

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 15-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition for Expansion of Franchise to the Town of Hanover and City of Lebanon, New  
Hampshire

**DIRECT TESTIMONY**

**OF**

**DANIEL G. SAAD**

July 24, 2015

1     **I.     INTRODUCTION**

2     **Q.     Please state your name and business address.**

3     A.     My name is Daniel G. Saad. My business address is 15 Buttrick Road, Londonderry, NH  
4            03053.

5     **Q.     By whom are you employed and in what capacity?**

6     A.     I am the President of Liberty Utilities (EnergyNorth Natural Gas) Corp. (“EnergyNorth”)  
7            and Liberty Utilities (Granite State Electric) Corp. (“Granite State”), together referred to  
8            as “Liberty” or “the Company.” Previously, I was employed as Vice President,  
9            Operations & Engineering by Liberty Energy Utilities (New Hampshire) Corp. (“Liberty  
10           Energy NH”). In that capacity, I was responsible for the day-to-day operations of  
11           EnergyNorth and Granite State, including all day-to-day field activities, maintenance,  
12           construction, LNG/LPG, dispatch and control, and engineering.

13    **Q.     On whose behalf are you testifying today?**

14    A.     I am testifying on behalf of EnergyNorth.

15    **Q.     Please state your educational background and professional experience.**

16    A.     In 1982, I earned a Bachelor of Science degree in Mechanical Engineering from the  
17            University of Massachusetts, and, in 1993, I earned a Masters of Business Administration  
18            from Boston College, with a concentration in finance and operations management. From  
19            1982 to 1988, I worked in various progressive engineering roles for Stone & Webster

1 Engineering Corporation in its nuclear engineering-mechanics division. From 1988 to  
2 2000, I was employed by Boston Gas Company. From 2000 until the time of Liberty  
3 Energy NH's acquisition of EnergyNorth and Granite State, I worked for National Grid  
4 USA and its predecessor company, KeySpan Corporation, in various capacities, including  
5 Vice President, Gas Operations & Construction, New England. I am also a registered  
6 professional engineer, a member of the American Gas Association, a Director of the  
7 Northeast Gas Association and a former director of the Energy Council of the Northeast.

8 **Q. Have you previously testified before this Commission?**

9 A. Yes. I testified in Docket No. DG 11-040, the docket in which the Commission approved  
10 the sale of Granite State and EnergyNorth to Liberty Energy NH, in Docket No. DG 14-  
11 155, involving the sale of New Hampshire Gas Corporation to EnergyNorth, and in  
12 Docket No. DG 14-180, the EnergyNorth distribution service rate case.

13 **Q. What is the purpose of your testimony?**

14 A. My testimony provides an overview of EnergyNorth's business plan to construct, own  
15 and operate an "off pipeline" natural gas distribution system in Hanover and Lebanon,  
16 New Hampshire. I will provide an explanation of how this new system fits within  
17 EnergyNorth's current operations, as well as its future goals for providing gas to New  
18 Hampshire customers. I will also provide testimony about the Company's managerial,  
19 financial and technical capabilities. Other witnesses and the topics of their testimony  
20 include:

1 Mr. William J. Clark who describes the proposed “off pipeline” distribution system and  
2 the benefits that will be realized by existing and future customers;

3 Mr. Francisco C. DaFonte who discusses fuel procurement for the new distribution  
4 system;

5 Mr. Richard G. MacDonald who discusses how EnergyNorth will construct and operate  
6 the new system; and

7 Mr. Steven E. Mullen who discusses how the Company will determine rates and charges  
8 for customers served by the new system.

9 **Q. Please provide a brief history of Liberty and its operating areas.**

10 A. Liberty Utilities purchased National Grid’s assets in New Hampshire, EnergyNorth and  
11 Granite State Electric, in July 2012. Granite State Electric provides local distribution of  
12 electricity to approximately 44,000 customers in New Hampshire, including the Town of  
13 Hanover and City of Lebanon. EnergyNorth provides local gas distribution services to  
14 approximately 90,000 customers, mainly located in the south-central region of the state.  
15 EnergyNorth also has the franchise rights for the City of Berlin. See Attachment DGS-1  
16 for a map showing the Company’s combined service areas. EnergyNorth has  
17 interconnects with Tennessee Gas Pipeline Company on the Concord Lateral, as well as a  
18 single interconnect on the Portland Natural Gas Transmission System pipeline to serve  
19 the Berlin franchise. Also included in the EnergyNorth portfolio are three liquefied  
20 natural gas (“LNG”) facilities and three propane facilities, which are utilized for both

1 supply and pressure enhancement, and a propane storage facility in Amherst. For more  
2 information on how these facilities operate, please see the testimony of Mr. DaFonte.

3 In January 2015, EnergyNorth acquired New Hampshire Gas Company, located in  
4 Keene, New Hampshire, from Iberdrola, USA. The Company now operates this entity as  
5 the Keene Division of EnergyNorth under a separate tariff. The Keene Division consists  
6 of approximately 1,250 customers who are supplied with a propane/air mixture through  
7 approximately 30 miles of underground distribution piping, which is supplied from a  
8 central fuel facility.

9 **Q. Please describe the areas to be served by this petition.**

10 A. EnergyNorth's franchise application will encompass the Town of Hanover and the City  
11 of Lebanon in their entirety. Both municipalities have vibrant economies with growing  
12 businesses and institutions looking for options for obtaining cleaner, more affordable  
13 energy. They also have potential anchor customers that provide economies of scale. In  
14 addition, EnergyNorth has infrastructure, operations, personnel and customer  
15 relationships in this franchise area because of the electric distribution network provided  
16 by its sister company, Granite State Electric. For more detail about the plans for  
17 development of this franchise see the testimony of Mr. Clark.

1   **Q.    How does an “off pipeline” natural gas system fit EnergyNorth’s growth model?**

2    A.    In order to provide customers with diversified options for fuel, EnergyNorth is  
3           continuously looking for ways to expand its footprint and grow its business in New  
4           Hampshire. Growing EnergyNorth’s distribution system brings benefits to new customers  
5           in the form of lower energy costs, to existing customers due to the spreading of fixed  
6           costs over more sales volume, and to the state as a whole by attracting new business  
7           development as a result of lower energy costs. EnergyNorth is developing plans to  
8           expand to new franchise areas through traditional pipeline expansion, as well as to other  
9           areas of New Hampshire through “off pipeline” facilities. For more detail about how an  
10          “off pipeline” distribution system works and how the Company plans to utilize both LNG  
11          and compressed natural gas (CNG) for the distribution system see the testimony of Mr.  
12          Clark.

