

ORIGINAL	
N.H.P.U.C. Case No.	DG 13-257
Exhibit No.	#5
Witness	Panel 1
DO NOT REMOVE FROM FILE	

EnergyNorth Natural Gas, Inc.
d/b/a
Liberty Utilities

Peakshaving Storage Requirement
Winter 2013 / 2014

Prepared under the direction or control of:

F.Chico DaFonte | Liberty Utilities | Sr. Director, Energy Procurement

Attachment A

NHPUC Storage Requirement
For
EnergyNorth Natural Gas, Inc.

Winter of 2013 / 2014

Coldest 7 Day Period – Manchester, NH		
DATE	Heating Degree Days	Manchester, NH Avg. Temp. (oF)
Jan 9, 2004	65.5	-0.5
Jan 10, 2004	61.5	3.5
Jan 11, 2004	45.0	20.0
Jan 12, 2004	38.5	26.5
Jan 13, 2004	50.5	14.5
Jan 14, 2004	66.5	-1.5
Jan 15, 2004	68.5	-3.5
	Total	Mean
	396	8.4

2013/14 EnergyNorth Natural Gas, Inc.		
Regression Coefficients with Growth Factors		
Firm Sales Base Load	46,876.4	MMBtu
Firm Sales Heating Load	706,727.2	MMBtu
Seven Day Sales Calculation	753,603.7	MMBtu
Standby Base Load	0.0	MMBtu
Standby Heat Load	0.0	MMBtu
Seven Day FT Calculation	0.0	MMBtu

2013/14 Seven-Day Requirements Calculations			
Total MMBtu Sales Sendout	Available MMBtu Pipeline (*)	Supplemental Requirements	
753,603.7	690,567.0	63,036.7	MMBtu
		672,939	Gal

(*) Pipeline total is less than 7 days of full MDQ due to weather conditions.

Summary of Available Pipeline Supply	MMBtu Units
Canadian	8,122.0
Gulf Coast Long Haul	21,596.0
Tennessee Short-Haul	50,000.0
Underground Storage	28,115.0
Citygate Service #1	0.0
Citygate Service #2	0.0
Winter Peaking Service (30 day service)	0.0
Total Pipeline	107,833.0

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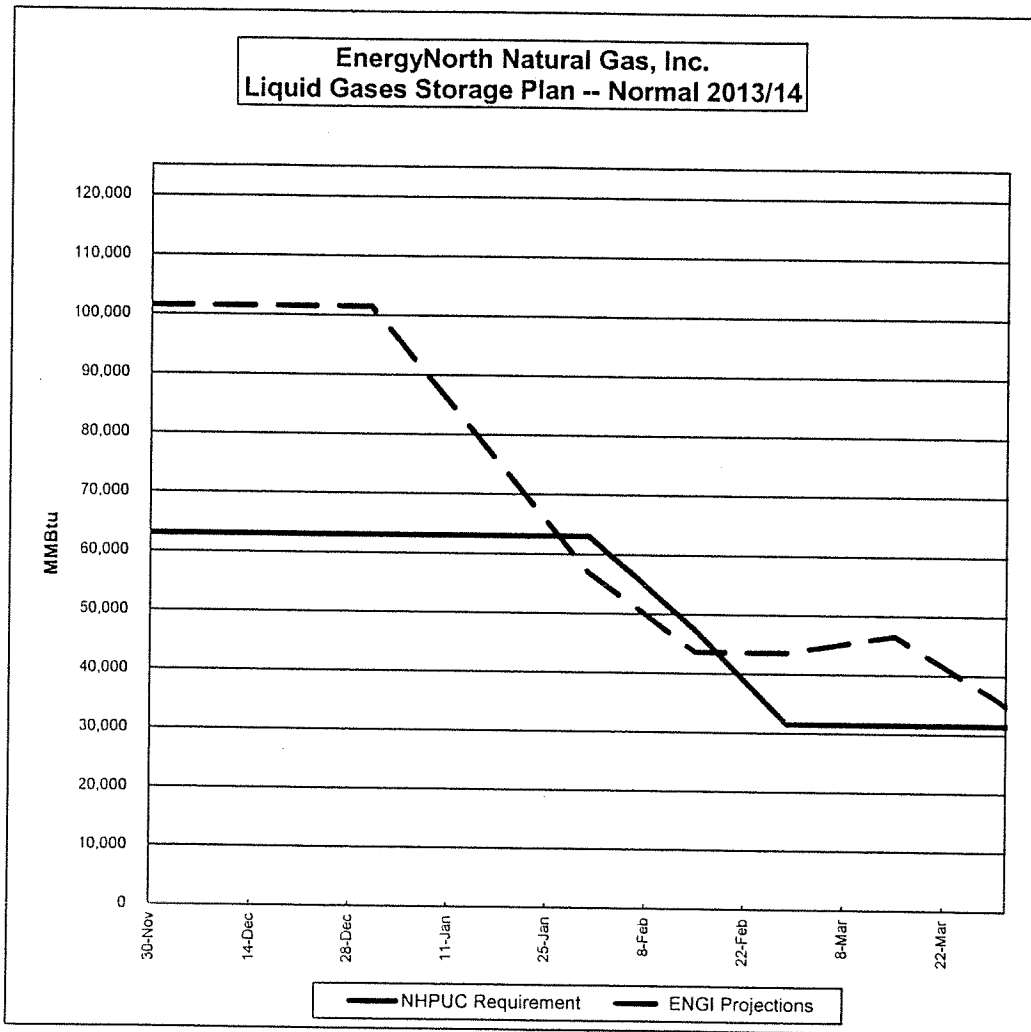
EnergyNorth Natural Gas, Inc.
Gas Supply Department
Liquid Storage Capacity in New Hampshire

