$ 16,627	\$ 16,583	\$ 16,641	\$ 16,673	\$ -	\$ 33,316	\$ 16,671	\$ 15,722	15,767	15,767	15,767	15,767	\$ 178,675
BG Energy								\$ 213,086		•		•	\$ 2,697,747
Granite						\$ 82.628		\$ 78,375					\$ 882,971
Emera	\$ 20,421		\$ 21,221			\$ 21,484				-		•	\$ 266,557
Iberdrola								\$ -		•			\$ 148,305
Iroquois	Ť	-	\$ 21,707	*		\$ 21,707		\$ 20.567					
J.P. Morgan								\$ 20,507			,		\$ 233,080 \$ 128,153
PNGTS (DEM)		-	\$ 15,098	•		\$ 15.098 :		•					\$ 4,239,132
Sequent								\$ 625,705				,	\$ 4,239,132
Spectra	,	•	•	*	•	\$ - :	•	\$ -	•	•	,		\$ 17,014
Tennessee Gas (El Paso)	•		\$ 137,622	*	•	\$ 137,622 :							,
, ,	,												\$ 1,366,911
	\$ 91,274		\$ 91.340		•	ຈ - : \$ 91.654 :	•	*					\$ 16,204
	\$ (5,524)		\$ (5,587)					\$ 123,617		,			\$ 1,163,809
= '					. , , ,					(,- , ,			\$ (262,337)
		·		·		·	*	Ψ					\$ -
Total Pipeline Reservation	\$ 612,846	\$ 593,037	\$ 594,086	\$ 604,269	\$ 577,405	\$ 637,401	\$ 745,288	\$ 1,348,331	1,489,445	1,344,283	1,587,346	1,555,330	\$ 11,076,222
Product Demand													
	\$ 1,147	\$ 1,155	\$ 1,223	\$ 1,672	\$ 1,189	\$ 1,146	\$ 1,283	\$ 1,235	1,067	1,044	1,089 \$	1.066	\$ 13,169
Distrigas of Massachusetts			\$ 116,012			\$ 116,012							
FPL/NextEra		. ,						\$ 162,997					\$ 1,191,773 \$ 814,983
NEGM	*	•	\$ 358	•	•	ъ - : \$358 :	*						. ,
LNG used to vaporize	\$ (39,958)					\$ (44,082) \$							\$ 3,907
				•				\$ - !					\$ (132,744) \$ -
		· * · · · · · · · · · · · · · · · · · · ·	<u> </u>			\$ 73,435		\$ 263,711					\$ 1,891,088
Total i Todact Bemand	\$ 77,500	\$ 73,303	\$ 117,054 A	\$ 110,000	\$ 117,572	φ <i>13,433</i> .	φ 12,030	\$ 203,711	203,354 4	203,031	203,342 4	203,555	\$ 1,091,000
Storage Pipeline Transportation and Demand	Reservation												
Spectra		\$ -	\$ - :	\$ -	\$ -	\$ - :	\$ 435	\$ - 5	5 - 9	5 - 9	5 - 9		\$ 435
·	•	•	\$ 4,632			\$ 4,847		\$ 4,593					\$ 51,616
Washington 10 (BG Energy)			\$ 120,633		•	\$ 120,633		\$ 114,300					\$ 1,174,665
Texas Eastern								\$ -					\$ 414
Company Managed		*	\$ (44,167)			•	*	\$ (246,597)					
Prior Period Adjustment	•					•	•	\$ - :		, , ,			\$ -
							·	\$ (127,705)			(149,380) \$	(146,725)	\$ (235,398)
	.20,000	120,200	V 0.,000	• • • • • • • • • • • • • • • • • • • •	4 120,101	120,101	0,200	ψ (,z.,,,σο)	/ (10.7002)	1.0.,0,	(1.15)555)	(1.10).20)	4 (
Demand Cost Estimates	\$ 1,093,496	\$ 1,093,496	\$ 800,208	\$ 800,208	\$ 937,830	\$ 800,208	\$ 1,834,817	\$ 1,755,720	1,482,990 \$	1,488,004	1,487,979 \$	663,217	\$ 13,144,679
Demand Cost Reversals	\$ (1,093,496)	\$ (1,093,496)	\$ (1,093,496)	\$ (800,208)	\$ (800,208)	\$ (937,830)	\$ (800,208)	\$ (1,834,817)	(1,755,720) \$	(1,482,990)	(1,488,004) \$	(1,487,979)	\$ (13,574,957)
Total Fixed Demand	\$ 815,759	\$ 792,208	\$ 499,490	\$ 756,801	\$ 958,079	\$ 698,695	\$ 1,857,816	\$ 1,405,241	1,325,908	1,458,518	1,701,483 \$	847,396	\$ 12,301,633
		_			_								_
•	•	•	•	•	•	•		\$ - :					\$ -
Amortization of PNGTS Rate Case Costs	.*	•	•	•	*	-		\$ 41,206		•			\$ 206,029
Capacity Release	\$ (235,351)			, ,	\$ (113,612)							, , , ,	\$ (1,665,775)
, ,		. ()	•	. (, . – . ,	(,,	\$ (11,161)		,		, , ,		,	\$ (103,680)
Production and Storage	*	-	\$ -	\$ -	\$ -	\$ - :		\$ 114,446					\$ 686,673
Miscellaneous Overhead	•	-	-	\$, -	-	•		\$ 15,974				•	\$ 95,845
Transp. Demand Revenues	•	T ('-/	•	\$ -	•	•	•	\$ - :					\$ (18)
Prior Period Adjustment	•	•	•	\$ -	•	•		\$ - :					\$ -
Demand Cost Estimates - Capacity Release	\$ (119,782)	,			\$ (127,604)			\$ (238,292)					\$ (1,971,556)
								\$ 238,292					\$ 1,963,675
								· · ·	1,212,446				\$ 11,512,825
Demand Costs Transferred to Summer Period	\$ (239,471)	\$ (239,471)	\$ (239,471)	\$ (239,471)	\$ (239,471)	\$ (239,471)	\$ -	\$ - :	- 9	- 9	\$ - \$	-	\$ (1,197,354)
Net Demand Costs For Winter Period	\$ 334,719	\$ 496,058	\$ 208,133	\$ 459,219	\$ 582,915	\$ 335,679	\$ 1,868,165	\$ 1,340,199	1,212,446	1,362,607	\$ 1,610,792 \$	839,259	\$ 10,315,471
Total Gas Costs	\$ 324,218	\$ 499,289	\$ 202 141	\$ 462,000	\$ 582 012	\$ 340.706	\$ 3,464,024	\$ 5,515,279	5 102 627 6	4 387 573	3,966,842 \$	2 310 122	\$ 26,833,523
10141 043 00313	φ 3 <u>4</u> 4,410	ψ 433,403	φ ZUZ,141	φ 403,030	ψ 303,012	# J4V,/VO	4 3,401,034	ψ J,J(J,Δ13 .	, J, 103,027 J	+,501,513	, 0,000,042 ¢	2,010,122	¥ 20,000,020

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION 2009 - 2010 WINTER PERIOD RECONCILIATION SCHEDULE 5: PURCHASED AND MADE VOLUMES May 2009 - April 2010

New Hampshire	<u>May-09</u>	<u>Jun-09</u>	<u>Jul-09</u>	<u>Aug-09</u>	<u>Sep-09</u>	Oct-09	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	Feb-10	<u>Mar-10</u>	Apr-10	<u>Total</u>
Throughput IN		1											
BTU Factor	1.058	1.043	1.046	1.029	1.05	1.042	1.037	1.04053	1.042	1.044	1.039	1.03975	
GST Meter Throughput (MCF)	318,202	259,715	275,694	259,076	278,578	460,252	528,094	880,611	977,063	812,599	665,946	416,782	6,132,612
Salem Meter (MCF)	13,740	10,711	11,098	10,145	11,353	21,545	27,009	56,707	61,967	49,058	34,966	18,950	327,249
GST Meter Throughpurt (DTH)	336,658	270,883	288,376	266,589	292,507	479,583	547,633	916,302	1,018,100	848,353	691,918	433,349	6,390,251
Salem Meter (DTH)	14,537	11,172	11,609	10,439	11,921	22,450	28,008	59,005	64,570	51,217	36,330	19,703	340,960
LNG/Propane		1 1 1 1											0
Total Throughput	351,195	282,054	299,984	277,028	304,428	502,032	575,642	975,307	1,082,669	899,570	728,248	453,052	6,731,210
Throughput OUT										,	•	•	
Residential Gas		•											
Charged	91,409	45,514	54,713	33,949	34,637	53,953	114,181	153,165	320,901	266,164	208,617	154,085	1,531,288
Uncharged Current	40,334	10,780	19,977	21,823	32,708	47,772	71,699	132,901	139,568	126,626	96,640	71,183	812,011
Uncharged Prior	-57,682	-40,334	-10,780	-19,977	-21,823	-32,708	-47,772	-71,699	-132,901	-139,568	-126,626	-96,640	-798,510
Total Residential Gas	74,060	15,960	63,910	35,795	45,522	69,016	138,108	214,367	327,568	253,222	178,631	128,628	1,544,788
Interruptible	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial/Industrial Gas		! ! !											
Charged	95,223	92,202	53,650	54,112	54,903	82,024	134,296	213,173	371,131	308,200	236,761	162,214	1,857,888
Uncharged Current	41,496	33,674	21,433	33,488	37,652	56,218	81,951	157,742	163,939	151,115	114,042	75,149	967,898
Uncharged Prior	-65,679	-41,496	-33,674	-21,433	-33,488	-37,652	-56,218	-81,951	-157,742	-163,939	-151,115	<i>-</i> 114,042	-958,429
Total C/I Gas	71,040	84,379	41,409	66,168	59,067	100,589	160,029	288,963	377,329	295,376	199,688	123,321	1,867,358
Transportation		1 1 1 1											
Charged	205,707	194,417	194,706	180,110	199,077	252,958	274,355	362,827	418,102	374,369	348,655	274,469	3,279,751
Uncharged Current	16,613	42,700	40,205	12,581	70,882	101,472	110,691	186,138	147,132	139,598	124,303	85,504	1,077,819
Uncharged Prior	-21,875	-16,613	-42,700	-40,205	-12,581	-70,882	-101,472	-110,691	-186,138	-147,132	-139,598	-124,303	-1,014,190
Total Transportation	200,445	220,504	192,210	152,485	257,379	283,547	283,574	438,274	379,095	366,836	333,359	235,670	3,343,380
Company Use	88	47	5	1	7	21	38	81	137	118	76	49	666
Total Throughput OUT	345,633	320,891	297,533	254,449	361,975	453,174	581,750	941,685	1,084,129	915,550	711,754	487,669	6,756,192
Total Throughput IN	351,195	282,054	299,984	277,028	304,428	502,032	575,642	975,307	1,082,669	899,570	728,248	453,052	6,731,210
Difference IN/OUT	5,562	-38,836	2,451	22,579	-57,547	48,859	-6,108	33,622	-1,460	-15,980	16,494	-34,616	-24,982
%	•	•	,		,		.,		,	.,			-0.37%

Attachment A

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION DEFERRED PEAK WORKING CAPITAL ALLOWANCE ON PURCHASED GAS COSTS Period Ending April 30, 2010

OFF-PEAK PERIOD - Acct 182.21

	BEGINNING	WORKING CAP	WORKING CAP	WORKING CAP	WORKING CAP	ENDING	AVE MONTHLY	INTEREST		ENDING BAL
_	BALANCE(1)	ALLOWANCE(2)	PERCENTAGE	COLLECTIONS	DEFERRED	BALANCE	BALANCE	RATE	INTEREST	W/ INTEREST
_	Α	В	С	D	E=B+D	F = A + E	G = (A + F) / 2	Н	I = G * (H / 12)	J=F+1
May 2009	\$ (28,876	5) 183	0.0564%	. 147	330	(28,546)	(28,711)	3.25%	(78)	(28,623)
June	\$ (28,623	3) 282	0.0564%	-	282	(28,342)	(28,482)	3.25%	(77)	(28,419)
July	\$ (28,419	114	0.0564%	(0)	114	(28,305)	(28,362)	3.25%	(77)	(28,382)
August	\$ (28,382	261	0.0564%	(0)	261	(28,121)	(28,251)	3.25%	(77)	(28,197)
September	\$ (28,197	329	0.0564%	(6)	323	(27,874)	(28,036)	3.25%	(76)	(27,950)
October	\$ (27,950) 192	0.0564%	(5)	187	(27,763)	(27,857)	3.25%	(75)	(27,839)
November	\$ (27,839	1,952	0.0564%	(6,275)	(4,323)	(32,162)	(30,000)	3.25%	(81)	(32,243)
December	\$ (32,243	3,111	0.0564%	(13,017)	(9,907)	(42,149)	(37,196)	3.25%	(101)	(42,250)
January 2010	\$ (42,250	2,878	0.0564%	(18,330)	(15,451)	(57,701)	(49,976)	3.25%	(135)	(57,837)
February	\$ (57,837	2,475	0.0564%	(14,266)	(11,792)	(69,628)	(63,732)	3.25%	(173)	(69,801)
March	\$ (69,801) 2,237	0.0564%	(9,837)	(7,600)	(77,401)	(73,601)	3.25%	(199)	(77,600)
April	\$ (77,600	1,303	0.0564%	(6,553)	(5,250)	(82,850)	(80,225)	3.25%	(217)	(83,068)

⁽¹⁾ The beginning balance for May-09 from Revised 2008-09 Winter Period Cost of Gas Adjustment Reconciliation in docket DG 08-115, dated March 4, 2009, has been reduced by \$538.08 for an adjustment made by NiSource prior to Unitil ownership. In addition, the amount of \$2,762.35 has been added back to reverse an adjustment made in the prior winter period reconciliation as this amount pertains to the summer period (See Attachment A, Footnote 3). These two changes combined with a small change in interest as a result yields a starting balance of (\$28,876).