13   **Q.    What experience does the Company have operating “off pipeline” and LNG**  
14    **facilities?**

15    A.    Liberty has three LNG facilities currently in operation on the EnergyNorth system which  
16           have been operating successfully for decades. I personally have 25 years of gas  
17           experience, including Director of LNG/LPG Operations for four states with KeySpan  
18           Energy Delivery. Together, KeySpan’s facilities had approximately 9.0 billion cubic feet  
19           (Bcf) of storage capacity and approximately 1.0 Bcf of vaporization capability, and 16  
20           million cubic feet per day of liquefaction capability. In addition to my experience,  
21          Norman Gallagher, Director of Production, Dispatch and Control, has decades of

1 experience operating, maintaining and controlling LNG facilities. Mr. Gallagher's  
2 Dispatch and Emergency Control team operates from a secure facility located in Liberty's  
3 Londonderry headquarters. This control room is manned 24 hours a day, seven days a  
4 week. The Keene propane/air facility is monitored by this team and is wired into the  
5 supervisory control and data acquisition (SCADA) system. EnergyNorth will be utilizing  
6 this team and control room for monitoring of the Hanover/Lebanon system as well.

7 **Q. What facilities does Liberty currently own in Hanover or Lebanon that are used by**  
8 **Granite State Electric?**

9 A. In addition to the electric distribution facilities associated with the poles and distribution  
10 lines, Liberty currently owns an operations center for Granite State Electric located at 407  
11 Miracle Mile in Lebanon, New Hampshire. This facility is a walk-in center, call center,  
12 and is used by electric operations personnel including line workers, meter readers and  
13 engineers.

14 **Q. What synergies could be realized by having Granite State Electric and EnergyNorth**  
15 **operating in the same franchise towns?**

16 A. The Company envisions utilizing this facility as a combination gas/electric customer  
17 service and operations center. EnergyNorth would be able to employ existing personnel  
18 to perform common tasks such as meter reading, bill payment and customer service.  
19 Employees would charge their time appropriately to either Granite State Electric or  
20 EnergyNorth. This should result in direct benefit to existing Granite State Electric

1 customers. There would also be synergies for existing EnergyNorth customers. It is not  
2 anticipated that EnergyNorth would need to hire any incremental dispatch, finance, call  
3 center or senior leadership employees to accommodate these new franchise towns.  
4 Therefore, these current costs would be spread among new customers of these new  
5 franchise areas resulting in beneficial impact to existing EnergyNorth customers. These  
6 synergies will also result in lower operating costs and lower rates for new customers in  
7 Hanover and Lebanon when compared to a new, start-up company that would be required  
8 to either hire full-time employees or contract with a third party for these services.

9 **Q. Please describe EnergyNorth's financial capability in so far as it pertains to this**  
10 **Petition?**

11 A. EnergyNorth is a wholly owned subsidiary of Liberty Energy Utilities (New Hampshire)  
12 Corp., which is itself owned by Liberty Utilities Co., which provides gas, electricity and  
13 water service to 485,000 customers in ten states. Liberty Utilities Co. is owned by  
14 Algonquin Power & Utilities Corp. Consequently, EnergyNorth has access to sufficient  
15 capital from a strong and diversified corporate parent.

16 For the development of this new franchise area, EnergyNorth plans to finance the project  
17 either through internally generated funds, and/or funds provided by its corporate parent  
18 which will inject equity and/or debt into EnergyNorth.



1   **Q.   Does EnergyNorth have the managerial capability to own and operate an “off**  
2   **pipeline” distribution system?**

3   A.   Yes, it does. As stated above, EnergyNorth currently operates the Keene Division as a  
4   separate entity. That portion of EnergyNorth’s service territory is served by a propane air  
5   system. Therefore, managing and operating a system that is not physically connected to a  
6   pipeline is a function that Liberty has been doing successfully since it acquired the Keene  
7   Division on January 2, 2015.

8   Additionally, Liberty has in place an extremely capable and experienced senior  
9   management team that is well suited for this type of business expansion. Many members  
10   of the management team were previously employees of National Grid who transferred to  
11   Liberty when Liberty acquired EnergyNorth. Other members of the senior management  
12   team were hired externally from other companies or organizations, bringing with them a  
13   wealth of knowledge of the business. The team has many years of experience operating a  
14   distribution utility (in addition to the experience in operating LNG facilities, which I  
15   described above). A chart showing the current managerial structure is included as  
16   Attachment DGS-2.

17   I became president of the Company approximately one year ago. In that time frame, we  
18   have implemented several process changes that are aimed at improving the Company’s  
19   performance. Those process changes have occurred in virtually every area of the

1 Company, and we are seeing some very positive results. For example, since September  
2 2014, the Company has:

- 3 • Made all of its regulatory filings on time (40 – 50 filings per month);
- 4 • Improved its collections activity to reduce EnergyNorth's 60-day uncollectible  
5 balance by 37%;
- 6 • Terminated the remaining Transition Service Agreements with National Grid;
- 7 • Improved its call answering service levels from 54% in September/October 2014  
8 to 93% in May/June 2015;
- 9 • Increased its sales activity to achieve an annual customer growth rate of  
10 approximately 1,500 and an annual dekatherm growth rate of approximately  
11 620,000; and
- 12 • Implemented a Compliance Assurance Committee to review all Commission  
13 rules, orders and audits to ensure follow up and compliance with all regulatory  
14 requirements.

15 I mention these improvements to illustrate the fact that the management team of the  
16 Company is focused on excellent performance. It is a mind-set that I have stressed in my  
17 twelve months as president, and that I will continue to stress to ensure we are providing  
18 top-quality service to our key constituents: our customers and the Commission. I am  
19 highly confident that adding the franchise area to the Company's footprint will be done in

1 a manner that is seamless to other customers, and that will provide long-term benefits to  
2 customers and the state as a whole.

3 **Q. In your opinion, would the granting of the Hanover/Lebanon franchise expansion to**  
4 **EnergyNorth serve the public good?**

5 A. Yes. As explained in my testimony and the testimony of the Company's other witnesses,  
6 EnergyNorth has the managerial, financial and technical ability to construct and operate  
7 this system. We also have access to first-rate legal, accounting, billing, regulatory,  
8 finance, engineering, operations, and other services through the corporate parent and  
9 affiliated companies. This new franchise system in Hanover and Lebanon would have a  
10 positive impact on current and future EnergyNorth and Granite State Electric customers  
11 through multiple synergies. This expansion would greatly benefit customers of this new  
12 system by offering fuel diversity, reduction in energy prices and access to energy  
13 efficiency programs otherwise not available to them. This new system would also be  
14 consistent with the 2014 New Hampshire State Energy Strategy. For all these reasons,  
15 EnergyNorth's proposed "off pipeline" distribution network and fuel storage/delivery  
16 facility is in the public good and EnergyNorth should be awarded the franchise rights for  
17 Hanover and Lebanon, New Hampshire.




