CHECK SHEET

The title page and pages 1-94 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

<u>Page</u>	Revision
Title	Original
1	Second Revised
2	Original
3	Second Revised
4	Original
5	Original
6	First Revised
7	Original
8	Original
9	Original
10	Original
11	Original
12	Original
13	Original
14	Original
15	Original
16	Original
17	Original
18	Original
19	Original
20	Original
21	Original
22	Original
23	Original
24	Original
25	Original
26	Original
27	Original
28	Original
29	Original
30	Original

August 28, 2015 Issued by: /s/ David R. Swain Issued:

Effective: November 1, 2015 David R. Swain

President

Title:

CHECK SHEET (Cont'd)

The title page and pages 1-94 inclusive of this tariff are effective as of the date shown on the individual tariff pages.

Page	Revision
61	Original
62	Original
63	Original
64	Original
65	Original
66	Original
67	Original
68	Original
69	Original
70	Original
71	Original
72	Original
73	Original
74	Second Revised
75	Original
76	First Revised
77	Second Revised
78	First Revised
79	First Revised
80	First Revised
81	First Revised
82	First Revised
83	Original
84	Original
85	Original
86	Original
87	Original
88	Original
89	First Revised
90	Original
91	Original
92	Original
93	Original
94	Original

Issued: August 28, 2015 Iss

Effective: November 1, 2015

Issued by: /s/ David R. Swain

David R. Swain

CHECK SHEET (Cont'd)

The title page and pages 1- inclusive of this tariff are effective as of the date shown on the individual tariff pages.

<u>Page</u>	<u>Revision</u>
Attachment A	Original
Attachment B	First Revised
Attachment C	First Revised

Issued:August 28, 2015Issued by:/s/ David R. SwainEffective:November 1, 2015David R. Swain

II RATE SCHEDULES FIRM RATE SCHEDULES

	Winter Period					Summer Period						
	Deliv <u>Cha</u>	•	Cost of Gas Rate <u>Page 77</u>	LDAC Page 82		Γotal Rate		elivery <u>harge</u>	Gá	Cost of as Rate age 77	LDAC Page 82	Total <u>Rate</u>
Residential Non Heating - R-1 Customer Charge per Month per Meter All therms		15.24 .2014	\$ 0.7516	\$ 0.1014		15.24 1.0544	\$	15.24 0.2014	\$	0.3421	\$ 0.0937	\$ 15.24 \$ 0.6372
Residential Heating - R-3 Customer Charge per Month per Meter Size of the first block	100 t	22.04 herms				22.04		22.04 0 therms			• • • • • •	\$ 22.04
Therms in the first block per month at All therms over the first block per month at		.3486 .2885	\$ 0.7516 \$ 0.7516				\$ \$	0.3486 0.2885	\$ \$	0.3421 0.3421	\$ 0.0937 \$ 0.0937	\$ 0.7844 \$ 0.7243
Residential Heating - R-4 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at	100 t	\$8.82 herms	\$ 0.7516	\$ 0.1014	\$ \$ (8.82 0.9924	\$ 2 \$	8.82 0 therms 0.1394	\$	0.3421	\$ 0.0937	\$ 8.82 \$ 0.5752
All therms over the first block per month at	\$ 0	.1153	\$ 0.7516	\$ 0.1014	\$ (0.9683	\$	0.1153	\$	0.3421	\$ 0.0937	\$ 0.5511
Commercial/Industrial - G-41 Customer Charge per Month per Meter Size of the first block		48.24 herms			\$	48.24	\$ 2	48.24 0 therms				\$ 48.24
Therms in the first block per month at All therms over the first block per month at		.3956 .2657	\$ 0.7454 \$ 0.7454	\$ 0.0685 \$ 0.0685		1.2095 1.0796	\$ \$	0.3956 0.2657	\$ \$	0.3558 0.3558	\$ 0.0793 \$ 0.0793	\$ 0.8307 \$ 0.7008
Commercial/Industrial - G-42 Customer Charge per Month per Meter Size of the first block	\$1 1000 t	44.73 herms			\$	144.73	\$ 40	144.73 0 therms				\$ 144.73
Therms in the first block per month at All therms over the first block per month at		.3598 .2396	\$ 0.7454 \$ 0.7454		- 1	1.1737 1.0535	\$ \$	0.3598 0.2396	\$ \$	0.3558 0.3558	\$ 0.0793 \$ 0.0793	\$ 0.7949 \$ 0.6747
Commercial/Industrial - G-43 Customer Charge per Month per Meter All therms over the first block per month at		21.12 .2210	\$ 0.7454	\$ 0.0685		621.12 1.0349	\$	621.12 0.1011	\$	0.3558	\$ 0.0793	\$ 621.12 \$ 0.5362
Commercial/Industrial - G-51 Customer Charge per Month per Meter Size of the first block	100 t	48.24 herms			\$	48.24		48.24 0 therms				\$ 48.24
Therms in the first block per month at All therms over the first block per month at		.2384 .1549	\$ 0.7647 \$ 0.7647	\$ 0.0685 \$ 0.0685	- 1	1.0716 0.9881	\$ \$	0.2384 0.1549	\$ \$	0.3076 0.3076	\$ 0.0793 \$ 0.0793	\$ 0.6253 \$ 0.5418
Commercial/Industrial - G-52 Customer Charge per Month per Meter Size of the first block	\$1 1000 t	44.73			\$	144.73	\$ 100	144.73 0 therms				\$ 144.73
Therms in the first block per month at All therms over the first block per month at	\$ 0	.2047	\$ 0.7647 \$ 0.7647			1.0379 0.9696	\$ \$	0.1484 0.0843			\$ 0.0793 \$ 0.0793	
Commercial/Industrial - G-53 Customer Charge per Month per Meter All therms over the first block per month at		39.21 .1430	\$ 0.7647	\$ 0.0685		639.21 0.9762	\$	639.21 0.0687	\$	0.3076	\$ 0.0793	\$ 639.21 \$ 0.4556
Commercial/Industrial - G-54 Customer Charge per Month per Meter All therms over the first block per month at		39.21 .0546	\$ 0.7647	\$ 0.0685	- 1	639.21 0.8878	\$ \$	639.21 0.0296	\$	0.3076	\$ 0.0793	\$ 639.21 \$ 0.4165