⁽²⁾ Working Capital Allowance Calculated by taking Eligible Gas Costs from Sch 4 and multiplying by (6.33/365)*Interest Rate.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION BAD DEBT EXPENSE - CALCULATION OF COLLECTION ALLOWANCE Period Ending April 30, 2010

OFF-PEAK PERIOD - Acct 182.22

					BAD DEBT					
	BEGINNING	BAD DEBT	% ALLOWED	BAD DEBT	DEFERRED	ENDING	AVE MO	INTEREST		END BAL
_	BALANCE(1)	ALLOWANCE(2)	BAD DEBT	COLLECTIONS	BALANCE	BALANCE	BALANCE	RATE	INTEREST	W/ INTEREST
	Α	В	С	D	E = B + D	F=A+E	G = (A + F) / 2	Н	I = G * (H / 12)	J=F+1
May 2009	46,749	1,460	0.45%	348	1,808	48,557	47,653	3.25%	129	48,686
June	48,686	2,248	0.45%	0	2,248	50,934	49,810	3.25%	135	51,069
July	51,069	910	0.45%	(0)	910	51,979	51,524	3.25%	140	52,119
August	52,119	2,085	0.45%	(0)	2,085	54,203	53,161	3.25%	144	54,347
September	54,347	2,629	0.45%	(15)	2,614	56,961	55,654	3.25%	151	57,112
October	57,112	1,534	0.45%	(13)	1,521	58,633	57,872	3.25%	157	58,790
November	58,790	15,583	0.45%	(15,940)	(357)	58,433	58,611	3.25%	159	58,592
December	58,592	24,833	0.45%	(33,042)	(8,209)	50,383	54,487	3.25%	148	50,530
January 2010	50,530	22,979	0.45%	(46,531)	(23,552)	26,979	38,754	3.25%	105	27,083
February	27,083	19,755	0.45%	(36,217)	(16,462)	10,622	18,853	3.25%	51	10,673
March	10,673	17,861	0.45%	(24,968)	(7,107)	3,566	7,119	3.25%	19	3,585
April	3,585	10,401	0.45%	(16,634)	(6,232)	(2,647)	469	3.25%	1	(2,646)

⁽¹⁾ The beginning balance for May-09 from Revised 2008-09 Winter Period Cost of Gas Adjustment Reconciliation in docket DG 08-115, dated March 4, 2009, has been reduced by \$1,276.81 for an adjustment made by NiSource prior to Unitil ownership. In addition, the amount of \$6,387.92 has been added back to reverse an adjustment made in the prior winter period reconciliation as this amount pertains to the summer period (See Attachment A, Footnote 3). These two changes combined with a small change in interest as a result yields a starting balance of \$46,749.

⁽²⁾ Bad Debt Allowance calculated by multiplying Bad Debt % by Gas Cost on Schedule 4 and Working Capital Allowance on Attachment A.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION SALES VARIANCE ANALYSIS WINTER 2009 - 2010

Attachment E Page 1 of 2

	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	TOTAL
Forecast Calendar Month Sales Actual Sales	259,755 254,579	451,329 363,628	631,824 691,982	625,692 574,357	525,469 445,323	390,952 441,292	2,885,021 2,771,161
Difference	(5,176)	(87,701)	60,158	(51,335)	(80,146)	50,340	(113,860)
Add: Volume Variance due to Weather							
Normal Cal. Month Actual Sales Actual Sales	298,137 254,579	503,331 363,628	704,897 691,982	548,597 574,357	378,318 445,323	251,950 441,292	2,685,229 2,771,161
Weather Variance	43,558	139,703	12,915	(25,760)	(67,005)	(189,342)	(85,932)
Total Variance Excluding Weather (excl weather effect)	38,382	52,002	73,073	(77,095)	(147,151)	(139,002)	(199,792)
Variance-difference due to meter count -difference in load pattern							(141,263) 27,403
SALES							(113,860)

Attachment E Page 2 of 2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION SALES VARIANCE ANALYSIS WINTER 2009 - 2010

	<u>NC</u>	ORMAL MME	<u>Btu</u>		METERS	
	2009-10	2009-10		2009-10	2009-10	
	Forecast	Actual	Difference	Forecast	Actual	Difference
Res Heat	1,272,586	1,341,110	68,524	121,032	121,602	570
Res General	19,689	24,362	4,673	9,510	9,828	318
Total Res	1,292,275	1,365,472	73,197	130,542	131,430	888
G-40	687,262	588,608	(98,654)	28,135	25,518	(2,617)
G-50	94,010	92,977	(1,033)	6,064	5,500	(564)
G-41	567,659	502,726	(64,933)	2,569	2,330	(239)
G-51	172,943	134,779	(38,164)	1,119	1,015	(104)
G-42	50,540	80.819	30,279	112	102	`(10)
G-52	20,331	5,779	(14,552)	22	20	(2)
Total C & I	1,592,745	1,405,688	(187,057)	38,021	34,485	(3,536)
Total Company	2,885,021	2,771,160	(113,860)	168,563	165,915	(2,648)

NORMAL AVERAGE USE

				Change in Sal	les Due to		
	2009-10	2009-10		Change	In:	Total Chg	%
	Forecast	Actual	Difference	Meter Count Lo	oad Pattern	MMBtu	Difference
Res Heat	10.51	11.03	0.51	5,993	62,531	68,524	5.38%
Res General	2.07	2.48	0.41	658	4,015	4,673	23.73%
Total Res	12.58	13.51	0.92	6,652	66,545	73,197	5.66%
G-40	24.43	23.07	(1.36)	(63,926)	(34,728)	(98,654)	-14.35%
G-50	15.50	16.90	1.40	(8,744)	7,711	(1,033)	-1.10%
G-41	220.96	215.76	(5.20)	(52,811)	(12,122)	(64,933)	-11.44%
G-51	154.55	132.79	(21.76)	(16,073)	(22,091)	(38,164)	-22.07%
G-42	451.25	792.34	341.09	(4,513)	34,792	30,279	59.91%
G-52	924.14	288.95	(635.19)	(1,848)	(12,704)	(14,552)	-71.58%
Total C & I	41.89	40.76	(1.13)	(147,915)	(39,142)	(187,057)	-11.74%
Total Company	17.12	16.70	(0.41)	(141,263)	27,403	(113,860)	-3.95%

Schedule 16 RLIAP A

Northern Utilities--New Hampshire Division

Residential Low Income Assistance Program (RLIAP)

Estimated Balance: November 2009 through October 2010

_	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11
Beginning Balance \$ Plus: Program Costs \$ Less: Revenues \$ Month Activity \$ Ending Bal w/o interest \$ Average Balance \$ Monthly Interest Rate Monthly Interest \$	17,349 \$ (19,862) \$ (2,514) \$ (31,406) \$ (30,149) \$ 3.25%	26,687 \$ (29,314) \$ (2,627) \$ (36,741) \$ (34,114) \$ 3.25%	36,219 \$ (39,782) \$ (3,562) \$ (43,958) \$ (40,396) \$ 3.25%	39,356 \$ (39,678) \$ (322) \$ (44,711) \$ (44,389) \$ 3.25%	(44,832) \$ 36,669 \$ (33,257) \$ 3,412 \$ (38,008) \$ (41,420) \$ 3,25% (112,18) \$	\$ 35,916 \$ (25,233) \$ 10,683 \$ (16,755) \$ (27,437) \$ 3.25%	21,376 (14,968) (14,968) (14,968) (14,012) (10,421) (10,4	16,113 \$ (11,342) \$ 4,771 \$ 5,502 \$ 731 \$ 3.25%	5,504 8,869 (8,237) 632 6,768 6,136 3,25% 16,62	\$ 9,061 \$ \$ (8,669) \$ \$ 393 \$ \$ 7,570 \$ \$ 7,178 \$ 3.25%	7,590 8,093 (9,330) (1,237) 5,116 6,353 3,25% 17,21	\$ 5,134 \$ 9,403 \$ (12,371) \$ (2,969) \$ (804)

Northern Utilities--New Hampshire Division Residential Low Income Assistance Program (RLIAP) Estimated Program Costs and Recoveries: November 2010 through October 2011

		Estimate Nov-10	Estimate Dec-10	Estimate Jan-11	Estimate Feb-11	Estimate Mar-11	Estimate Apr-11	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
ustomer Count (1)	***********	1107-10	Dec-10	Jan-II	Len-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11
ctual / Projected No. of Customers:													
LIHEAP		872	868	863	856	852	848	835	830	973	938	914	891
Non-LIHEAP		23	24	24	24	23	23	23	26	25	24	26	26
Total		896	893	888	881	876	872	859	857	998	962	940	917
LIAP Recoveries (1)													
Therm Sales-Total Firm Throughput		4,619,147	6,817,145	9.251.536	9,227,431	7,734,292	5,868.240	3,480,836	2,637,644	1,915,520	2,015,995	2,169,667	2.877.067
RLIAP Rate Per Therm	\$	0.0043 \$	0.0043 \$	0.0043 \$		0.0043 \$	0.0043 \$						
Total	\$	19,862 \$	29,314 \$	39,782 \$	39,678 \$	33,257 \$	25,233 \$						
ogram Costs (1) ojected Costs													
IT Admin.	\$	- \$	- \$	- \$	*	- \$	- \$					\$ - 9	-
Admin. Education	\$	- \$	- \$	- \$	- \$	- \$	- \$			•		\$ - 9	
Interest	\$	1,230 \$ 194 \$	- \$ 156 \$	- \$ 120 \$		- \$	- \$				\$ -		
Discounts-LIHEAP	9	15.774 \$	26,597 \$	36,128 \$		147 \$ 36,585 \$	141 \$						
Discounts -Non-LIHEAP	\$	345 \$	90 \$	91 \$		85 \$	35,828 \$ 88 \$						
Total Costs	\$	17,543 \$	26,843 \$	36,339 \$	39,470 \$	36,816 \$	36,057 \$						
Monthly Residential Customer Bill	\$	98 \$	152 \$	241 \$	227 \$	176 \$	143 \$					······································	
g Monthly Residential Low Income Customer Bill	\$	80 \$	128 \$	206 \$	194 \$	146 \$	117 \$	50 5	30 \$				
g Monthly RLIAP Customer Discount	\$	18 \$	25 \$	35 \$	33 \$	30 \$	26 \$						
g. Monthly RLIAP Customer Discount as a % to Avg. Monthly Residential Customer Bill		19%	16%	14%	15%	17%	18%	26%	30%	32%	34%	32%	31%
oss Monthly Revenues	\$	3,981,839 \$	6,010,649 \$	10,409,204 \$	8,582,090 \$	6,994,539 \$					\$ 1,352,128		
iol Conto on a manner of Conce Manufalia D		0.440/	0.450/										
al Costs as a percent of Gross Monthly Revenues		0.44%	0.45%	0.35%	0.46%	0.53%	0.76%	0.89%	1.06%	0.67%	0.69%	0.56%	0.44%

⁽¹⁾ Forecast based on actual results for the 12-month period ended August 2010.