18 **Q. Does this conclude your testimony?**

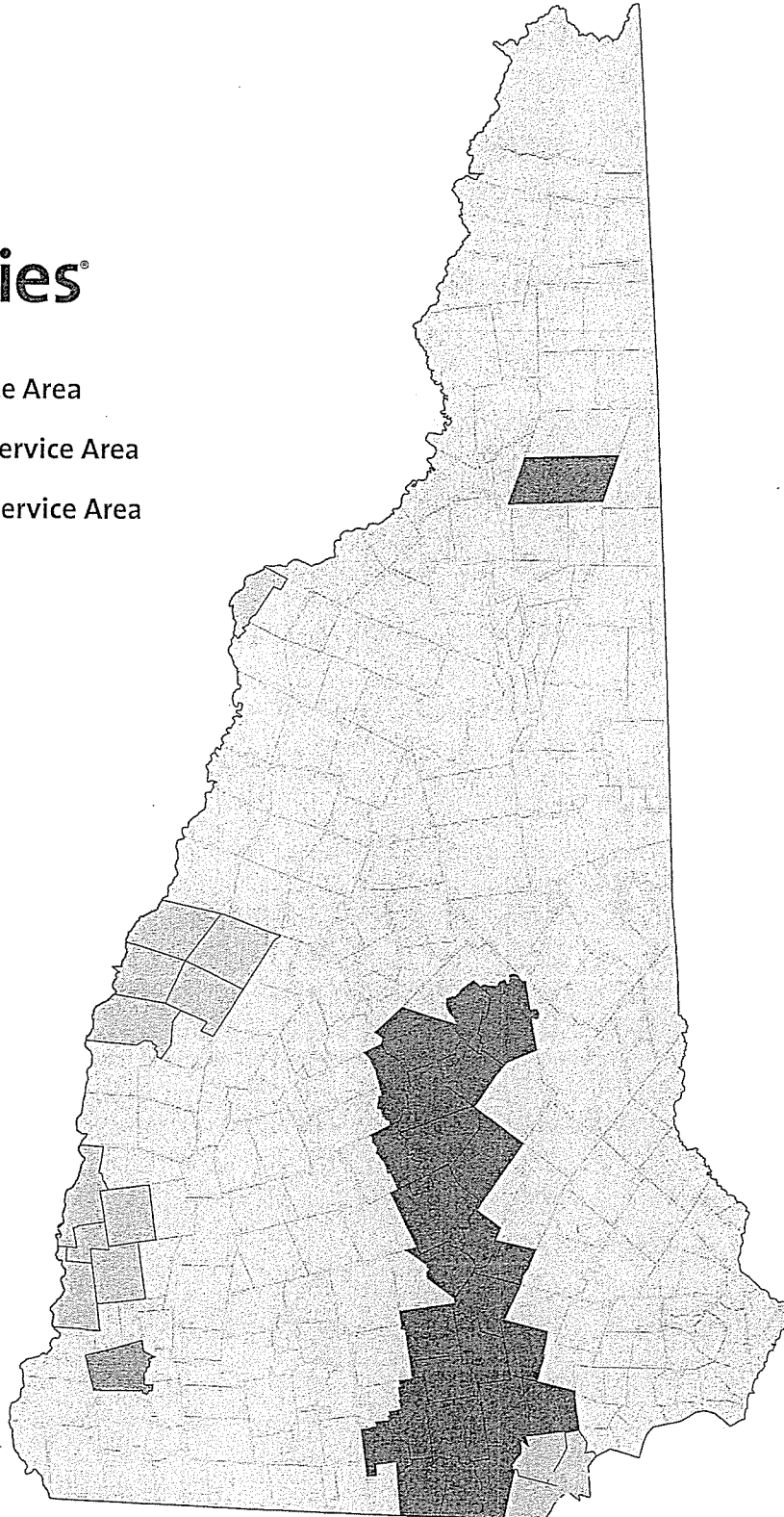
19 A. Yes, it does.