Issued by: /s/ David R. Swain

David R. Swain

Title: President

Issued: August 28, 2015 Effective: November 1, 2015

Anticipated Cost of Gas

PERIOD COVERED: WINTER PERIOD, NOVEMBER 1, 2015 THROUGH APRIL 30, 2016 (REFER TO TEXT IN SECTION 16 COST OF GAS CLAUSE)

(Col 1)		(Col 2)		(Col 3)
ANTICIDATED DIDECT COST OF CAS				
ANTICIPATED DIRECT COST OF GAS Purchased Gas:				
Demand Costs:	\$	7,958,775		
Supply Costs:	Ψ.	51,450,609		
2417		,,		
Storage Gas:				
Demand, Capacity:	\$	987,267		
Commodity Costs:		5,489,978		
Produced Gas:		3,547,477		
Hedged Contract (Saving)/Loss		176,262		
Hedge Underground Storage Contract (Saving)/Loss				
			_	
Unadjusted Anticipated Cost of Gas			\$	69,610,368
Adjustmonts				
Adjustments: Prior Period (Over)/Under Recovery (as of 05/01/15)	\$	(4,339,198)		
Interest	Ψ	(140,799)		
Prior Period Adjustments		-		
Broker Revenues		(1,917,919)		
Refunds from Suppliers		(358,691)		
Fuel Financing		-		
Transportation CGA Revenues		35,761		
Interruptible Sales Margin		-		
Capacity Release and Off System Sales Margins		(3,512,739)		
Hedging Costs		40 505		
Fixed Price Option Administrative Costs		49,565		(10.184.020)
Total Adjustments			_	(10,184,020)
Total Anticipated Direct Cost of Gas			\$	59,426,348
Total Anticipated Direct Cost of Gas			Ψ	39,420,340
Authorizate d Indirect Cost of Cos				
Anticipated Indirect Cost of Gas				
Working Capital:	_			
Total Unadjusted Anticipated Cost of Gas 11/01/15 - 04/30/16	\$	69,610,368		
Working Capital Rate: Lead Lag Days / 365 Prime Rate		0.0391 3.25%		
Working Capital Percentage		0.127%		
Working Capital	\$	88,467		
	•			
Plus: Working Capital Reconciliation (Acct 142.20)		(28,115)		
Total Working Capital Allowance				60,352
• •				
Bad Debt:				
Total Unadjusted Anticipated Cost of Gas 11/01/15 - 04/30/16	\$	69,610,368		
Less: Refunds		(358,691)		
Plus: Total Working Capital		60,352		
Plus: Prior Period (Over)/Under Recovery		(4,339,198)		
Subtotal	\$	64,972,831		
B 1814B				
Bad Debt Percentage		3.47%		
Bad Debt Allowance	•			
Divar Bod Dobt Decembilistics (Acet 175.50)	\$	2,254,557		
Plus: Bad Debt Reconciliation (Acct 175.52)	\$		•	2.075.000
Plus: Bad Debt Reconciliation (Acct 175.52) Total Bad Debt Allowance	\$	2,254,557	\$	2,975,200
	\$	2,254,557	\$	2,975,200
Total Bad Debt Allowance	\$	2,254,557		
	\$	2,254,557	\$	2,975,200 1,980,428