Northern Utilities, Inc. -- New Hampshire Division

Energy Efficiency Budget											
	Residential	Low-Income	Gen Service	Total							
August-10	\$11,443	\$8,939	\$82,030	\$102,412							
September-10	\$5,722	\$4,469	\$82,030	\$92,221							
October-10	\$5,722	\$4,469	\$41,015	\$51,206							
November-10	\$5,722	\$4,469	\$54,686	\$64,877							
December-10	\$27,464	\$21,453	\$54,686	\$103,603							
January-11	\$22,231	\$5,500	\$25,834	\$53,565							
February-11	\$26,677	\$6,600	\$34,446	\$67,723							
March-11	\$31,123	\$7,700	\$25,834	\$64,657							
April-11	\$31,123	\$7,700	\$43,057	\$81,880							
May-11	\$22,231	\$5,500	\$25,834	\$53,565							
June-11	\$75,585	\$18,700	\$60,280	\$154,565							
July-11	\$17,785	\$4,400	\$17,223	\$39,408							
August-11	\$44,462	\$11,000	\$51,668	\$107,130							
September-11	\$22,231	\$5,500	\$51,668	\$79,399							
October-11_	\$22,231	\$5,500	\$25,834	\$53,565							
15-Month Budget	\$371,750	\$121,900	\$676,127	\$1,169,776							

Budget with Low-Income Costs Allocated to Residential and General Service Classes

	Residential	Low-Income	Gen Service	Total
August-10	\$13,323	0	\$89,089	\$102,412
September-10	\$6,581	0	\$85,639	\$92,221
October-10	\$6,562	0	\$44,643	\$51,206
November-10	\$6,885	0	\$57,993	\$64,877
December-10	\$33,290	0	\$70,313	\$103,603
January-11	\$23,964	0	\$29,601	\$53,565
February-11	\$28,911	0	\$38,812	\$67,723
March-11	\$33,642	0	\$31,016	\$64,657
April-11	\$33,614	0	\$48,267	\$81,880
May-11	\$24,025	0	\$29,540	\$53,565
June-11	\$80,552	0	\$74,013	\$154,565
July-11	\$18,768	0	\$20,640	\$39,408
August-11	\$46,789	0	\$60,342	\$107,130
September-11	\$23,290	0	\$56,109	\$79,399
October-11	\$23,265	0	\$30,300	\$53,565
15-Month Budget	\$403,460	\$0	\$766,316	\$1,169,776

Northern Utilities, Inc.

New Hampshire Division

Calculation of the DSM Charge, a Component of the Local Distribution Adjustment Charge To Be Effective November 1, 2010 through October 31, 2011

Residential Customers

													Ending		
		Beginning	DSM				Allocated	Allocated	Ending	Average	Interest	Interest @	Balance plus		
		Balance	Rate per	DSM			Low Income	Low Income	Balance	Balance	Prime	Prime	Interest		# of
		(Over)/Under	Therm	Collections	DSM Costs	DSM SHI	Costs	SHI	(Over)/Under	(Over)/Under	Rate	Rate	(Over)/Under	Therm Sales	Days
July-10	Actual	152,267	\$0.0185	6,949	10,388	1,724	5,607	128	163,165	157,716	3.25%	435	163,600	375,418	31
August-10		163,600	\$0.0185	6,722	11,443	1,724	1,879	137	172,061	167,831	3.25%	463	172,524	363,367	31
September-10	Forecast	172,524	\$0.0185	7,814	5,722	1,724	860	126	173,141	172,833	3.25%	462	173,603	422,359	30
October-10		173,603	\$0.0185	9,175	5,722	1,724	841	123	172,837	173,220	3.25%	478	173,315	495,952	31
November-10	Forecast	173,315	\$0.0355	40,000	5,722	1,724	1,163	170	142,094	157,704	3.25%	421	142,515	1,126,635	30
December-10		142,515	\$0.0355	67,464	27,464	1,724	5,827	177	110,242	126,378	3.25%	349	110,591	1,900,203	31
		110,591	\$0.0355	99,555	22,231	2,964	1,733	231	38,195	74,393	3.25%	205	38,400	2,804,066	31
February-11	Forecast	38,400	\$0.0355	103,950	26,677	2,964	2,234	248	(33,427)	2,486	3.25%	6	(33,421)	2,927,871	28
March-11		(33,421)	\$0.0355	86,768	31,123	2,964	2,519	240	(83,344)	(58,382)	3.25%	(161)	(83,505)	2,443,900	31
April-11	Forecast	(83,505)	\$0.0355	64,703	31,123	2,964	2,490	237	(111,393)	(97,449)	3.25%	(260)	(111,653)	1,822,428	30
May-11	Forecast	(111,653)	\$0.0355	39,264	22,231	2,964	1,794	239	(123,688)	(117,671)	3.25%	(325)	(124,013)	1,105,900	31
June-11	Forecast	(124,013)	\$0.0355	23,275	75,585	2,964	4,967	195	(63,578)	(93,796)	3.25%	(251)	(63,829)	655,568	30
July-11	Forecast	(63,829)	\$0.0355	14,915	17,785	2,964	983	164	(56,848)	(60,339)	3.25%	(167)	(57,015)	420,094	31
August-11	Forecast	(57,015)	\$0.0355	12,998	44,462	2,964	2,327	155	(20,106)	(38,560)	3.25%	(106)	(20,212)	366,114	31
September-11	Forecast	(20,212)	\$0.0355	15,105	22,231	2,964	1,059	141	(8,921)	(14,566)	3.25%	(39)	(8,960)	425,454	30
October-11	Forecast	(8,960)	\$0.0355	17,735	22,231	2,964	1,034	138	(329)	(4,644)	3.25%	(13)	(342)	499,521	31
														·	

Northern Utilities, Inc.

New Hampshire Division

Calculation of the DSM Charge, a Component of the Local Distribution Adjustment Charge To Be Effective November 1, 2010 through October 31, 2011

General Service Customers

							,						Ending		
		Beginning	DSM				Allocated	Allocated	Ending	Average	Interest	Interest @	Balance plus		
		Balance	Rate per	DSM			Low Income	Low Income	Balance	Balance	Prime	Prime	Interest		# of
		(Over)/Under	Therm	Collections	DSM Costs	DSM SHI	Costs	SHI	(Over)/Under	(Over)/Under	Rate	Rate	(Over)/Under	Therm Sales	Days
July-10	Actual	(176,433)	\$0.0054	8,343	9,439	2,659	23,075	525	(149,078)	(162,756)	3.25%	(449)	(149,529)	1,544,966	31
August-10	Forecast	(149,529)	\$0.0054	7,370	82,030	2,659	7,059	516	(64,635)	(107,082)	3.25%	(296)	(64,931)	1,364,896	31
September-10	Forecast	(64,931)	\$0.0054	9,574	82,030	2,659	3,609	527	14,320	(25,305)	3.25%	(68)	14,252	1,772,983	30
October-10		14,252	\$0.0054	11,559	41,015	2,659	3,629	530	50,526	32,389	3.25%	89	50,615	2,140,510	31
November-10		50,615	\$0.0160	51,301	54,686	2,659	3,306	483	60,448	55,531	3.25%	148	60,596	3,202,347	30
December-10	Forecast	60,596	\$0.0160	81,636	54,686	2,659	15,626	475	52,407	56,502	3.25%	156	52,563	5,095,925	31
January-11		52,563	\$0.0160	97,663	25,834	2,871	3,767	502	(12,125)	20,219	3.25%	56	(12,069)	6,096,372	31
February-11		(12,069)	\$0.0160	91,674	34,446	2,871	4,366	485	(61,576)	(36,822)	3.25%	(92)	(61,668)	5,722,498	28
March-11	Forecast	(61,668)	\$0.0160	80,541	25,834	2,871	5,181	493	(107,829)	(84,748)	3.25%	(234)	(108,063)	5,027,531	31
April-11	Forecast	(108,063)	\$0.0160	61,068	43,057	2,871	5,210	496	(117,497)	(112,780)	3.25%	(301)	(117,798)	3,812,030	30
May-11	Forecast	(117,798)	\$0.0160	36,584	25,834	2,871	3,706	494	(121,478)	(119,638)	3.25%	(330)	(121,808)	2,283,685	31
June-11	Forecast	(121,808)	\$0.0160	29,035	60,280	2,871	13,733	538	(73,421)	(97,614)	3.25%	(261)	(73,682)	1,812,458	30
July-11	Forecast	(73,682)	\$0.0160	23,392	17,223	2,871	3,417	569	(72,994)	(73,338)	3.25%	(202)	(73,196)	1,460,200	31
August-11	Forecast	(73,196)	\$0.0160	21,862	51,668	2,871	8,673	578	(31,267)	(52,231)	3.25%	(144)	(31,411)	1,364,700	31
September-11	Forecast	(31,411)	\$0.0160	28,570	51,668	2,871	4,441	592	(409)	(15,910)	3.25%	(42)	(451)	1,783,427	30
October-11	Forecast	(451)	\$0.0160	34,559	25,834	2,871	4,466	595	(1,244)	(847)	3.25%	(2)	(1,246)	2,157,275	31

CALCULATION OF ENVIRONMENTAL RESPONSE COST RATE

November 1, 2010 through October 31, 2011

ERC Recovery Rate	\$0.0056
Forcasted Firm Sales & Firm Transportation Volumes	58,898,383
Total ERC Cost to be Recovered	\$330,483
Less Current (Over) Collection (Estimated)	(\$36,705)
Total ERC Costs for the Period	\$367,188

NORTHERN UTILITIES, INC.- NEW HAMPSHIRE DIVISION REMEDIATION ADJUSTMENT CLAUSE COMPLIAN G 2009-2010 ENVIORMENTAL RESPONSE COS SITE SPECIFIC EXPENSES

								,			,									
е	Description	Total	11	/07 - 10/08	11	/08 - 10/09	11	/09 - 10/10	11	/10 - 10/11	11	/11 - 10/12	11/	12 - 10/13	11/	13 - 10/14	11	1/14 10/15	11/	15-10/16
	ENVIRONMENTAL RESPONSE COST (ERC)																			
	July 03 - June 04 Expenses Amortization (1/7)	\$ 291,630	\$	41,661	\$	41,661	\$	41,661	\$	41,661										
	July 04 - June 05 Expenses Amortization (1/7)	\$ 909,099	\$	129,871	\$	129,871	\$	129,871	\$	129,871	\$	129,871								
	July 05 - June 06 Expenses Amortization (1/7)	\$ 632,461	\$	90,352	\$	90,352	\$	90,352	\$	90,352	\$	90,352	\$	90,352						
	July 06 - June 07 Expenses Amortization (1/7)	\$ 186,804	\$	26,686	\$	26,686	\$	26,686	\$	26,686	\$	26,686	\$	26,686	\$	26,686				
1	July 07 - June 08 Expenses Amortization (1/7)	\$ 232,960			\$	33,280	\$	33,280	\$	33,280	\$	33,280	\$	33,280	\$	33,280	\$	33,280		
i	July 08 - June 09 Expenses Amortization (1/7)	\$ 127,728					\$	18,247	\$	18,247	\$	18,247	\$	18,247	\$	18,247	\$	18,247	\$	18,247
	July 09 - June 10 Expenses Amortization (1/7)	\$ 189,634							\$	27,091	\$	27,091	\$	27,091	\$	27,091	\$	27,091	\$	27,091
1	Subtotal (Line 1 through Line 5)	\$ 2,570,316	\$	468,432	\$	501,712	\$	372,043	\$	367,188	\$	325,527	\$	195,655	\$	105,304	\$	78,617	\$	45,337
1	Add: Excess amortization from prior years (from schedule 5, Line 9)	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
)	Less: Excess amortization to be deferred (from schedule 5, Line 8)	\$ 	\$	-	\$	-	\$		\$		\$	_	\$		\$	-	\$		\$	-
1	Total Enviromental Response cost to be recovered (ERC)	\$ 2,570,316	\$	468,433	\$	501,712	\$	372,043	\$	367,188	\$	325,527	\$	195,655	\$	105,304	\$	78,617	\$	45,337
2 3 4 5 6 7 8	July 2004 - June 2005 Unamortized beginning balance July 2005 - June 2006 Unamortized beginning balance July 2006 - June 2007 Unamortized beginning balance July 2007 - June 2008 Unamortized beginning balance July 2008 - June 2009 Unamortized beginning balance		\$ \$ \$	166,646 649,356 542,109 186,804	\$ \$ \$ \$ \$ \$	124,984 519,485 451,758 160,118 232,960	\$ \$ \$	83,323 389,614 361,406 133,431 199,680 127,728	\$ \$	41,661 259,743 271,055 106,745 166,400 109,481 189,634	\$ \$ \$ \$ \$ \$	129,871 180,703 80,059 133,120 91,234 162,544	\$ \$ \$	0 90,352 53,373 99,840 72,987 135,453	\$ \$ \$	26,686 66,560 54,741 108,362	\$ \$	- 33,280 36,494 81,272	\$	- 18,247 54,181
9	Total Unamortized beginning balance		\$	2,690,645	\$	2,455,173	\$	1,327,128	\$	1,144,719	\$	777,531	\$	452,004	\$	256,349	\$	151,045	\$	72,428
0	INSURANCE/3RD PARTY EXPENSES (IE) Expenses (from schedule 2)																			
	INSURANCE/3RD PARTY RECOVERIES (IR) UNDER/OVER Recovery from previous year																			
3	Total of Lines 15, 16, 17, 18		\$	2,690,645	\$	2,455,173	\$	1,327,128	\$	1,144,719	\$	777,531	\$	452,004	\$	256,349	\$	151,045	\$	72,428
									1		1									