# Combined Franchise Area



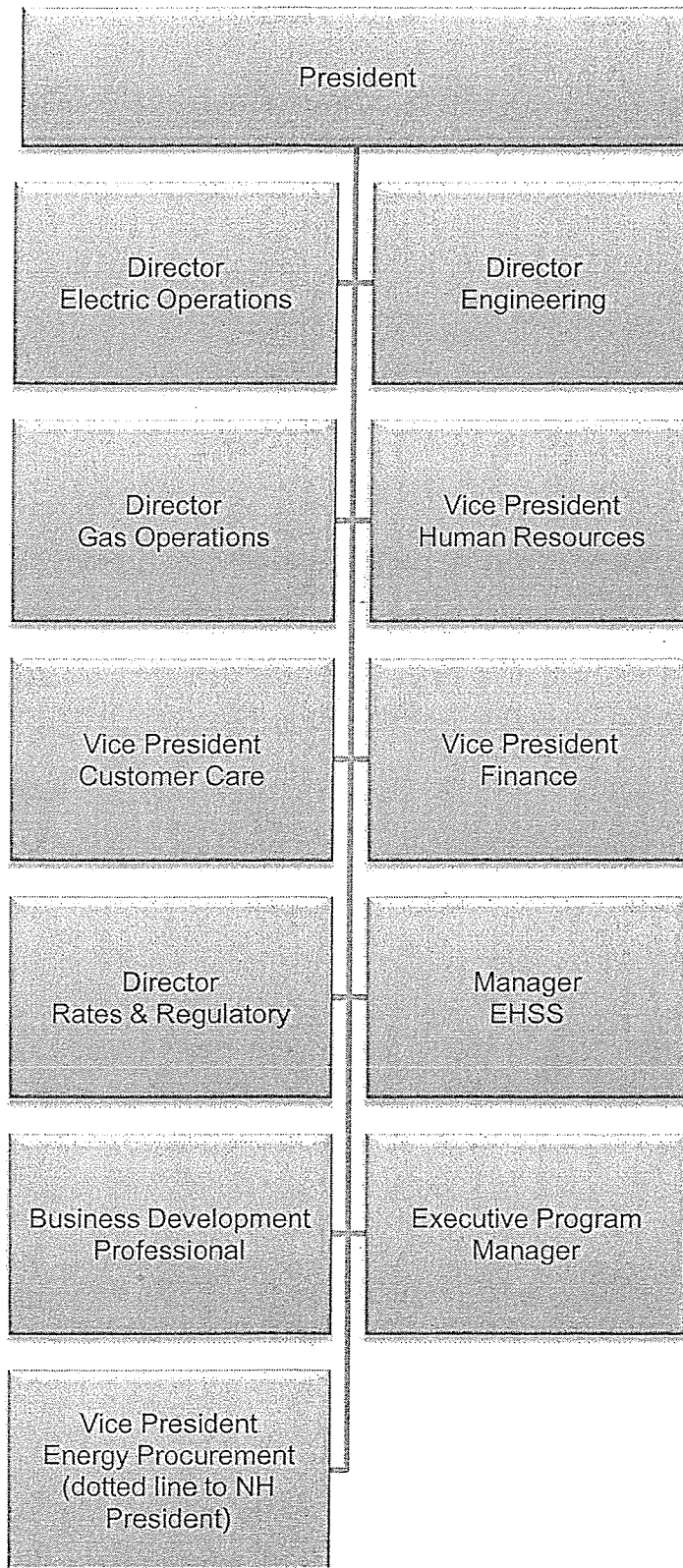
**Liberty  
Utilities®**

-  Electric Service Area
-  Natural Gas Service Area
-  Propane/Air Service Area



# LIBERTY UTILITIES – New Hampshire

Docket No. DG 15-XXX  
Attachment DGS-2  
Page 1 of 1



THIS PAGE INTENTIONALLY LEFT BLANK

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 15-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition for Expansion of Franchise to the Town of Hanover and City of Lebanon, New  
Hampshire

**DIRECT TESTIMONY**

**OF**

**WILLIAM J. CLARK**

July 24, 2015

**I. INTRODUCTION**

**Q. Please state your name and business address.**

A. My name is William J. Clark. My business address is 15 Buttrick Road, Londonderry, NH 03053.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Liberty Utilities Service Corp. ("Liberty") as the Business Development Professional. In that capacity, I am responsible for creating new business opportunities for Liberty Utilities (EnergyNorth Natural Gas) Corp. ("EnergyNorth" or "the Company") and Liberty Utilities (Granite State Electric) Corp. ("Granite State Electric") while identifying and recommending new products, services and businesses including enhancements of existing offerings to improve the overall profitability, earnings production and strategic positioning of the companies. Another aspect of my job description includes customer satisfaction enhancements such as community engagement with local, regional and state officials to ensure their needs are being met by Liberty Utilities. This also allows Liberty to understand local concerns or opportunities, which are acted upon in a positive and timely manner.

**Q. On whose behalf are you testifying today?**

A. I am testifying on behalf of EnergyNorth.



1   **Q.     Please state your educational background and professional experience.**

2   A.     I graduated from St. Anselm College in Goffstown, New Hampshire, with a Bachelor of  
3         Science degree in Financial Economics in 1991. In 1992, I began my career at Boston  
4         Gas Company. During this time, I was a member of the Steel Workers of America, Local  
5         12007 and held various positions in gas distribution and customer service, as well as  
6         being a union official. In 1998, I was employed by National Grid to start an unregulated  
7         energy service subsidiary, where I worked as a Sales Account Manager until 2010. In  
8         2010, when National Grid sold this business, I was employed by National Grid as a  
9         Commercial Gas Sales Representative, working in EnergyNorth's service territory. In  
10        2012, I joined Liberty and progressed into my current position. In this role, I am  
11        responsible for organic growth opportunities and commercial development for both  
12        EnergyNorth and Granite State Electric.

13   **Q.     Have you previously testified before this Commission?**

14   A.     Yes. I testified before the New Hampshire Public Utilities Commission ("Commission")  
15         in Docket No. DG 14-091 regarding a Special Contract and Lease Agreement with  
16         Innovative Natural Gas, LLC d/b/a iNATGAS pertaining to construction of a compressed  
17         natural gas ("CNG") facility in Concord, New Hampshire, as well as Docket No. DG 14-  
18         380 regarding the Precedent Agreement between EnergyNorth and Tennessee Gas  
19         Pipeline Company ("TGP") for capacity on the proposed Northeast Energy Direct  
20         Pipeline.

1   **Q.    What is the purpose of your testimony?**

2    A.    My testimony provides details on how the proposed “off pipeline” natural gas  
3           distribution system in Hanover and Lebanon, New Hampshire, will be supplied by natural  
4           gas, as well as the benefits for existing and future customers.

5   **Q.    When did Liberty begin the process of evaluating the “off pipeline” model for**  
6           **Hanover and Lebanon?**

7    A.    Liberty began the process of evaluating the “off pipeline” local distribution company  
8           (“LDC”) model in 2013. The first public mention of this model occurred during a  
9           presentation at the New Hampshire Business and Industry Association’s annual Energy  
10          Seminar, which was held on December 11, 2013, by F. Chico DaFonte, then-Senior  
11          Director, Energy Procurement<sup>1</sup>. See Attachment WJC-1. Also in 2013, EnergyNorth  
12          began the due diligence process on the possible acquisition of New Hampshire Gas. As  
13          stated above, EnergyNorth acquired New Hampshire Gas in January 2015 and is  
14          currently evaluating plans to convert that system to natural gas utilizing LNG and CNG  
15          as the primary fuels. As EnergyNorth’s sister company, Granite State Electric, is the local  
16          electric distribution company in Hanover and Lebanon, EnergyNorth is aware of the  
17          customer demand for a cleaner, more convenient and less expensive fuel option. The  
18          Company has been in discussions with large anchor customers in the area on their fuel  
19          requirements and responded to a Request for Indicative Bids from Dartmouth College to

---

<sup>1</sup> Mr. DaFonte is now Vice President, Energy Procurement

1 supply its central boiler plant with LNG and/or CNG in January 2014. See Attachment  
2 WJC-2 (indicative price range redacted). As indicated in Mr. Saad's testimony,  
3 EnergyNorth is also developing plans to expand to new franchise areas through  
4 traditional pipeline expansion, as well as other areas of New Hampshire that could benefit  
5 from "off pipeline" facilities.

6 **Q. How does an "off pipeline" distribution system work?**

7 A. An "off pipeline" distribution system has two key components. The first component is the  
8 underground gas distribution piping along with service risers and meters located at the  
9 customer's premises. This component of the system is identical to the existing  
10 EnergyNorth network that has been operated safely, reliably and efficiently by Company  
11 employees for decades. The second unique component of the "off pipeline" distribution  
12 system is the fueling facility that will be utilized to supply the distribution system with  
13 natural gas.

14 A conventional local distribution network has an interconnection with an interstate  
15 pipeline company. At this interconnection, an LDC would receive shipments of natural  
16 gas from its supplier, regulate pressure down to LDC operating pressure (typically 60  
17 PSI), and add mercaptan, which is a gas odorant, and distribute the gas to customers.  
18 Because there is not an interstate pipeline within 50 miles of the Hanover/Lebanon  
19 franchises with which to interconnect, the Company plans to construct an LNG storage

1 and vaporization facility along with a CNG decompression facility to supply the natural  
2 gas to the distribution system and customers.