Total Bad Debt Allowance	\$	2,254,557		
Total Bad Debt Allowance Production and Storage Capacity	<u>-</u>	2,254,557 720,643		
Total Bad Debt Allowance Production and Storage Capacity Miscellaneous Overhead (11/01/15 - 04/30/16)	<u>-</u>	2,254,557 720,643 13,170		
Total Bad Debt Allowance Production and Storage Capacity Miscellaneous Overhead (11/01/15 - 04/30/16) Times Winter Sales	<u>-</u>	2,254,557 720,643 13,170 85,914		
Total Bad Debt Allowance Production and Storage Capacity Miscellaneous Overhead (11/01/15 - 04/30/16) Times Winter Sales Divided by Total Sales	<u>-</u>	2,254,557 720,643 13,170 85,914		1,980,428
Total Bad Debt Allowance Production and Storage Capacity Miscellaneous Overhead (11/01/15 - 04/30/16) Times Winter Sales Divided by Total Sales Miscellaneous Overhead	<u>-</u>	2,254,557 720,643 13,170 85,914	\$	1,980,428 10,272

Issued: August 28, 2015 Issued by: <u>/s/ David R. Swain</u>

Effective: November 1, 2015 David R. Swain

CALCULATION OF FIRM SALES COST OF GAS RATE PERIOD COVERED: WINTER PERIOD, NOVEMBER 1, 2015 THROUGH APRIL 30, 2016 (Refer to Text in Section 16 Cost of Gas Clause)

(Col 1)		(Col 2)	((Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (11/01/15 - 04/30/16) Direct Cost of Gas Rate	\$	59,426,348 85,749,300	\$	0.6930	per therm
Demand Cost of Gas Rate Commodity Cost of Gas Rate Adjustment Cost of Gas Rate Total Direct Cost of Gas Rate	\$ 	8,946,041 60,664,327 (10,184,020) 59,426,348		0.1043 0.7075 (0.1188)	per therm per therm per therm per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/15 - 04/30/16) Indirect Cost of Gas	\$	5,026,252 85,749,300	\$		per therm
TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 11/01/15			\$	0.7516	per therm
RESIDENTIAL COST OF GAS RATE - 11/01/15	COC	Swr	\$	0.7516	/therm
	Maximum (CO	G + 25%)	\$	0.9395	
	iviaxiiilulii (CO	G + 25/0)	ψ	0.9393	

C&I LOW WINTER USE COST OF GAS RATE - 11/01/15	COGwl	\$ 0.7647 /therm
--	-------	------------------

Average Demand Cost of Gas Rate Effective 11/01/15 Times: Low Winter Use Ratio (Winter) Times: Correction Factor Adjusted Demand Cost of Gas Rate	\$ 0.1043 1.1498 0.9794 \$ 0.1174	Maximum (COG + 25%)	\$ 0.9559
Commodity Cost of Gas Rate Adjustment Cost of Gas Rate Indirect Cost of Gas Rate Adjusted C&I Low Winter Use Cost of Gas Rate	\$ 0.7075 \$ (0.1188) \$ 0.0586 \$ 0.7647		