Northern Utilities, Inc.-New Hampshire Calculation of Balancing Charge

November 2010 through October 2011

	MDQ	Ma	x Swing	% MDQ	
New Hampshire Underground	17,495		3,532	20.19%	
LNG	4,895		0	0.00%	
Propane	1,958		0	0.00%	

				% Allocated to	
	% MDQ	Costs	Balancing Costs	Balancing	Allocated Costs
New Hampshire Underground					
Del., Res., and Transp.	20.19%	\$10,762,980	\$2,172,901	0.19%	\$4,208
Capacity	20.19%	\$1,443,260	\$291,375	35.42%	\$103,211
LNG	0.00%	\$112,432	\$0	140.86%	\$0
Propane	0.00%	\$122,856	\$0	0.00%	\$0
Total		\$12,441,529	\$2,464,276		\$107,420
					4.40.00.4
Annual Sum of Absolute Swings					142,624
Balancing Rate Per MMBtu Swing					\$0.75

Note: LNG and LP MDQ allocated based on New Hampshire's current PR-Allocator percentage.

48.95%

0.02418093

Northern Utilities, Inc. NH Division Peaking Capacity Assignment Demand Rate November 2010 through April 2011

Line	Description		Northern	7	IH Division						
1	Capacity Allocation Factor				48.95%						
2	Peaking Contracts		62,088		30,392						
3	Peaking Plants		10,000		4,895						
4	Total		72,088		35,287						
5	Peaking Contracts Costs	\$	4,582,488	\$	2,243,128						
6	Peaking Plants			\$	686,673						
7.	Capacity Costs (Before Cap Assignment)			\$	2,929,801						
8	NH Division Peaking Capacity Assignment Rate			\$	13.838						

Northern Utilities - New Hampshire Division Capacity Assignment Calculations 2010-2011 Derivation of Class Assignments and Weightings

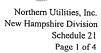
Basic assumptions:

- 1 Residential class pays average seasonal gas cost rate (using MBA method to allocate costs to seasons)
- 2 Residual gas costs are allocated to C&I HLF and LLF classes based on MBA method
- 3 The MBA method allocates capacity costs based on design day demands in two pieces:
 - a The base use portion of the class design day demand based on base use
 - b The remaining portion of design day demand based on remaining design day demand
- 4 Base demand is composed solely of pipeline supplies
- 5 Remaining demand consists of a portion of pipeline and all storage and peaking supplies

1 2	RATE A-Resi Non-Htg RATE B-Resi Htg	214 16,366	Design Day Demand. Th 2,141 163,663	Adjusted Design Day Demand, Dt 252 19,300	Percent of Total 0.4% 32.4%	Avg Daily Base Use Load, Dt 56 1,404	Remaining Design Day Demand 197 17,896
3	RATE G-40 (R)	7,688	76,877	9,066	15.2%	263	8,803
4	RATE G-50 (Q)	880	8,798	1,037	1.7%	346	691
5	RATE G-41 (T)	7,566	75,659	8,922	15.0%	443	8,479
6	RATE G-51 (S)	1,388	13,880	1,637	2.7%	492	1,144
7	RATE G-42 (V)	846	8,460	998	1.7%	94	904
8	RATE G-52a (U)	42	417	49	0.1%	24	25
9	Special Contract	0	3,217	379	0.6%	3,070	-
10	RATE T-40	1,048	10,483	1,236	2.1%	36	1,200
11	RATE T-50	323	3,225	380	0.6%	127	253
12	RATE T-41	4,961	49,606	5,850	9.8%	290	5,559
13	RATE T-51	922	9,220	1,087	1.8%	327	760
14	RATE T-42	3,263	32,630	3,848	6.5%	361	3,487
15	RATE T-52	4,719	47,191	5,565	<u>9.3%</u>	2,743	2,822
16	Total		505,467	59,607	100.0%	10,076	52,222
17							-
18	Residential Total		165,804	19,552	32.8%	1,460	18,092
19	LLF Total		253,715	29,919	50.2%	1,486	28,433
20	HLF Total		85,947	10,135	<u>17.0%</u>	7,130	3,006
21	Total		505,467	59,607	100.0%	10,076	49,531
22	rotai		000,101	30,00.	,	,-,	,
23							
24			Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
25	Pipeline		2,141,251	11,697	15.25		
26	Storage		12,731,830	17,365	61.10		
27	Peaking		3,702,470	30,545	10.10		
28	Total		18,575,551	59,607	25.97	62.33	
	rotai		10,070,001	39,007	25.51	02.55	
29							
30							
31			0	MDO D4	C/D4 Ma		
32	Disalisa Danaland		Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
33	Pipeline - Baseload		1,844,459	10,076	15.25		
34	Pipeline - Remaining		296,792	1,621	15.25		
35	Storage		12,731,830	17,365	61.10		
36	Peaking		3,702,470	30,545	10.10		
37	Total		18,575,551	59,607	25.97		
38							
39					* (*)		
40	Residential Allocation		Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
41	Pipeline - Base	32.8%	605,023	3,305	15.25		
42	Pipeline - Remaining	32.8%	97,354	532	15.25		
43	Storage	32.8%	4,176,316	5,696	61.10		
44	Peaking	32.8%	1,214,490	10,019	10.10		
45	Total	32.8%	6,093,183	19,552	25.97		

1	C&I Allocation			city Cost	ı	MDQ, Dt	\$/[Dt-Mo.			
2	Pipeline - Base		7	,239,437		6,771 1,089		15.25 15.25			
3	Pipeline - Remaining		0	199,438				61.10			
4	Storage			,555,514		11,669		10.10			
5	Peaking			,487,979	_	20,525					
6	Total 67.2	2%	12	,482,368		40,055		25.97			
7											
8											
9	LLF - C&I Allocation		Capa	acity Cost		MDQ, Dt	\$/	Dt-Mo.			
10	Pipeline - Base			213,759		1,168		15.25			
11	Pipeline - Remaining			180,371		985		15.25			
12	Storage			,737,599		10,553		61.10			
13	Peaking		2	,250,126	_	18,563		10.10			
14	Total 55.9	9%	10	,381,856		31,270		27.67			
15											
16											
17	HLF - C&I Allocation		Capa	acity Cost		MDQ, Dt	\$/	Dt-Mo.			
18	Pipeline - Base		1	,025,678		5,603		15.25			
19	Pipeline - Remaining			19,066		104		15.25			
20	Storage			817,915		1,116		61.10			
21	Peaking			237,853		1,962		10.10			
22	Total 11.	3%		2,100,512		8,785		19.93			
23	1000	- , ,	_	, ,		·					
24											
25	Unit Cost		Re	sidential		LLF C&I	Н	LF C&I			
26	OTHE COSE										
27	Pipeline		\$	15.25	\$	15.25	\$	15.25			
28	Storage		\$	61.10	\$	61.10	\$	61.10			
29	Peaking		\$	10.10	\$	10.10	\$	10.10			
30	Total		\$	25.97	\$	27.67	\$	19.93			
31	Checktotal		\$	25.97	\$	27.67	\$	19.93			
32	Oricontotal		•		•						
33										Storage and	Peaking
34	Load Makeup		Re	sidential	Г	LLF C&I	Н	LF C&I		LLF C&I	HLF C&I
35	Load Makeup			0,007,00					:		
36	Pipeline			19.62%	1	6.89%		64.97%		NA	NA
37	Storage			29.13%		33.75%		12.70%		36.25%	36.25%
38	Peaking			51.24%		<u>59.37%</u>		22.34%		63.75%	63.75%
39	Total			100.00%		100.00%		100.00%			
	i Otal			10010070							
40											
41	Cumply Makaup		Ro	sidential		LLF C&I	н	LF C&I	Total		
42	Supply Makeup		110	olucituai							
43	Dinelina			32.80%		18.41%		48.79%	100.00%		
44	Pipeline Storage			32.80%		60.77%		6.42%	100.00%		
45	Storage Booking			32.80%		60.77%		6.42%	100.00%		
46	Peaking			32.00%	,	00.1170		O.74.70	100.0070		





Northern Utilities Simplified Market Based Allocator (MBA) Calculations ALLOCATION OF NORTHERN FIXED CAPACITY COSTS

1 Total Fixed Capacity Costs To Be Allocated

2	NUI Total
3 Pipeline Demand	\$ 6,979,327
4 Storage Demand	\$ 26,009,867
5 Peaking Demand	\$ 6,160,974
6 Subtotal Demand	\$ 39,150,168
7 Litigation Expense - PNGTS Invoices from	. ,
9/1/2009 - 8/13/2010	\$ 376,840
8 Capacity Release (Credit)	\$ (424,530)
9 Asset Management (Credit)	\$ (2,507,000)
10 Total Net Demand Costs	\$ 36,595,478
11	

13 Proportional Responsibility (PR) Allocators

15 Allocation of Product and Pipeline Demand Costs (including Injections) to Months

16	T		3,											
- 1 I	No.	ov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
17 Design Year Pipeline Sendout	6	99,251	721,983	721,983	652,114	711,219	680,066	625,280	433,252	368.464	392,573			
18 Rank		4	,	121,000	002,114	111,213	000,000	025,200	455,252	300,404	392,573	425,203	646,665	7,078,052
19 % Max Month			2	1	9	3	5	8	9	12	11,	10	7	
		96.85%	100.00%	100.00%	90.32%	98.51%	94.19%	86.61%	60.01%	51.03%	54,37%	58.89%	89.57%	
20 PR	1	0.66%	0.75%	0.00%	0.13%	0.55%	0.77%	3.32%	0.12%	4.25%	0.30%	0.45%		44 ~ 404
21 CumPR		10.44%	11.74%	11.74%									0.42%	11.74%
	1				9.01%	11.00%	9.78%	8.46%	5.13%	4.25%	4.56%	5.01%	8.88%	100.00%
22 Product and Pipeline Demand Costs	\$ 7	28,959 \$	819,550	819,550 \$	628,551	\$ 767,521	\$ 682,593	\$ 590,239	\$ 358,201	\$ 296.825	\$ 318 012	\$ 349 555	\$ 619,771 \$	6.979,327
23										+ =00,0E0	Ψ 010,01L	Ψ 0,000	4 013,771 4	0,313,321

24 Allocation of Storage Injection Fees to Months

25	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
26 Storage Injection Volume	-	-	-	-	_	5.234	554,104	556,770	575.329	574.118	556,770		
27 Design Year Pipeline Sendout	699,251	721,983	721.983	652,114	711,219			,				551,826	3,374,152
28 % of Deliveries Injected	0.0%	0.0%	, , , , ,				625,280	433,252	368,464	,	425,203	646,665	7,078,052
29 Injection Fees	0.076	0.0%	0.0%	0.0%	0.0%	0.8%	47.0%	56.2%	61.0%	59.4%	56.7%	46.0%	32.3%
29 Injection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,214	\$ 277,309	\$ 201,445	\$ 180,942	\$ 188,867	\$ 198,195	\$ 285,364	\$ 1,337,337