3 LNG will be trucked to the facility and off-loaded into LNG storage tanks. From the  
4 tanks, the liquid will be vaporized into gaseous form, odorized as needed and injected  
5 into the distribution system. This same procedure has been working reliably and safely at  
6 EnergyNorth's current LNG plants for approximately 40 years. CNG will also be trucked  
7 to the facility and attached to decompression skids, which will decompress the gas from  
8 approximately 3600 PSI to the working LDC pressure of 60 PSI and injected into the  
9 system. This process is relatively new, but has been working reliably and safely in New  
10 Hampshire for the past few years.

11 **Q. Why is the Company planning to utilize both LNG and CNG for the distribution**  
12 **system?**

13 A. The Company plans to operate this system in accordance with all New Hampshire Public  
14 Utilities Commission (PUC) rules and within the terms and conditions of the existing  
15 EnergyNorth tariff, with the exception of the Cost of Gas ("COG") calculation and  
16 transportation customer service. For information on how the Hanover/Lebanon franchises  
17 will be treated with respect to rates and tariff requirements, please see the testimony of  
18 Mr. Mullen.

1 PUC 500 rules stipulate that the LDC have seven peak days of storage available to all  
2 firm, non-interruptible customers. EnergyNorth plans to fulfill this requirement by  
3 utilizing the storage ability of LNG, as CNG storage options are limited at this time.  
4 However, there may be instances where CNG is the less expensive fuel and a more cost  
5 effective choice for customers. By utilizing both LNG and CNG, EnergyNorth will be  
6 able to diversify the fuels and provide the most reliable and least-cost service to  
7 customers. There are currently seven CNG “virtual pipeline” compression facilities in  
8 operation or under construction in New England that could provide fuel. Currently,  
9 Xpress Natural Gas has two facilities in Maine and NG Advantage/Clean Energy has one  
10 facility in Vermont and another in New Hampshire. Global Partners, LP has a single  
11 facility in Maine. iNATGAS has two facilities under construction with one in New  
12 Hampshire and the other in Massachusetts. EnergyNorth and iNATGAS have received  
13 approval of a special contract from the Commission under which EnergyNorth will  
14 supply firm quantities of CNG to iNATGAS’s open access facility.

15 **Q. Is there another component to this facility that would be a benefit to the region?**

16 A. Yes, the facility may also contain a natural gas vehicle fueling station. The vehicle  
17 fueling facility would be an open access facility which may be utilized by private vehicle  
18 owners as well as commercial fleet applications. Liberty Utilities is currently utilizing  
19 CNG vehicles in its commercial fleet which has decreased costs and emissions.

1    **Q.    What work has been done to date regarding design of the fuel facility?**

2    A.    EnergyNorth has plans to design a fully scalable facility that will support a growing  
3           customer base in the region. The Company has been utilizing internal engineers and  
4           professionals along with retaining a leading, local firm in the LNG arena, Sanborn, Head  
5           & Associates, Inc. of Concord, New Hampshire. Sanborn, Head has provided services to  
6           the Company with respect to its existing LNG and propane facilities for many years and  
7           has an excellent relationship with our Operations and Engineering teams. Sanborn, Head  
8           also designed and engineered the largest, non-utility, LNG facility in New England for  
9           OMYA, Inc. in Florence, VT. EnergyNorth has also been working closely with Algas-  
10          SDI, a world leader in decompression technology for the CNG market. Both Algas-SDI  
11          and Sanborn, Head have drafted plans for a new LNG/CNG facility in our Keene  
12          Division with an initial capacity of 300,000 annual dekatherms (ADTH), scalable up to  
13          550,000 ADTH. EnergyNorth will be utilizing these plans as representative of a mid-size  
14          “off pipeline” system, such as Keene, and other potential areas to which EnergyNorth  
15          may expand service.

16   **Q.    What does EnergyNorth perceive to be the potential market/load in Hanover and**  
17   **Lebanon and how does that impact the facility design?**

18   A.    The Company believes the potential market in Hanover and Lebanon to be on the order  
19          of 1.3 to 1.6 billion cubic feet (Bcf) of annual load. The Company has been in discussions  
20          with three large anchor customers that alone would represent 1 Bcf of this annual load.  
21          Utilizing data gathered from our Keene Division and similar communities within

1 EnergyNorth's existing service territory with similar demographics, the Company  
2 believes there is an opportunity of 300,000 to 600,000 ADTH in addition to the 1 Bcf of  
3 anchor customer load. The Company is working with these three large potential  
4 customers to determine their individual fuel storage preferences in order to fully design  
5 the facility. EnergyNorth will acquire control of a parcel of land that would be capable of  
6 obtaining all required permits for the final design of a facility. This would include full  
7 vapor dispersion modeling, and all required federal, state and local permits. However,  
8 due to the uncertainty of the timing of these customers connecting to the system,  
9 EnergyNorth would optimize capital expenditures by adding vaporizers, decompression  
10 and storage as customer additions warrant.

11 **Q. How does EnergyNorth plan to procure and treat the fuel purchases for the**  
12 **Hanover/Lebanon franchises?**

13 A. EnergyNorth's plan is to procure the fuel for the Hanover/Lebanon franchise area  
14 consistent with its Least Cost Integrated Resource Plan, through an open request for  
15 proposal (RFP) process and treat it as a pass-through cost, without mark-up to the  
16 customer. For more information on the procurement process and rate treatment please see  
17 the testimonies of Mr. DaFonte and Mr. Mullen.

18 **Q. How do the economics compare to alternative fuels?**

19 A. The savings from oil and propane when compared to LNG and/or CNG can be  
20 compelling. For a comparison of oil and propane to First Tier pricing for utility natural

1 gas service in New Hampshire please see Attachment WJC-3. First Tier pricing reflects  
2 the higher distribution charge associated with the first therms used per billing cycle. It  
3 also includes the COG as well as the Local Distribution Adjustment (“LDAC”) charge.  
4 See the testimony of Mr. Mullen for more on this. As you can see from the chart, there is  
5 the potential for significant savings when utilizing natural gas versus other alternatives.  
6 Even when allowing for the increased costs of liquefaction, compression, delivery and  
7 facility construction, there is potential for significant savings to the customer.

8 **Q. Are there customers in the Lebanon and Hanover area that are currently utilizing**  
9 **LNG and/or CNG?**

10 A. Yes, I am aware of two customers in Lebanon utilizing CNG, and another that is utilizing  
11 LNG. Dartmouth Hitchcock Medical Center and Pike Industries are currently utilizing  
12 CNG and Kleen Laundry is utilizing LNG. See Attachment WJC-4. All three of these  
13 customers have substantial annual usage.