C&I HIGH WINTER USE COST OF GAS RATE - 11/01/15 COGWI	n \$ 0.7454 /therm
---	--------------------

Average Demand Cost of Gas Rate Effective 11/01/15 Times: High Winter Use Ratio (Winter) Times: Correction Factor Adjusted Demand Cost of Gas Rate	\$ 0.1043 0.9607 0.9794 \$ 0.0981	Maximum (COG + 25%)	\$ 0.9318
Commodity Cost of Gas Rate Adjustment Cost of Gas Rate Indirect Cost of Gas Rate Adjusted C&I High Winter Use Cost of Gas Rate	\$ 0.7075 \$ (0.1188) \$ 0.0586 \$ 0.7454		

Issued: August 28, 2015 Issued by: /s/ David R. Swain

Effective: November 1, 2015 David R. Swain

> Title: President

Issued in compliance with NHPUC Order No. 25,833 dated October 30, 2015 in Docket No. DG 15-353.

II. RATE SCHEDULES

CALCULATION OF FIXED WINTER PERIOD COST OF GAS RATE PERIOD COVERED: WINTER PERIOD, NOVEMBER 1, 2015 THROUGH APRIL 30, 2016 (Refer to Text in Section 17(A) Fixed Price Option Program)

(Col 1)		(Col 2)	(Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (11/01/15 - 04/30/15)	\$	59,426,348 85,749,300		
Direct Cost of Gas Rate			\$ 0.6930	per therm
Demand Cost of Gas Rate	\$	8,946,041	\$	per therm
Commodity Cost of Gas Rate		60,664,327	\$ 0.7075	per therm
Adjustment Cost of Gas Rate	_	(10,184,020)	\$ (0.1188)	per therm
Total Direct Cost of Gas Rate	\$	59,426,348	\$ 0.6930	per therm
Total Anticipated Indirect Cost of Gas	\$	5,026,252		
Projected Prorated Sales (11/01/15 - 04/30/15)		85,749,300		
Indirect Cost of Gas			\$ 0.0586	per therm
TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE (05/01/15)			\$ 0.7516	
FPO Risk Premium			\$ 0.0200	
TOTAL PERIOD FIXED PRICE OPTION COST OF GAS RATE EFFECTIVE (05/01/15)			\$ 0.7716	
RESIDENTIAL COST OF GAS RATE - 11/01/15	CC	OGwr	\$ 0.7716	/therm

Issued: August 28, 2015 Effective: November 1, 2015 Issued by: /s/ David R. Swain

David R. Swain

II. RATE SCHEDULES

Calculation of Firm Transportation Cost of Gas Rate PERIOD COVERED: WINTER PERIOD, NOVEMBER 1, 2015 THROUGH APRIL 30, 2016 (Refer to text in Section 16(Q) Firm Transportation Cost of Gas Clause)

(Col 1)	(Col 2)	(Col 3)	(Col 4)
ANTICIPATED COST OF SUPPLEMENTAL GAS SUPPLIES:			
PROPANE	\$ 1,176,481		
LNG	2,370,996		
TOTAL ANTICIPATED COST OF SUPPLEMENTAL GAS SUPPLIES ESTIMATED PERCENTAGE USED FOR PRESSURE SUPPORT PURPOSES ESTIMATED COST OF LIQUIDS USED FOR PRESSURE SUPPORT PURPOSES	3,547,477 <u>9.9%</u> \$ 351,200		
PROJECTED FIRM THROUGHPUT (THERMS): FIRM SALES FIRM TRANSPORTATION SUBJECT TO FTCG TOTAL FIRM THROUGHPUT SUBJECT TO COST OF GAS CHARGE	85,913,727 48,417,049 134,330,777	64.0% <u>36.0%</u> 100.0%	
TRANSPORTATION SHARE OF SUPPLEMENTAL GAS SUPPLIES	36.0%	x \$351,200 =	\$ 126,584
PRIOR (OVER) OR UNDER COLLECTION			(162,345)
NET AMOUNT TO COLLECT FROM (RETURNED TO) TRANSPORTATION CUSTOMERS			\$ (35,761)
PROJECTED FIRM TRANSPORTATION THROUGHPUT			48,417,049
FIRM TRANSPORTATION COST OF GAS			(\$0.0007)