31 Allocation of Storage Demand Costs to Months

32	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
33 Design Year Storage	135.581	686,913	1,016,879	728,568	633.976	190,867	24.831	Jun	Jui	Aug	Sep		
34 Rank	•	6 3	1	2	4	5	2-7,001	٩	۰	- 0	- 0	17,189	3,434,803
35 % Max Month	13.339	67.55%	100.00%	71.65%	62.35%	18.77%	2.44%	0.00%	0.00%	0.00%	0.00%	1.69%	
36 PR	1.829	6 1.74%	28.35%			1.09%	0.11%	0.00%	0.00%		0.00%		46.25%
37 CumPR	2.13%	6 15.85%	46.25%	17.90%			0.32%		0.00%				100.00%
38 Storage Demand Costs	\$ 555,014	\$ 4,122,650	\$ 12,029,843	\$ 4,655,382	\$ 3,671,308	\$ 837.833			\$ -	\$ -	\$ -		\$ 26,009,867
39 Plus Injection Fees	\$ -	- \$	\$ -	\$ -	\$ -	\$ 5,214			\$ 180.942	\$ 188,867	\$ 198 195	\$ 285 364	\$ 1.337.337
40 TOTAL	\$ 555,014	\$ 4,122,650	\$ 12,029,843	\$ 4,655,382	\$ 3,671,308	\$ 843,047	\$ 360,190	\$ 201,445	\$ 180.942	\$ 188.867	\$ 198 195	\$ 340 320	\$ 27,347,204

42 Allocation of Peaking Demand Costs to Months

43	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
44 Design Year Peaking Volumes	134,340	128,242	199,339	162,905	111.881	139,911	16,142	1,350	1,395	1,395	1,350	3.873	902,124
45 Rank	4	5	1	2	6	3	7	12	10	1,000	11	0,070	302,124
46 % Max Month	67.39%	64.33%	100.00%	81.72%	56.13%	70.19%	8.10%	0.68%	0.70%	0.70%	0.68%	1.94%	
47 PR	0.76%			5.77%	8.00%	0.93%	0.88%	0.06%	0.00%	0.00%	0.00%	0.16%	36.48%
48 CumPR	11.50%		36.48%	18.20%	9.10%	12.44%	1.09%	0.06%	0.06%	0.06%	0.06%	0.10%	
49 Peaking Demand Costs	\$ 708.782			\$ 1,121,516		\$ 766.178		\$ 3,477					100.00%
	Ψ 700,70 <u>2</u>	Ψ 001,000	Ψ 2,247,300	\$ 1,121,010	\$ 500,552	\$ 100,170	\$ 67,359	\$ 3,477	\$ 3,616	\$ 3,616	\$ 3,477	\$ 13,189	\$ 6,160,974

Northern Utilities, Inc. New Hampshire Division Schedule 21 Page 2 of 4

Northern Utilities Simplified Market Based Allocator (MBA) Calculations ALLOCATION OF NORTHERN FIXED CAPACITY COSTS

-		
3	Pipeline Demand	Schedule 5
4	Storage Demand	Schedule 5
5	Peaking Demand	Schedule 5
3	Subtotal Demand	Sum LN 3: LN 5
7	1 111 11	

Litigation Expense - PNGTS ME Attachment NUI-FXW-9

Invoices from 9/1/2009 - 8/13/2010

8 Capacity Release (Credit) Schedule 5
9 Asset Management (Credit) Schedule 5
10 Total Net Demand Costs Sum LN 6 : LN 9
11

Proportional Responsibility (PR) Allocators

Allocation of Product and Pipeline Demand Costs (including Injections) to Months

Design Year Pipeline Sendout
Rank

Max Month
PR
CumPR
Product and Pipeline Demand Costs

Company Analysis
LN 17 Ranking
LN 17 / LN 17 MAX
The difference between LN 19 for the month and LN 19 for next highest rank
Cumulative Values, LN 20
LN 21 * LN 3

Allocation of Storage Injection Fees to Months

)		
;	Storage Injection Volume	Company Analysis
•	Design Year Pipeline Sendout	LN 17
}	% of Deliveries Injected	LN 26 / Sum (LN 26 : LN 27)
)	Injection Fees	LN 28 * LN 22

Allocation of Storage Demand Costs to Months

Design Year Storage	Company Analysis
Rank	LN 33 Ranking
% Max Month	LN 33 / LN 33 MAX
PR	The difference between LN 35 for the month and LN 35 for next highest rank
CumPR	Cumulative Values, LN 36
Storage Demand Costs	LN 37 * LN 4
Plus Injection Fees	LN 29
TOTAL	LN 38 + LN 39

Allocation of Peaking Demand Costs to Months

	Time out of the carting Demand	osts to months
43		
44	Design Year Peaking Volumes	Company Analysis
45	Rank	Rank LN 44
46	% Max Month	LN 44 / LN 44 MAX
47	PR	The difference between LN 46 for the month and LN 46 for next highest rank
48	CumPR	Cumulative Values, LN 47
49	Peaking Demand Costs	LN 48 * LN 5

Northern Utilities, Inc. New Hampshire Division Schedule 21 Page 3 of 4

Northern Utilities Simplified Market Based Allocator (MBA) Calculations ALLOCATION OF NORTHERN FIXED CAPACITY COSTS

7	T	Nov-10	1	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	TOTAL	٦
Pipeline & Product Demand	1		\$	819,550	\$ 819.550	\$ 628.551	\$ 767,521	\$ 682,593	\$ 590,239	\$ 358,201		\$ 318,012	\$ 349,555	\$ 619,771		4
Storage Incld Inj Fees	\$		\$		\$ 12,029,843	\$ 4,655,382	\$ 3,671,308		\$ 360,239				\$ 198,195		\$ 6,979,327	
Peaking	\$, i	\$			\$ 1,121,516	\$ 5,071,500		\$ 67,359	\$ 201,445	\$ 3,616	\$ 188,867 \$ 3,616		\$ 340,320	\$ 27,347,204	
Less Injection Fees	S	700,702	\$	001,000	\$ 2,247,300	\$ 1,121,510	\$ 500,532		\$ (277,309)				\$ 3,477 \$ (198,195)	\$ 13,189 \$ (285,364)	\$ 6,160,974 \$ (1,337,337)	
Less: Capacity Release	\$	(84,906)	\$	(84,906)	\$ (84,906)	*	\$ (84,906)		\$ (211,309) \$ -	\$ (201,443)	\$ (100,942)	\$ (100,007)	\$ (190,195)	\$ (200,304) \$ -	\$ (1,337,337) \$ (424,530)	
Less: Asset Mamt net of Current PNGTS	\$		\$		\$ (355.027)		\$ (355,027)		\$ -	\$ -	\$ -	\$ - \$ -	\$ - \$ -	\$ -	\$ (2,130,160)	
Total Demand	\$				\$ 14,657,027		\$ 4,559,428					\$ 321,628	Ψ		\$ 36.595.478	
7	1 4	1,002,022	<u> </u>	0,100,002	Ψ 14,001,021	Ψ 0,303,517	Ψ 4,555,420	ψ1,331,377	<u> Ψ /40,4/3</u>	<u> </u>	φ 300,441 _]	\$ 321,020	\$ 333,032	\$ 001,911	\$ 30,393,476	J
Capacity Cost Allocator based on Desi			ndo													_
	<u></u>	Nov-10		Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	TOTAL	1
Therms																1
Maine		512,441		802,081	984,724	779,373	729,594	512,543	334,300	199,982	211,643	224,651	216,214	361,107	5,868,653	1
New Hampshire		456,732		735,057	953,477	764,214	727,482	498,301	331,952	234,620	158,216	169,317	210,339	306,619	5,546,326	İ
Total		969,173	<u> </u>	1,537,138	1,938,201	1,543,587	1,457,076	1,010,844	666,252	434,602	369,859	393,968	426,553	667,726	11,414,979]
																_
Percentage of Total	<u></u>	Nov-10		Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	TOTAL	1
Maine	1	52.87%	l	52.18%	50.81%	50.49%	50.07%	50.70%		46.01%	57.22%	57.02%	50.69%	54.08%	51.05%	,]
New Hampshire Total		47.13%		47.82%	49.19%	49.51%	49.93%	49.30%		53.99%	42.78%	42.98%	49.31%	45.92%	48.95%	,
Total		100.00%		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	,
3																_
Allocation of Demand Costs by Division	1															
) Maine	1	\$821,040		\$2,694,548	\$7,446,661	\$3,012,051	\$2,283,019	\$979,396	\$371,544	\$166,426	\$171,920	\$183,401	\$178,947	\$372,026	\$18,680,979]
New Hampshire		\$731,782		\$2,469,384	\$7,210,366	\$2,953,466	\$2,276,410	\$952,182	\$368,935	\$195,252	\$128,521	\$138,227	\$174,085	\$315,891	\$17,914,499	.]
Total Total	\$	1,552,822	\$	5,163,932	\$ 14,657,027	\$ 5,965,517	\$ 4,559,428	\$ 1,931,577	\$ 740,479	\$ 361,678	\$ 300,441	\$ 321,628	\$ 353,032	\$ 687,917	\$ 36,595,478]
B Detailed Allocation of Demand Costs b	/ Div	ision														
Maine	T	Nov-10	[Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	TOTAL	T
Pipeline & Product Demand	\$	385,430	\$	427.642		\$ 317,362	\$ 384,317			\$ 164,826	\$ 169,851	\$ 181,339		\$ 335,173	\$ 3,601,771	E1
Storage Incld Injection Fees	s		\$				\$ 1,838,315								\$ 13,942,053	
Peaking	\$		\$		\$ 1,141,900	\$ 566,265	\$ 280,672		\$ 33,798	\$ 1,600	\$ 2,069	\$ 2,062	\$ 1,762	\$ 7.133	\$ 3,145,768	
Less: Injection Fees	ı s		\$		\$ 1,141,500	\$ 300,203 ¢	\$ 200,072		\$ (139,143)				\$ (100,462)		\$ (700,506)	
Capacity Release (Credit)	ı s	(44,893)		(44,304)		\$ (42,870)			S -	\$ (32,033)	\$ (103,340)	\$ (107,037)	\$ (100,402)	\$ (104,323)	\$ (217,719)	
Asset Management - PNGTS (Credit)	\$	(187,717)		(185,253)		\$ (42,870)	\$ (177,771)			\$ -	\$ -	φ -	\$ -	\$ -	\$ (217,719)	
	\$	821,040		2,694,548		\$ 3,012,051	\$ 2,283,019				T	\$ 192 401	\$ 178,947	*	\$ 18,680,979	
Total Allocated Demand		021,040	ΙΨ	2,034,540	φ 7,440,001	φ 5,012,051	\$ 2,205,015	\$ 313,330	3 311,344	\$ 100,420	\$ 171,520	\$ 165,401	\$ 170,947	\$ 372,020	\$ 10,000,979	131
	<u> </u>	•														T
	T	Nov-10	_	Dec-10	lan-11	Eab-11	Mar-11	Apr.11	May-11	lun.11	1:4-11	Δυα-11	Sop 11	Oct 11		
New Hampshire	•	Nov-10	•	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	TOTAL \$ 2,277,556	10
New Hampshire Pipeline & Product Demand	\$	343,529	\$	391,908	\$ 403,169	\$ 311,189	\$ 383,204	\$ 336,488	\$ 294,080	\$ 193,375	\$ 126,974	\$ 136,673	\$ 172,370	\$ 284,598	\$ 3,377,556	
New Hampshire Pipeline & Product Demand Storage Incld Injection Fees	\$	343,529 261,555	\$	391,908 1,971,445	\$ 403,169 \$ 5,917,951	\$ 311,189 \$ 2,304,832	\$ 383,204 \$ 1,832,993	\$ 336,488 \$ 415,584	\$ 294,080 \$ 179,461	\$ 193,375 \$ 108,750	\$ 126,974 \$ 77,402	\$ 136,673 \$ 81,170	\$ 172,370 \$ 97,732	\$ 284,598 \$ 156,275	\$ 3,377,556 \$ 13,405,151	49
New Hampshire Pipeline & Product Demand Storage Incld Injection Fees	\$	343,529 261,555 334,020	\$	391,908 1,971,445	\$ 403,169	\$ 311,189 \$ 2,304,832	\$ 383,204 \$ 1,832,993 \$ 279,860	\$ 336,488 \$ 415,584 \$ 377,692	\$ 294,080 \$ 179,461 \$ 33,561	\$ 193,375 \$ 108,750 \$ 1,877	\$ 126,974 \$ 77,402 \$ 1,547	\$ 136,673 \$ 81,170 \$ 1,554	\$ 172,370 \$ 97,732 \$ 1,715	\$ 284,598 \$ 156,275 \$ 6,057	\$ 3,377,556 \$ 13,405,151 \$ 3,015,206	49 48
New Hampshire Pipeline & Product Demand Storage Incld Injection Fees Peaking Less: Injection Fees	\$	343,529 261,555 334,020	\$ \$ \$	391,908 1,971,445 316,407	\$ 403,169 \$ 5,917,951 \$ 1,105,666 \$ -	\$ 311,189 \$ 2,304,832 \$ 555,251 \$ -	\$ 383,204 \$ 1,832,993 \$ 279,860 \$ -	\$ 336,488 \$ 415,584 \$ 377,692 \$ (2,570)	\$ 294,080 \$ 179,461 \$ 33,561 \$ (138,166)	\$ 193,375 \$ 108,750 \$ 1,877 \$ (108,750)	\$ 126,974 \$ 77,402 \$ 1,547 \$ (77,402)	\$ 136,673 \$ 81,170 \$ 1,554 \$ (81,170)	\$ 172,370 \$ 97,732 \$ 1,715 \$ (97,732)	\$ 284,598 \$ 156,275 \$ 6,057 \$ (131,039)	\$ 3,377,556 \$ 13,405,151 \$ 3,015,206 \$ (636,830)	49 48
New Hampshire Pipeline & Product Demand Storage Incld Injection Fees Peaking Less: Injection Fees Capacity Release	\$ \$	343,529 261,555 334,020 - (40,013)	\$ \$ \$	391,908 1,971,445 316,407 - (40,602)	\$ 403,169 \$ 5,917,951 \$ 1,105,666 \$ - \$ (41,769)	\$ 311,189 \$ 2,304,832 \$ 555,251 \$ - \$ (42,036)	\$ 383,204 \$ 1,832,993 \$ 279,860 \$ - \$ (42,391)	\$ 336,488 \$ 415,584 \$ 377,692 \$ (2,570) \$ -	\$ 294,080 \$ 179,461 \$ 33,561 \$ (138,166) \$ -	\$ 193,375 \$ 108,750 \$ 1,877 \$ (108,750) \$ -	\$ 126,974 \$ 77,402 \$ 1,547 \$ (77,402) \$ -	\$ 136,673 \$ 81,170 \$ 1,554 \$ (81,170) \$ -	\$ 172,370 \$ 97,732 \$ 1,715 \$ (97,732) \$ -	\$ 284,598 \$ 156,275 \$ 6,057 \$ (131,039) \$ -	\$ 3,377,556 \$ 13,405,151 \$ 3,015,206 \$ (636,830) \$ (206,811)	49 48) 48
New Hampshire	\$	343,529 261,555 334,020 - (40,013) (167,310)	\$ \$ \$	391,908 1,971,445 316,407 (40,602) (169,773)	\$ 403,169 \$ 5,917,951 \$ 1,105,666 \$ -	\$ 311,189 \$ 2,304,832 \$ 555,251 \$ - \$ (42,036)	\$ 383,204 \$ 1,832,993 \$ 279,860 \$ - \$ (42,391) \$ (177,256)	\$ 336,488 \$ 415,584 \$ 377,692 \$ (2,570) \$ - \$ (175,012)	\$ 294,080 \$ 179,461 \$ 33,561 \$ (138,166) \$ -	\$ 193,375 \$ 108,750 \$ 1,877 \$ (108,750)	\$ 126,974 \$ 77,402 \$ 1,547 \$ (77,402)	\$ 136,673 \$ 81,170 \$ 1,554 \$ (81,170)	\$ 172,370 \$ 97,732 \$ 1,715 \$ (97,732)	\$ 284,598 \$ 156,275 \$ 6,057 \$ (131,039)	\$ 3,377,556 \$ 13,405,151 \$ 3,015,206 \$ (636,830)	49 48) 48) 48