14 **Q. What advantage could these customers gain by connecting to a centrally located**  
15 **EnergyNorth facility via an underground distribution network?**

16 A. EnergyNorth believes there are several advantages to receiving gas through its utility  
17 model. The first advantage would be participation in the Company’s award winning  
18 CORE energy efficiency programs. Since these customers would be contributing to the  
19 program through the LDAC charge, they would qualify for all of EnergyNorth’s general  
20 and custom rebate programs. These programs would assist the customers with reducing



1       their consumption, lowering their energy bills and reducing their carbon footprint. A  
2       second advantage would be lower commodity costs due to increased purchasing power  
3       that will be realized by aggregating their fuel purchases with all customers connected to  
4       the system through the Company's Energy Procurement department. The Company will  
5       be purchasing fuel for its entire system, which should result in reduced pricing through  
6       economies of scale. The fuel pricing paid will directly pass-through, without mark-up to  
7       the customer, as is the case with EnergyNorth currently. Another advantage would be the  
8       release of valuable real estate on the customer's property, which is currently utilized for  
9       LNG storage or CNG trailer decompression. This real estate could be utilized for  
10      increased parking, facility expansion or other beneficial purposes. Removing the truck  
11      traffic required for direct service should also result in better logistics and reliability for  
12      customers and employees at each location. Since each customer currently has a single  
13      fuel source, they will benefit from fuel diversification in the form of both LNG and CNG  
14      as proposed by the company as part of a centralized distribution system and supply  
15      network. Being reliant on a single fuel supply exposes customers to the price vagaries  
16      inherent in each individual fuel source while a mix of fuel sources provides optionality  
17      and mitigates the price risk of any one-fuel source. Lastly, the customers will benefit  
18      from the considerable resources which the Company has available to it and which it will  
19      bring to bear in servicing customers in the Hanover and Lebanon area.

1   **Q.    Could there be other safety enhancements with a centrally located EnergyNorth**  
2       **facility?**

3    A.    Yes. The EnergyNorth facility will fall under the oversight of the Safety Division of the  
4       New Hampshire Public Utilities Commission and will be subject to all inspections and  
5       reporting currently in place under the EnergyNorth tariff and PUC rules. This added level  
6       of scrutiny should result in the safest facility in operation. Another potential enhancement  
7       is a reduction in reliance on local public emergency personnel to respond to situations at  
8       various locations. The Company has, and will add, local, trained employees that can  
9       respond to an emergency in the same manner and timelines as currently stipulated in the  
10      EnergyNorth tariff.

11   **Q.    How would new commercial and residential customers benefit from EnergyNorth's**  
12       **centralized facility?**

13   A.    Large commercial customers that have a load profile which would otherwise warrant  
14       conversion to CNG, but do not have the available physical space required to construct a  
15       decompression terminal(s) at their facility, would be able to receive service through an  
16       underground service line, a service riser and meter, with minimal space utilization and  
17       disruption. There may also be savings for these new commercial customers from  
18       socializing the construction and equipment costs of a larger, more efficient central  
19       facility, rather than bearing the cost of a stand-alone, individual facility. Due to the costs  
20       associated with trailers and decompression units, CNG is usually uneconomical for  
21       customers utilizing less than 50,000 Dth of gas annually. That leaves small and mid-size

1 commercial customers and all residential customers that do not have access to pipeline  
2 natural gas with few options. These customers, due to their relatively small size, also face  
3 higher oil and propane costs than the much larger industrial and commercial customers  
4 do. EnergyNorth's facility would open a new supply option to these customers, as well as  
5 energy efficiency programs and the convenience of having their fuel piped directly to  
6 their home or business. As stated above, these customers would also have access to  
7 Liberty's award winning CORE energy efficiency programs and be served by a safety  
8 award winning utility. See Attachment WJC-5.

9 **Q. Please describe EnergyNorth's customer acquisition processes and the resources**  
10 **committed to new customer growth.**

11 A. Within the last two years, EnergyNorth has expanded its Sales and Marketing department  
12 to nine full time employees from a previous level of three. This includes two commercial  
13 and industrial account managers along with three residential sales representatives. In  
14 addition, Liberty Utilities has a hired a marketing coordinator/analyst which greatly  
15 enhances the Company's ability to reach existing and potential customers in a timely and  
16 efficient manner.

17 Within EnergyNorth's existing franchise territory the Sales and Marketing team utilize  
18 various methods to acquire new customers. The team has identified all potential  
19 customers who currently reside within 100 feet of an existing gas main, customers who  
20 live within a franchise town but require a main extension for service, and all customers

1 that currently have an active gas meter but do not utilize natural gas for heating. Liberty  
2 actively communicates with these customers via various methods depending on the  
3 situation. The Sales and Marketing manager will also utilize third party data to update the  
4 prospects list and offer conversion incentives at various times of the year. Other effective  
5 methods of customer acquisition have been meeting with City and Town engineers to  
6 assess timing of DPW projects and street repaving projects, along with neighborhood open  
7 houses in targeted areas to explain the conversion process to customers residing in  
8 neighborhoods that have expressed interest in extension of gas service.

9 Other than existing customer data, the Liberty Sales and Marketing team will utilize all of  
10 these available resources in Hanover and Lebanon to ensure a robust growth rate is  
11 achieved and customers have access to natural gas as expeditiously as possible.

12 **Q. What is the timing to provide service to Hanover and Lebanon?**

13 A. EnergyNorth has narrowed the possible location of the fueling facility to a few locations  
14 within the City of Lebanon and plans to have site control shortly. The Company is  
15 prepared technically and financially to move forward with facility construction upon  
16 receipt of all required federal, state, municipal and regulatory approvals. EnergyNorth  
17 fully expects construction of both the fueling facility and underground distribution  
18 system to commence in 2016. The company will also be utilizing temporary LNG or  
19 CNG trailers in certain areas while the local distribution system is being built out in order  
20 to serve customers in a more timely manner.

1   **Q.    Is this project consistent with the State's Energy Strategy?**

2    A.    Yes, EnergyNorth's franchise expansion to Hanover and Lebanon through an "off  
3        pipeline" satellite local distribution system is consistent with the 2014 New Hampshire  
4        10-Year State Energy Strategy on several levels. The State Energy Strategy states in  
5        section 5.4.4 Natural Gas: "As indicated in the Business as Usual forecast, natural gas  
6        currently provides 16% of residential heating needs, 44% of commercial thermal needs  
7        and 54% of industrial thermal needs. In total, only 51 New Hampshire cities and towns  
8        have access to natural gas, and the state's two gas utilities, Unitil and EnergyNorth, only  
9        serve approximately 117,000 customers." See Attachment WJC-6. A major contributor to  
10       these low saturation rates is access to natural gas pipelines. TGP owns and operates the  
11       Concord Lateral transmission pipeline, which supplies gas to approximately 90,000  
12       EnergyNorth customers. The Portland Natural Gas Transmission System ("PNGTS")  
13       pipeline crosses the northern part of the state and crosses into Maine. EnergyNorth has a  
14       single interconnection to the PNGTS pipeline in Berlin which is used to supply natural  
15       gas to EnergyNorth's Berlin franchise area. Unitil supplies natural gas to customers along  
16       the seacoast through a combination of the TGP, PNGTS, and Granite State Gas  
17       Transmission pipeline systems. Lack of pipeline access in many other parts of the state  
18       forces residents and businesses to procure more expensive and possibly less cleaner  
19       burning fuels. The State Energy Strategy recommends fuel diversity strategies. A  
20       centrally located facility, supplied by LNG and CNG, connected to a network of local  
21       distribution piping is consistent with this diversity strategy. There are currently two LNG