Issued:August 28, 2015Issued by: /s/ David R. SwainEffective:November 1, 2015David R. Swain

Environmental Surcharge - Manufactured Gas Plants

Manufactured Gas Plants

Required annual Environmental increase \$2,651,933

DG 10-17 Base Rate Revision Collections \$0

Environmental Subtotal \$2,651,933

Overall Annual Net Increase to Rates \$2,651,933

Estimated weather normalized firm therms billed for the

twelve months ended 10/31/16 - sales and transportation 184,393,263 therms

Surcharge per therm \$0.0144 per therm

Total Environmental Surcharge \$0.0144

Issued: August 28, 2015 Issued by: /s/ David R. Swain

Effective: November 1, 2015 David R. Swain

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities Local Distribution Adjustment Charge (LDAC) increase due to Rate Case Expense and Recoupment For LDAC effective November 1, 2015 - December 31, 2016 Docket No. DG 14-180

1	Rate Case Expense in Docket No. DG 14-180	\$411,782
2	Recoupment in Docket No. DG 14-180	\$2,990,348
3		\$3,402,130
4		
5	Rate Case Expense Overcollection in Docket No. DG 10-017	(\$129,262)
6		
7	Estimated July 2015 - October 2015 Recoveries	(\$281,992)
8		
9	Estimated November 2015 - December 2016 Remaining Recovery	\$2,990,876
10	Estimated November 2015 - December 2016 Interest	<u>\$50,283</u>
11		
12	Total Remaining Recovery	\$3,041,159
13		
14	Estimated November 2015 - December 2016 Sales (therms)	217,953,914
15		
16	RCE rate per therm November 2015 - December 2016	\$0.0140
	·	•