Northern Utilities Simplified Market Based Allocator (MBA) Calculations ALLOCATION OF NORTHERN FIXED CAPACITY COSTS

		1
50	Pipeline & Product Demand	LN 22
51	Storage	LN 40
52	Peaking	LN 49
53	Less: Injection Fees	-(LN 29)
54	Less: Capacity Release	LN 8/5
55	Less: Asset Management	(LN 9 + LN 7) / 6
56	Total Demand	Sum (LN 50 : LN 55)
57		
58	Capacity Cost Allocator based on	Design Year Firm Sendout
59		
60	Therms	
61	Maine	Company Analysis
62	New Hampshire	Company Analysis
63	Total	LN 61 + LN 62
64	Percentage of Total	
65	Maine	LN 61 / LN 63
66	New Hampshire	LN 62 / LN 63
67	Total	LN 65 + LN 66
68		
69	Allocation of Demand Costs by Di	
70	Maine	LN 56 * LN 65
71	New Hampshire	LN 56 * LN 66
72	Total	LN 70 + LN 71
70	D . 11 . 14 . 15	
73	Detailed Allocation of Demand Co	sts by Division
74	Maine	
75	Pipeline & Product Demand	LN 50 * LN 65
76	Storage	LN 51 * LN 65
77	Peaking	LN 52 * LN 65
78	Injection Fees	LN 53 * LN 65
79	Capacity Release (Credit)	LN 54 * LN 65
80	Asset Management (Credit)	LN 55 * LN 65
81	Total Allocated Demand	Sum (LN 75 : LN 80)
82		
83	New Hampshire	
84	Pipeline & Product Demand	LN 50 * LN 66
85	Storage	LN 51 * LN 66
86	Peaking	LN 52 * LN 66
87	Injection Fees	LN 53 * LN 66
88	Capacity Release	LN 54 * LN 66
89	Asset Management (Credit)	LN 55 * LN 66
90	Total Allocated Demand	Sum (LN 84 : LN 89)

Northern Utilities, Inc. New Hampshire Division Schedule 22 Page 1 of 6

Supply Volumes - MMBtu 2 Total Pipeline 499,368 256,695 197,401 162,786 371,174 573,323 3,444,961 2,060,747 3 Total Storage 0 571,056 896,418 747,336 490,230 2,536 2,707,576 2,707,576 4 Total Peaking 93,071 127,597 128,626 114,220 131,348 28,722 631,864 623,584 5 Subtotal 592,439 955,348 1,222,446 1,024,342 992,752 604,580 6,784,401 5,391,907			Γ	Nov-10	Г	Dec-10		Jan-11		Feb-11		Mar-11		Apr-11		TOTAL	Γ	WINTER
2 Total Pipeline	1	Supply Volumes - MMBtu												·	\vdash			
Total Forest	2			499 368		256 695		197 401		162 786		371 174		573 323	ĺ	3 444 961		2.060.747
Total Peaking												•						' ' 1
Subtotal Subtotal		1		-														
6 Less Interrupible - Maine 0 0 0 0 0 0 0 0 0			 		-						-		-		-		 	
7 Increase New Hampshire Section Sect	6	Less Interruptible - Maine			\vdash								\vdash		 			0,001,001
8 Total Firm Supply 592,439 955,248 1,222,446 1,024,342 992,752 604,580 6,784,401 5,391,907 10 Variable Costs 499,368 256,695 197,401 162,768 371,174 573,323 3,444,961 2,060,747 11 Pipeline Costs \$2,759,757 \$1,490,684 \$1,187,752 \$5,306 \$2,173,072 \$3,121,720 \$1,935,5513 \$1,711,666 12 NYMEX Price Used for Forecast \$4,905 \$4,393 \$4,643 \$4,533 \$4,472 \$4,399 \$4,907 \$1,490,684 \$1,807,643 \$5,306 \$5,210 \$3,217,700 \$1,9,355,513 \$1,711,666 \$1,007,687 \$5,306 \$5,210 \$3,217,700 \$6,015	7							- 1		- 1						•		*
Total Firm Pipeline Costs Modeled in Sendout 499,368 256,695 197,401 162,766 371,174 573,323 3,444,961 2,060,747				-				-		9 1		-	İ	-		•		۱
10 Variable Costs Modeled in Sendout™ \$ 2,759,757 \$ 1,490,684 \$ 1,187,524 \$ 978,909 \$ 2,173,072 \$ 3,121,720 \$ 19,355,513 \$ 11,711,666 12 NYMEX Price Used for Forecast \$ 4,905 \$ 43,359 \$ 34,543 \$ 44,72 \$ 43,939 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787 \$ 853,809 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 1,000,787			-		-								-		\vdash			
11 Pipeline Costs Modeled in Sendout™ \$ 2,759,757 \$ 1,490,684 \$ 1,197,524 \$ 978,909 \$ 2,173,072 \$ 3,121,720 \$ 19,355,513 \$ 11,711,666 \$ 1			L	433,300	L	230,093		197,401		102,760	L	3/1,1/4	L	373,323	_	3,444,961	<u> </u>	2,060,747
NYMEX Price Used for Forecast \$4.905 \$4.255 \$4.359 \$4.591 \$4.595 \$4.593 \$4.70 \$5.018 \$1.000000000000000000000000000000000000			1 6	2.750.757	6	4 400 004	æ	4 407 504	_	070.000	Φ.	0.470.070	T &	0.404.700	Α.	10.055.510	Г	44 744 000 1
NYMEX Price Used for Update \$4.025 \$4.359 \$4.538 \$4.472 \$4.399			Þ		Þ		Ф		ф		Þ				Ъ	19,355,513	Þ	11,/11,666
Increase/(Decrease) NYMEX Price \$0.880 \$0.9313 \$0.794 \$0.7968 \$0																	}	I
Increase/(Decrease) in Pipeline Costs																		Ţ
Total Updated Pipeline Costs \$2,320,313 \$1,281,991 \$1,030,787 \$853,889 \$1,899,146 \$2,766,833 \$1,7001,598 \$1,0152,959					I													
Total Pipeline							\$	(156,737)										
Total Pipeline		Total Updated Pipeline Costs	\$	2,320,313	\$	1,281,991	\$	1,030,787	\$	853,889	\$	1,899,146	\$	2,766,833	\$	17,001,598	\$	10,152,959
19 Total Storage \$ -\$ \$ 2,485,349 \$ 3,913,239 \$ 3,286,653 \$ 2,142,377 \$ 11,800 \$ 11,811,500 \$ 11,811,500 \$ 12,800,032 \$ 50,000 \$ 14,250,0694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,516 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 \$ 14,801,000 \$ 14,250,0694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,516 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 \$ 14,801,000 \$ 14,250,0694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,516 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 \$ 14,801,000 \$ 14,250,0694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,516 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 \$ 14,801,000 \$ 14,250,0694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,516 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 \$ 1,801,000	17		ĺ		1									•				
Total Storage	18	Total Pipeline	\$	2,320,313	\$	1,281,991	\$	1,030,787	\$	853,889	\$	1,899,146	\$	2,766,833	\$	17,001,598	\$	10,152,959
Total Peaking	19	Total Storage	\$	-	\$	2,485,349	\$	3,913,239	\$	3,258,653	\$	2.142.377	\$	11.880				11.811.500
Subtotal \$2,696,001 \$4,280,694 \$5,461,399 \$4,571,564 \$4,594,518 \$2,895,855 \$31,392,767 \$24,500,032 Hedging (Gain)/Loss Estimate	20	Total Peaking	\$	375,688	\$	513,353	\$	517,373										
Hedging (Gain)/Loss Estimate	21	Subtotal	\$	2,696,001	\$										\$			
Hedging (Gain)/Loss Estimate	22											.,,	Ť		Ť		<u> </u>	
Time Triggered NYMEX Contracts (Allocated between ME and NH) NYMEX NG Futures Contracts 7		Hedging (Gain)/Loss Estimate															1	1
NYMEX NG Futures Contracts			netv	veen ME an	d N	IH)					_		_				 	
Average Purchase Price			ĺ		Ĭ			4		5		5		a		46		38
NYMEX Price Used for Forecast \$ 4.905 \$ 5.172 \$ 5.337 \$ 5.306 \$ 5.210 \$ 5.018 \$ NYMEX Price Used for Update \$ 4.025 \$ 4.359 \$ 4.543 \$ 4.538 \$ 4.472 \$ 4.399 \$ Increase/(Decrease) NYMEX Price \$ (0.880) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.738) \$ (0.738) \$ (0.619) \$ Increase/(Decrease) NYMEX Price \$ (0.880) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.738) \$ (0.708) \$ (0.708) \$ (0.619) \$ Increase/(Decrease) NYMEX Contracts (NH Only) \$ (0.768) \$ (0.880) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.738) \$ (0.619) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.738) \$ (0.619) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.768) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.813) \$ (0.768) \$ (0.813)			•		•		•		ď				_a	-		40		30
NYMEX Price Used for Update												3						
Increase/(Decrease) NYMEX Price \$ (0.880) \$ (0.813) \$ (0.794) \$ (0.768) \$ (0.738) \$ (0.619) \$ (0.6																		İ
Futures Hedging (Gain)/Loss - Allocate											'							ļ
Price Triggered NYMEX Contracts (NH Only) NYMEX NG Futures Contracts 6 5 6.647 8 6.983 8 6.825 8 6.730 8 6.200																		
NYMEX NG Futures Contracts		Futures Hedging (Gain)/Loss - Allocate	\$	165,200	\$	182,180	\$	97,930	\$	118,200	\$	112,050	\$	160,090	\$	901,540	\$	835,650
Average Purchase Price \$ 6.260 \$ 6.647 \$ 6.983 \$ 6.825 \$ 6.730 \$ 6.200 \$			l															1
NYMEX Price Used for Forecast S 4.905 S 5.172 S 5.337 S 5.306 S 5.210 S 5.018 S 5.01				6						4		4		6		28	1	28
NYMEX Price Used for Update \$ 4.025 \$ 4.359 \$ 4.543 \$ 4.538 \$ 4.472 \$ 4.399	33	Average Purchase Price	\$	6.260	\$	6.647	\$	6.983	\$	6.825	\$	6.730	\$	6.200				1
NYMEX Price Used for Update	34	NYMEX Price Used for Forecast	\$	4.905	\$	5.172	\$	5.337	\$	5.306	\$	5.210	\$	5.018				1
Increase NYMEX Price \$ (0.880) \$ (0.813) \$ (0.794) \$ (0.798) \$ (0.738) \$ (0.738) \$ (0.619) \$ (35	NYMEX Price Used for Update	\$	4.025	\$	4.359	\$	4.543	\$		\$	4.472	\$					İ
Futures Hedging (Gain)/Loss (NH ONLY) \$ 134,100 \$ 114,400 \$ 73,210 \$ 91,480 \$ 90,320 \$ 108,060 \$ 611,570 \$ 611,570 \$ 813,570 \$ 853,889 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$	36	Increase/(Decrease) NYMEX Price	\$	(0.880)	\$	(0.813)	\$	(0.794)	\$		\$		\$					
Interruptible Cost Estimate	37		\$												\$	611.570	\$	611.570
Interruptible Cost Estimate	38		-		_		_ - -			0.1,100	Ť	00,020	Ť	,	_	37.1,0.0	Ť	51,7010
40 Variable Pipeline Costs Excld Hedges \$ 2,320,313 \$ 1,281,991 \$ 1,030,787 \$ 853,889 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 41 Average Supply Cost (\$/MMBtu) \$ 4.646 \$ 4.994 \$ 5.222 \$ 5.245 \$ 5.117 \$ 4.826 \$ 10,152,959 42 Interruptible Cost - Maine Interruptible Cost - New Hampshire \$ -		Interruptible Cost Estimate				-												
41 Average Supply Cost (\$/MMBtu) \$ 4.646 \$ 4.994 \$ 5.222 \$ 5.245 \$ 5.117 \$ 4.826 42 Interruptible Cost - Maine Interruptible Cost - New Hampshire \$ -			¢	2 320 313	¢	1 281 991	¢	1 030 787	¢	853 880	¢	1 800 1/6	¢	2 766 833	¢	17 001 508	æ	10 152 050
Interruptible Cost - Maine \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		Average Supply Cost (\$/MMRtu)													Ψ	17,001,000	Ψ.	10,152,555
43 Interruptible Cost - New Hampshire \$ - <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>J.222</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Φ</td><td></td><td>•</td><td>····</td></t<>					-			J.222							Φ		•	····
44 45 Firm Sales Pipeline Commodity Excld Hedge \$ 2,320,313 \$ 1,281,991 \$ 1,030,787 \$ 853,889 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 10,152,959 \$ 10,152,959 \$ 10,152,959 \$ 10,152,959 \$ 10,152,959 \$ 11,811,500 \$ 11,								-		-				•		•		-
Firm Sales Pipeline Commodity Excld Hedge Total Storage Total Peaking Total Peaking Total Peaking Firm Sales Variable Costs Excld Hedge Plus Hedging (Gain)/Loss \$ 2,320,313 \$ 1,281,991 \$ 1,030,787 \$ 853,889 \$ 1,899,146 \$ 2,766,833 \$ 17,001,598 \$ 10,152,959 \$ 11,811,500 \$ 11,81		interruptible Cost - New Hampshire	Ð.	-	Þ		-D	-	Ф	-	4		3	-	Φ	-	D.	
46 Total Storage \$ - \$ 2,485,349 \$ 3,913,239 \$ 3,258,653 \$ 2,142,377 \$ 11,880 \$ 11,811,500 \$ 11,811,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 10,411,500 \$ 11,811,500 \$ 11,		Firm Oak, Bir B. O. Br F. C.		0.000.010	_	1 001 00:	_	4 000 707	•	050 055	_	1 000 115		0 700 000	_	17 001 500	_	10 150 050
47 Total Peaking \$ 375,688 \$ 513,353 \$ 517,373 \$ 459,022 \$ 552,995 \$ 117,142 \$ 2,579,670 \$ 2,535,574 48 Firm Sales Variable Costs Excld Hedge \$ 2,696,001 \$ 4,280,694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,518 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 49 Plus Hedging (Gain)/Loss \$ 165,200 \$ 182,180 \$ 97,930 \$ 118,200 \$ 112,050 \$ 160,090 \$ 901,540 \$ 835,650				2,320,313														
48 Firm Sales Variable Costs Excld Hedge \$ 2,696,001 \$ 4,280,694 \$ 5,461,399 \$ 4,571,564 \$ 4,594,518 \$ 2,895,855 \$ 31,392,767 \$ 24,500,032 49 Plus Hedging (Gain)/Loss \$ 165,200 \$ 182,180 \$ 97,930 \$ 118,200 \$ 112,050 \$ 160,090 \$ 901,540 \$ 835,650																		
49 Plus Hedging (Gain)/Loss \$ 165,200 \$ 182,180 \$ 97,930 \$ 118,200 \$ 112,050 \$ 160,090 \$ 901,540 \$ 835,650					<u> </u>						÷		<u> </u>					
	48			2,696,001		4,280,694		5,461,399				4,594,518		2,895,855				24,500,032
	49	Plus Hedging (Gain)/Loss	\$															
	50	Total Firm Sales Variable Costs	\$	2,861,201	\$	4,462,874	\$	5,559,329	\$	4,689,764	\$	4,706,568	\$	3,055,945	\$	32,294,307	\$	25,335,682