1 import facilities in New England: the Canaport LNG terminal owned and operated by  
2 Repsol in New Brunswick, Canada, and the Distrigas terminal owned and operated by  
3 GDF-Suez in Everett, Massachusetts. However, only the Distrigas terminal offers trucked  
4 LNG. Others currently offering trucked LNG include Gaz Metro in Montreal, Canada,  
5 and UGI Corp of Reading, Pennsylvania. In addition to these facilities, there are multiple  
6 proposals for new facilities in various stages of development in the Northeast and New  
7 England. As stated previously, there will be seven CNG facilities in operation by winter  
8 of 2015 in New England. These facilities are connected to various transmission pipelines  
9 in New Hampshire, Maine, Massachusetts, Vermont and New York. These varied options  
10 certainly constitute a diverse supply chain option that EnergyNorth could tap through  
11 competitive bidding, and as a result, its strategy is consistent with the State Energy  
12 Strategy.

13 Another recommendation of the State Energy Strategy is “reducing usage through  
14 efficiency and conservation.” See Attachment WJC-6. By participating in EnergyNorth’s  
15 energy efficiency programs, these “off pipeline” customers would have significant  
16 incentives and rebates available to assist in conservation measures. Finally, Sub-  
17 Recommendation 13.B Monitor Development of Trucked CNG of the State Energy  
18 Strategy notes that some areas are simply too remote to expand to with traditional  
19 distribution expansion, yet the demand for natural gas in these areas is great. “The State  
20 should encourage targeted, strategic installations of trucked CNG in areas where the  
21 impact will be maximized. The State should monitor these developments and work to

1 clarify and simplify the permitting processes for such installations.” See Attachment  
2 WJC-6. A centrally located facility connected to a local distribution network like this  
3 EnergyNorth proposal would maximize the benefit to a region and reduce the impact to  
4 the community as well.

5 **Q. Does this conclude your testimony?**

6 **A.** Yes, it does.



**Liberty Utilities<sup>SM</sup>**

Docket No. DG 15-XXX  
Attachment WJC-1  
Page 1 of 12

# **Pricing, Growth, Opportunity... The LDC Perspective**

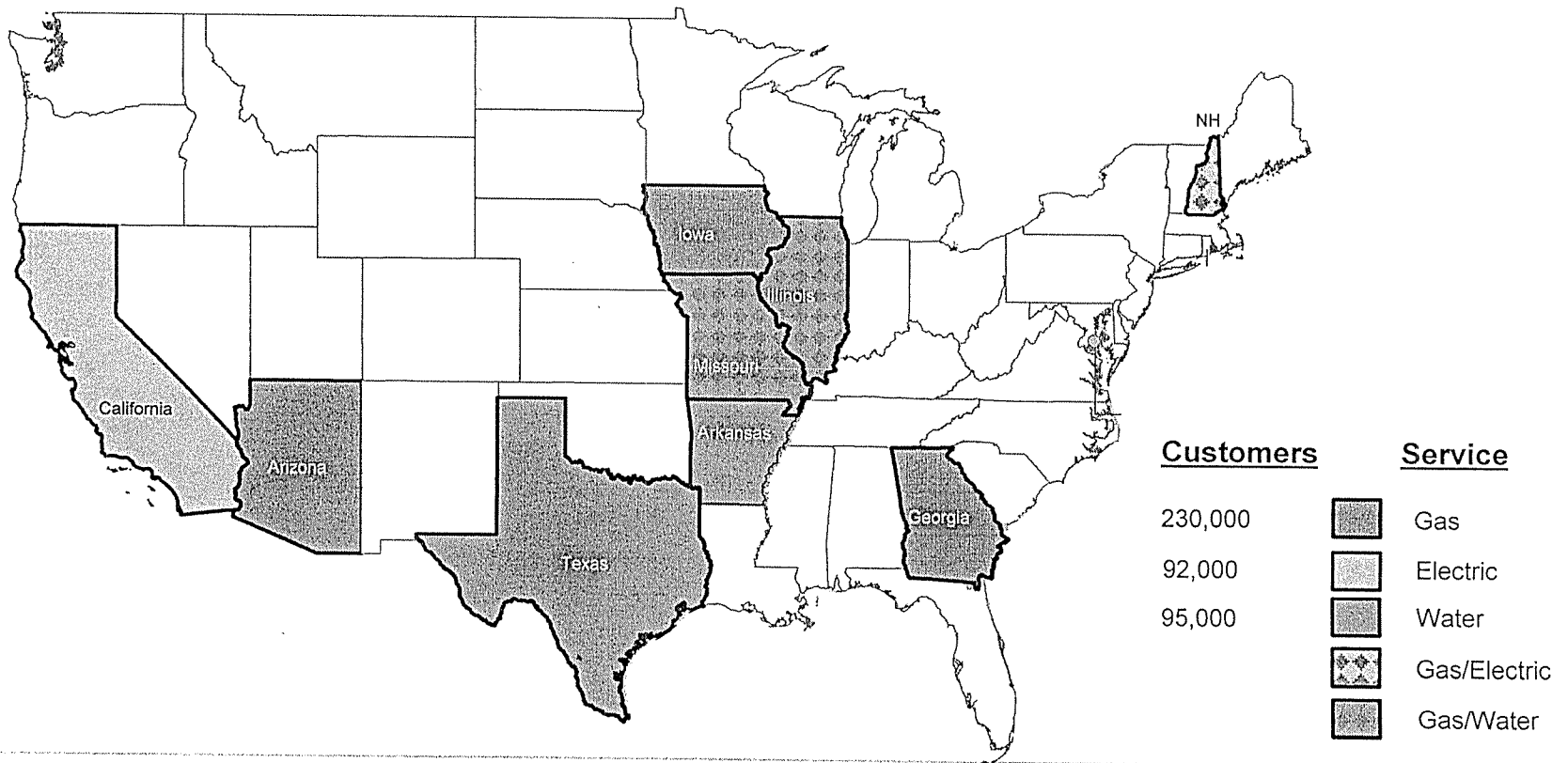
New Hampshire Business & Industry Association  
Annual Energy Seminar  
December 11, 2013