FIXED STORAGE								
Location	Tank Type	Total # of Tanks	Water Capacity (Gallons)	Workable Percentage	Workable Capacity (Gallons)	Conversion Factor (Gallons to Mcf)	Conversion Factor (Mcf to MMBtu)	Workable Capacity (MMBtu's)
Nashua	LPG	4	30,000	85%	102,000	10.9529	1.0260	9,555
	LPG	3	61,400	85%	156,570	10.9529	1.0260	14,667
Amherst (*)	LPG	0	61,400	85%	0	10.9529	1.0260	0
	LPG	0	30,000	85%	0	10.9529	1.0260	0
Manchester	LPG	20	30,000	85%	510,000	10.9529	1.0260	47,774
	LNG	1	55,000	90%	49,500	11.6686	1.0260	4,352
Concord	LPG	0	0	0%	0	10.9529	1.0260	0
	LNG	1	55,000	90%	49,500	11.6686	1.0260	4,352
Tilton	LPG	2	30,000	85%	51,000	10.9529	1.0260	4,777
	LNG	1	55,000	90%	49,500	11.6686	1.0260	4,352
TOTAL	LPG	29	964,200		819,570			76,772
TOTAL	LNG	3	165,000		148,500			13,057
TOTAL FIXED					968,070			89,830
OTHER (FIXED OR MOVABLE STORAGE)								
Location	Tank Type	Total # of Tanks	Water Capacity (Gallons)	Workable Percentage	Workable Capacity (Gallons)	Conversion Factor (Gallons to Mcf)	Conversion Factor (Mcf to MMBtu)	Workable Capacity (MMBtu's)
Truckable (70% of 5 days trucking; 0 loads/day)	LPG				0	10.9529	1.0260	0
Truckable (70% of 5 days trucking; 4 loads/day)	LNG				133,000	11.6686	1.0260	11,694
TOTAL OTHER					133,000			11,694
TOTAL LPG					952,570			76,772
TOTAL LNG					281,500			24,752
TOTAL STORAGE					1,101,070			101,524

(*) Use of the Amherst facility is included in the LPG trucking capability.

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EnergyNorth Natural Gas, Inc.
Liquid Gases Storage Plan - Normal 2013 / 2014

	NHPUC Requirement		ENGI projections (*)	
	MMBtu's	Gallons	MMBtu's	Gallons
Nov-30-2013	63,037	672,939	101,524	1,083,804
Dec-31-2013	63,037	672,939	101,524	1,083,804
Jan-31-2014	63,037	672,939	56,824	606,616
Feb-15-2014	47,278	504,704	43,624	465,701
Feb-28-2014	31,518	336,469	43,624	465,701
Mar-15-2014	31,518	336,469	46,524	496,660
Mar-31-2014	31,518	336,469	34,830	371,818

(*) Includes propane trucking Jan-Mar.
Includes LNG trucking Nov-Mar.

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