1	Supply Volumes - MMBtu	
	Total Pipeline	Calculate OA
	Total Storage	Schedule 6A, page 2
4	Total Storage Total Peaking	Schedule 6A, page 2
5	Subtotal	Schedule 6A, page 2
6	Less Interruptible - Maine	SUM LN 2: LN 4
		Schedule 6A, page 2
8	Less Interruptible - New Hampshire	Schedule 6A, page 2
9	Total Firm Supply	LN 5 - LN 6 - LN 7
- 1	Total Firm Pipeline Sendout	LN 2 - LN 6 - LN 7
	Variable Costs	
11	Pipeline Costs Modeled in Sendout™	Schedule 6A, Page 1
	NYMEX Price Used for Forecast	Schedule 6A
	NYMEX Price Used for Update	Schedule 6A
	Increase/(Decrease) NYMEX Price	LN 13 - LN 12
	Increase/(Decrease) in Pipeline Costs	LN 2 * LN 14
16	Total Updated Pipeline Costs	LN 15 + LN 11
17		
18	Total Pipeline	LN 16
19	Total Storage	Schedule 6A, page 2
20	Total Peaking	Schedule 6A, page 2
21	Subtotal	Sum LN 18 : LN 20
22		
23	Hedging (Gain)/Loss Estimate	
24	Time Triggered NYMEX Contracts (Allocated between ME and	NH)
25	NYMEX NG Futures Contracts	Schedule 6A, Page 2
26	Average Purchase Price	Schedule 6A, Page 2
27	NYMEX Price Used for Forecast	Schedule 6A
28	NYMEX Price Used for Update	Company Analysis
29	Increase/(Decrease) NYMEX Price	LN 28 - LN 27
30	Futures Hedging (Gain)/Loss - Allocate	(LN 26 - LN 27 - LN 29) * LN 25*10,000
31	Price Triggered NYMEX Contracts (NH Only)	
32	NYMEX NG Futures Contracts	Schedule 6A, Page 2
33	Average Purchase Price	Schedule 6A, Page 2
34	NYMEX Price Used for Forecast	Schedule 6A, Page 2
35	NYMEX Price Used for Update	Company Analysis
36	Increase/(Decrease) NYMEX Price	LN 35 - LN 34
37	Futures Hedging (Gain)/Loss (NH ONLY)	(LN 33 - LN 34 - LN 36) * LN 32*10,000
38		(1.00 1.101 1.100) 1.1102 10,000
1	Interruptible Cost Estimate	
40	Variable Pipeline Costs Excid Hedges	LN 16
41	Average Supply Cost (\$/MMBtu)	LN 40 / LN 2
42	Interruptible Cost - Maine	LN 41 * LN 6
43	Interruptible Cost - New Hampshire	LN 41 * LN 7
44	monapholo cost - New Hampshire	[Lat 7 1 Lat 1 1
45	Firm Sales Pipeline Commodity Excld Hedge	LN 40 - LN 42 - LN 43
46	Total Storage	LN 40 - LN 42 - LN 43
47	Total Peaking	LN 20
48	Firm Sales Variable Costs Excld Hedge	Sum LN 45 : LN 47
49	9	
	Plus Hedging (Gain)/Loss	LN 30
50 [Total Firm Sales Variable Costs	LN 48 + LN 49

Northern Utilities, Inc. New Hampshire Division Schedule 22 Page 3 of 6

51	Commodity Allocation Factors																
52	Firm Sales Sendout for Normal Winter, MMBtu	,															
53		T	Nov-10	Τ	Dec-10	Т	Jan-11		Feb-11	Т	Mar-11	Т	Apr-11	Τ.	TOTAL	Ţ	WINTER
54	Maine	T	280,388	\vdash	471,420	1	569,668	\vdash	468.815	+	454,818	+	278.040	┼-	3,157,582		
55	New Hampshire		312,051	1	483,928		652,778	l	555,527		537,934		326,540	1			2,523,149
56	Total	\top	592,439	\vdash	955,348	 	1,222,446	⊢	1,024,342	╁	992,752	╁		-	3,626,819	-	2,868,758
57				_	000,010	ــــــــــــــــــــــــــــــــــــــ	1,222,440	Ь	1,024,042	Ц	992,732	<u> </u>	604,580	L	6,784,401		5,391,907
58	Percentage of Total	Т		П				1		Т-		_		1			
59	Maine		47.33%	l	49.35%	l	46.60%		45.77%		45.81%		45.000/		10.510/		
60	New Hampshire		52.67%	}	50.65%		53.40%		54.23%		54.19%		45.99% 54.01%		46.54%		46.80%
61	Total	T	100.00%	\vdash	100.00%		100.00%	-	100.00%		100.00%				53.46%		53.20%
62				_	100.0070	L	100.0076		100.00 /6	Ц	100.00%	<u></u>	100.00%	Ц_	100.00%	L	100.00%
63	Commodity Allocation by Jurisdiction																
64	Maine																
65	Firm Sales Pipeline Commodity Excld Hedge	T \$	1,098,152	\$	632,603	\$	480,354	\$	390,803	\$	870,072	\$	1,272,437	6	7.007.440	<u></u>	1744 104
66	Hedging (Gains) Losses	\$			89,897	\$		\$	54,097	\$	51,334		73,624	\$	7,867,440	\$	4,744,421
67	Storage	\$	-	\$	1,226,405	\$		\$		\$	981,506			\$	423,275	\$	392,774
68	Peaking	\$	177,804	\$	253,316	\$	241,099	\$	210,083	\$	253,349	\$	5,464	\$	5,528,372	\$	5,528,372
69	Maine Interruptible	\$		\$	-	\$	241,000	\$	210,003	\$		\$	53,872	\$ \$	1,209,364	\$	1,189,523
70	Total Maine Commodity Costs	\$		\$	2,202,222	\$	2,590,685		2,146,385			\$	1 405 207	<u> </u>	45,000,454	\$	44.055.000
71	Maine Inventory Finance Costs	\$		\$	1,629	\$	2,000,000	\$	1,646	\$		\$	1,405,397	\$			11,855,090
72	Total Maine Variable Costs		1,355,006	\$		\$			2,148,031		2,157,823	\$	855 1,406,252	\$	8,583	\$	8,583
73	New Hampshire		.,,		2,200,001	Ψ	2,002,712	Ψ	2,140,031	Ψ	2,137,023	Φ	1,400,252	Ф	15,037,034	\$	11,863,674
74	Firm Sales Pipeline Commodity Excld Hedge	1\$	1,222,161	\$	649,388	\$	550,433	\$	463,086	Φ	1,029,074	\$	1,494,396	•	9,134,158	•	5 400 500
75	Hedging (Gains) Losses	\$	221,115	\$	206.683	\$	125,504	\$	155,583	\$	151,036		194,526	\$, , , , , , ,	\$	5,408,538
76	Storage	\$		\$	1,258,945	\$	2,089,644	\$	1,767,251	\$				\$	1,089,835	\$	1,054,446
77	Peaking	\$	197,883	\$	260,037	\$	276,274	\$	248,940	\$	299,647	\$	6,417	\$		\$	6,283,128
78	New Hampshire Interruptible	\$		\$	200,007	\$	210,217	\$	240,340	\$	299,041	\$	63,270	\$	1,370,306	\$	1,346,050
79	Total New Hampshire Commodity Costs	\$	1,641,159		2,375,052	\$	3,041,855		2,634,860		2,640,628	\$	1,758,608		47.077.400	\$	44.000.400
80	New Hampshire Inventory Finance Costs	\$	970	\$	1,697	\$	2,423	\$	2,042	\$	1,929	\$	1,730,000	\$	17,877,426		14,092,162
81	Total New Hampshire Variable Costs	\$			2,376,749				2,636,902		2,642,557		1,759,640		10,094 17,887,520	\$	10,094
82	Northern Utilities	<u> </u>	.,,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2,0.0,1.10	Ψ.	0,011,210	Ψ	2,000,002	Ψ	2,042,337	Ψ	1,759,640		17,887,520	\$	14,102,256
83	Firm Sales Pipeline Commodity Excld Hedge	\$	2,320,313	\$	1,281,991	\$	1,030,787	\$	853,889	\$	1,899,146	đ	0.700.000	•	47.004.500		10 150 050
84	Hedging (Gains) Losses	\$	299,300	\$	296,580	\$	171,140	\$	209,680	\$			2,766,833		17,001,598		10,152,959
85	Storage	\$		\$	2,485,349	-	3,913,239	•	3,258,653		202,370		268,150	\$	1,513,110	\$	1,447,220
86	Peaking	\$	375,688	\$	513,353	\$	517,373	\$	459,022								11,811,500
87	Northern Interruptible	\$	070,000	\$	010,000	\$	317,373	\$	459,022	\$	552,995	\$	117,142	\$	2,579,670	\$	2,535,574
88	Total Northern Commodity Costs	\$	2,995,301		4,577,274		5,632,539		4,781,244	<u> </u>	4 706 888	\$	2 404 005	\$		\$	-
89	Northern Inventory Finance Costs	\$		\$	3,326	\$	4,451	\$	3,688	\$	4,796,888		3,164,005		32,905,877		25,947,252
90	Total Northern Variable Costs		2,997,135		4,580,600						3,491 4,800,380	\$	1,887	\$		\$	18,677
91				Ψ_	.,000,000	Ψ_	0,000,000	Ψ	7,104,332	φ	4,000,300	Φ	3, 103,892	Þ	32,924,554	\$	25,965,929