Issued: August 28, 2015 Effective: November 1, 2015

Issued by: /s/ David R. Swain

David R. Swain

NHPUC No. 8 - GAS LIBERTY UTILITIES

Local Distribution Adjustment Charge Calculation

Residential Non Heating Rates - R-1 Energy Efficiency Charge	\$0.0585	Sales <u>Customers</u>	Transportation <u>Customers</u>	
Demand Side Management Charge	0.0000	# 0.0505		
Conservation Charge (CCx) Relief Holder and pond at Gas Street, Concord, NH	0.0000	\$0.0585		
Manufactured Gas Plants Environmental Surcharge (ES)	0.0144	0.0144		
Interruptible Transportation Margin Credit (ITMC)		0.0000		
Cost Allowance Adjustment Factor Rate Case Expense Factor (RCEF)		0.0000 0.0140		
Residential Low Income Assistance Program (RLIAP) LDAC		0.0145 \$0.1014		per therm
		ф 0.1014		per therm
Residential Heating Rates - R-3, R-4 Energy Efficiency Charge	\$0.0585			
Demand Side Management Charge	0.0000			
Conservation Charge (CCx) Relief Holder and pond at Gas Street, Concord, NH	0.0000	\$0.0585		
Manufactured Gas Plants	0.0144			
Environmental Surcharge (ES) Cost Allowance Adjustment Factor		0.0144 0.0000		
Rate Case Expense Factor (RCEF)		0.0140		
Residential Low Income Assistance Program (RLIAP) LDAC		0.0145 \$0.1014		per therm
Commercial/Industrial Low Annual Use Rates - G-41, G-51	*****			
Energy Efficiency Charge Demand Side Management Charge	\$0.0256 0.0000			
Conservation Charge (CCx)		\$0.0256	\$0.0256	
Relief Holder and pond at Gas Street, Concord, NH Manufactured Gas Plants	0.0000 0.0144			
Environmental Surcharge (ES)	0.0144	0.0144	0.0144	
Cost Allowance Adjustment Factor		0.0000	0.0000	
Gas Restructuring Expense Factor (GREF) Rate Case Expense Factor (RCEF)		0.0000 0.0140	0.0000 0.0140	
Residential Low Income Assistance Program (RLIAP)		0.0145	0.0145	
LDAC		\$0.0685	\$0.0685	per therm
Commercial/Industrial Medium Annual Use Rates - G-42, G-52				
Energy Efficiency Charge	\$0.0256			
Demand Side Management Charge	0.0000	#0.0050	#0.0050	
Conservation Charge (CCx) Relief Holder and pond at Gas Street, Concord, NH	0.0000	\$0.0256	\$0.0256	
Manufactured Gas Plants	0.0144			
Environmental Surcharge (ES)		0.0144 0.0000	0.0144 0.0000	
Cost Allowance Adjustment Factor Gas Restructuring Expense Factor (GREF)		0.0000	0.0000	
Rate Case Expense Factor (RCEF)		0.0140	0.0140	
Residential Low Income Assistance Program (RLIAP) LDAC		0.0145 \$0.0685	0.0145 \$0.0685	per therm
-2.0		40.000	40.0000	po
Commercial/Industrial Large Annual Use Rates - G-43, G-53, G-54				
Energy Efficiency Charge Demand Side Management Charge	\$0.0256 0.0000			
Conservation Charge (CCx)	0.0000	\$0.0256	\$0.0256	
Relief Holder and pond at Gas Street, Concord, NH	0.0000		ţ::1 <u>=</u> 00	
Manufactured Gas Plants Environmental Surcharge (ES)	0.0144	0.0444	0.0444	
Cost Allowance Adjustment Factor		0.0144 0.0000	0.0144 0.0000	
Gas Restructuring Expense Factor (GREF)		0.0000	0.0000	
Rate Case Expense Factor (RCEF)		0.0140	0.0140	
Residential Low Income Assistance Program (RLIAP) LDAC		0.0145 \$0.0685	0.0145 \$0.0685	per therm

Issued: August 28, 2015 Effective: November 1, 2015

Issued by: /s/ David R. Swain

David R. Swain

Title: President

Issued in compliance with NHPUC Order No. 25,833 dated October 30, 2015 in Docket No. DG 15-353.

III DELIVERY TERMS AND CONDITIONS

ATTACHMENT B

Schedule of Administrative Fees and Charges

I. Supplier Balancing Charge: \$0.24 per MMBtu of Daily Imbalance Volumes

II. Capacity Mitigation Fee 15% of the Proceeds from the Marketing of Capacity for Mitigation.

Capacity for Mitigation.

III. Peaking Demand Charge \$ 12.89 MMBTU of Peak MDQ

IV. Company Allowance Calculation (per Schedule 25)

177,437,780 Total Sendout - Therms Jul-2013 - Jun-2014 174,430,425 Total Throughput - Therms Jul-2013 - Jun-2014

3,007,355 Variance (Sendout - Throughput)

Company Allowance Percentage 2015-16 1.7% Variance / Total Sendout

Issued: August 28, 2015
Effective: November 1, 2015

Issued by: <u>/s/ David R. Swain</u>
David R. Swain

III DELIVERY TERMS AND CONDITIONS

ATTACHMENT C Capacity Allocators

Rate Class		Pipeline	Storage	Peaking	Total
	Low Annual/High				
G-41	Winter Use	47.7%	20.1%	32.2%	100.0%
	Low Annual/Low				
G-51	Winter Use	76.6%	9.0%	14.4%	100.0%
	Medium Annual / High				
G-42	Winter	47.7%	20.1%	32.2%	100.0%
	High Annual / Low				
G-52	Winter Use	76.6%	9.0%	14.4%	100.0%
	High Annual / High				
G-43	Winter	47.7%	20.1%	32.2%	100.0%
	High Annual / Load				
G-53	Factor < 90%	76.6%	9.0%	14.4%	100.0%
	High Annual / Load				
G-54	Factor < 90%	76.6%	9.0%	14.4%	100.0%

Issued: August 28, 2015
Effective: November 1, 2015
Issued by: <u>/s/ David R. Swain</u>
David R. Swain

Effective: November 1, 2015

David R. S

Title: President