51	Commodity Allocation Factors	
52	Firm Sales Sendout for Normal Winter, MMBtu	
53		
54	Maine	ME Attachment NUI-JDS-4, LN 33 / 10
55	New Hampshire	Company Analysis
56	Total	LN 54 + LN 55
57		
58	Percentage of Total	
59	Maine	LN 54 / LN 56
60	New Hampshire	LN 55 / LN 56
61	Total	LN 59 + LN 60
62		TER OO TER OO
63	Commodity Allocation by Jurisdiction	
64	Maine	
65	Firm Sales Pipeline Commodity Excld Hedge	LN 45 * LN 59
66	Hedging (Gains) Losses	LN 30 * LN 59
67	Storage	LN 46 * LN 59
68	Peaking	LN 47 * LN 59
69	Maine Interruptible	LN 42
	Total Maine Commodity Costs	Sum LN 65 : LN 69
71	Maine Inventory Finance Costs	LN 112
72	Total Maine Variable Costs	LN 70 + LN 71
	New Hampshire	LIVIO
	Firm Sales Pipeline Commodity Excld Hedge	LN 45 * LN 60
75	Hedging (Gains) Losses	LN 30 * LN 60 + LN 37
76	Storage	LN 46 * LN 60
77	Peaking	LN 47 * LN 60
78	New Hampshire Interruptible	LN 43
79	Total New Hampshire Commodity Costs	Sum LN 74 : LN 78
	New Hampshire Inventory Finance Costs	LN 117
81	Total New Hampshire Variable Costs	LN 79 + LN 80
	Northern Utilities	LIV 75 + LIV 60
83	Firm Sales Pipeline Commodity Excld Hedge	LN 65 + LN 74
84	Hedging (Gains) Losses	LN 66 + LN 75
85	Storage	LN 67 + LN 76
86	Peaking	
87	Northern Interruptible	LN 68 + LN 77
88	Total Northern Commodity Costs	LN 69 + LN 78
		LN 70 + LN 79
	Total Northern Variable Costs	LN 88 + LN 89
90 91	Northern Inventory Finance Costs Total Northern Variable Costs	LN 71 + LN 80 LN 88 + LN 89

Northern Utilities, Inc. New Hampshire Division Schedule 22 Page 5 of 6

Northern Utilities ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

92 Northern Utilities

93 Simplified Market Based Allocator (MBA) Calculations

94 ALLOCATION OF NORTHERN INVENTORY FINANCE CHARGE

95																	
96	Col A		Col B		Col C		Col D		Col E		Col F		Col G		CalN		0-10
97					00.0		00. B		001 L		COLL		COLG		Col N		Col O
98	Inventory Finance Charge	Ī	Nov-10		Dec-10		Jan-11		Feb-11	Т	Mar-11	Г	Apr-11	Γ	TOTAL		
99	Storage	\$	1,793	\$	1,793	\$	1,514	\$	1.091	\$	739	\$	663	\$	17,542		
100	Peaking	\$	140	ŝ	138	\$	128	\$	124	\$	113	\$	104	, -	1,135		
101	Total	\$	1,933	\$	1,931	\$	1,642	\$	1,214		853	\$	767	\$	18,677		
102				1 Y	.,,00.		1,0 12	Ψ	1,217	Ψ	000	Ψ	707	Φ	10,077		
103	Inventory Finance Charge Allocation by Juris	sdic	tion										·				
104	Maine	T \$	915	\$	953	\$	765	\$	556	\$	391	\$	353	T &	8,583		
105	New Hampshire	\$	1,018	\$	978	\$	877	\$	658	\$	462	\$	414	\$	10,094		
106	Total	\$	1,933	\$	1.931	\$	1,642	\$	1,214	·	853	\$	767	\$			
107				_	1,001	Ψ_	1,012	Ψ_	1,217	Ψ	000	Ψ	707	Ψ	18,677		
108	Inventory Finance Charge Allocation by Mon	th															
109	Maine	•••															
110	Firm Sales Normal Remaining Sendout	Г	213,227		402.021		500.269		406,132		385,419		210,879		2.117.945		2,117,945
111	Monthly % Sendout of Total Winter	İ	10.07%		18.98%		23.62%		19.18%		18.20%		9.96%		100.00%		, , , , , , ,
112	ME Allocated Inventory Finance Charge	\$	864	\$		\$	2,027	\$	1,646	2	1,562	Φ	855	\$		æ	100.00%
113		<u> </u>		<u> </u>	1,020	Ψ	2,021	Ψ	1,040	Ψ	1,502	Ψ	655	Φ	8,583	\$	8,583
114	New Hampshire																
115	Firm Sales Normal Remaining Sendout	<u> </u>	225,402		394,163		562,921		474,361		448,225	_	239,824		2,344,895	-	2,344,895
116	Monthly % Sendout of Total Winter		9.61%		16,81%		24.01%		20.23%		19.11%		10.23%		100.00%		, ,
117	NH Allocated Inventory Finance Charge	\$	970	\$		\$	2,423	\$	2,042	\$	1,929	\$	1,032	\$		<u> </u>	100.00%
	Y			<u> </u>	.,,,,,			Ψ	2,072	<u> </u>	1,020	Ψ.	1,002	φ_	10,094	₽	10,094

Northern Utilities, Inc. New Hampshire Division Schedule 22 Page 6 of 6

Northern Utilities ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

92 Northern Utilities

93 Simplified Market Based Allocator (MBA) Calculations

94 ALLOCATION OF NORTHERN INVENTORY FINANCE CHARGE

95	
96	
97	

98 Inventory Finance Charge 99 Storage Company Analysis, Attachment NUI-JDS-8 - 'Carrying Costs' 100 Peaking Company Analysis, Attachment NUI-JDS-8 - 'Carrying Costs' 101 Total Sum LN 99: LN 100

102

103 Inventory Finance Charge Allocation by Juri	sdiction
104 Maine	LN 101 * LN 59
105 New Hampshire	LN 101 * LN 60
106 Total	Sum LN 104 : LN 105
407	The same of the sa

108 Inventory Finance Charge Allocation by Month

١	09	Maine

110	Firm Sales Remaining Sendout	ME Attachment NUI-JDS-4, LN 80 / 10
	Monthly % Sendout of Total Winter	LN 110 / LN 110 Col N
	ME Allocated Inventory Finance Charge	LN 104 Col N * LN 111

113

 New	Ham	pshire

114	New Hampshire	
115	Firm Sales Remaining Sendout	Company Analysis
116	Monthly % Sendout of Total Winter	LN 115 / LN 115 Col N
117	NH Allocated Inventory Finance Charge	LN 105 Col N* LN 116

Northern Utilities, Inc. New Hampshire Division Schedule 23 Page 1 of 1

Northern Utilities - NEW HAMPSHIRE DIVISION Supporting Detail to Proposed Tariff Sheets Average Cost of Gas Calculation

		T	Winter	·	Summar	Т	Tatal	
1	Demand	6		Φ.	Summer	-	Total	
2	Commodity	\$	13,712,022	\$	1,077,843	\$	14,789,865	Schedule 1A, LN 80
3	Total	\$			3,785,265		17,887,520	Schedule 1B, LN 0
4	Total	\$	27,814,277	\$	4,863,108	\$	32,677,385	LN 1 + LN 2
5	Forecasted Firm Sales (Therms)		00 000 050		7 400 040			
6	Forecasted Residential Sales (Therms)		28,028,950		7,400,642		35,429,591	Schedule 10B, LN 11 * 10
7	Average Residential Rate:	ļ	13,035,240		3,274,690		16,309,931	Schedule 10B, LN 3 * 10
8	Average Demand Rate		Winter		Summer		Total	
9			\$0.4892		\$0.1456	1		LN 1 / LN 5
	Average Commodity Rate		\$0.5031		\$0.5115			LN 2 / LN 5
10	Average Rate		\$0.9923		\$0.6571			LN 3 / LN 5
11								
	Residential Reallocation:		Winter		Summer		Total	
13	Demand Costs Allocated To Residential per SMBA	\$	6,503,781	\$	509,014	\$	7,012,796	Schedule 10A, LN 168
14	Demand Costs Allocated To Residential per Avg Res. Rate	\$	6,376,960	\$	476,795	\$	6,853,755	LN8*LN6
	Demand Reallocation:	\$	126,821	\$	32,219	\$	159,040	LN 13 - LN 14
16	HLF Allocation	\$	12,540	\$	8,067	\$	20,607	LN 15 / LN 20
17	LLF Allocation	\$	114,281	\$	24,152	\$	138,433	LN 15 / LN 21
18		i i	,	•	,,	Ψ	100, 100	214 107 214 21
19	SMBA Capacity Cost Allocation (%)							
20	HLF		9.89%		25.04%		ł	Schedule 10A, LN 173
21	LLF		90.11%		74.96%			
22			30.1170		14.30 /6			Schedule 10A, LN 174
23	Commodity Costs Allocated To Residential per SMBA	\$	6,566,201	\$	1 672 007	φ	0.000.000	
24	Commodity Costs Allocated To Residential per Avg Res. Rate	\$		φ \$	1,673,007	\$ \$	8,239,208	Schedule 10A, LN 138
25	Commodity Reallocation:	\$	7,757		1,675,004		8,233,448	LN 18 * LN 16
26	HLF Allocation			\$	(1,997)		5,760	LN 23 - LN 24
27	LLF Allocation	\$	1,419	\$	(885)		535	LN 25 / LN 30
28		\$	6,338	\$	(1,112)	\$	5,226	LN 25 / LN 31
	SMPA Commodity Cook Allogation (0)							
	SMBA Commodity Cost Allocation (%)							
30	HLF		18.30%		44.30%			Schedule 10C, LN 143
31	LLF		81.70%		55.70%			Schedule 10C, LN 144