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



# About Liberty Utilities

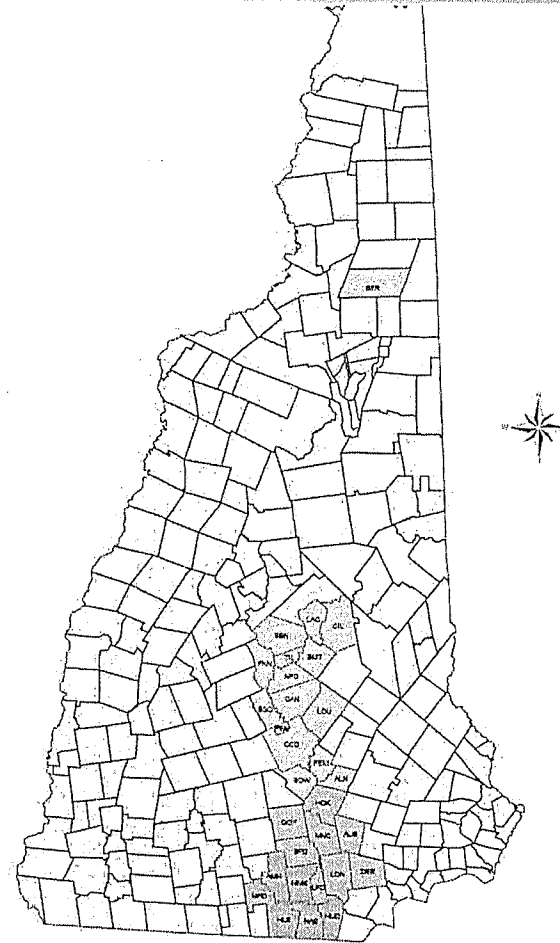
- 29 gas, electric and water utilities across the U.S.
- Serving over 410,000 customers



033

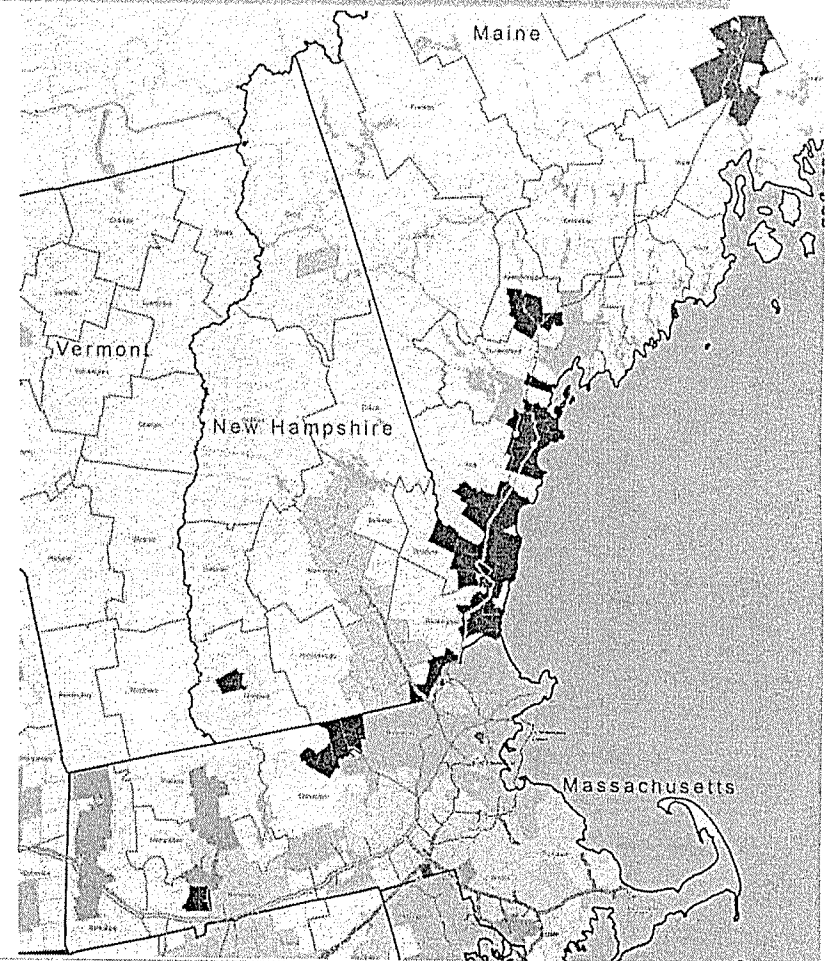
# EnergyNorth Natural Gas, Inc.

- Largest Liberty Utility
- Almost 90,000 Natural Gas Customers
- Footprint in southern to central NH
- Isolated system in Berlin
- Largest concentration of customers in Nashua and Manchester



# Pipeline Resources

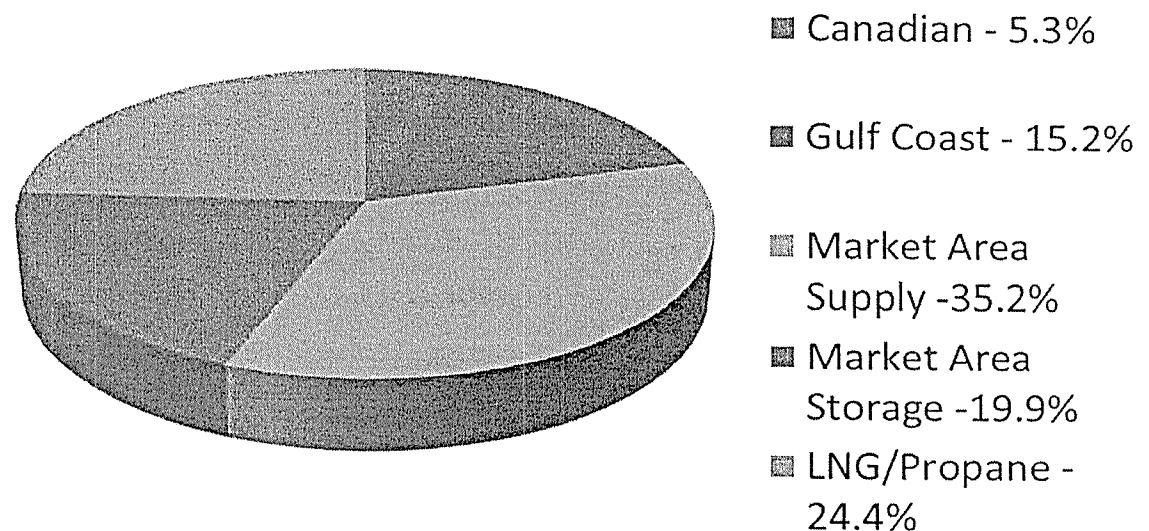
- Capacity on 7 interstate pipelines and 4 underground storage facilities
- 7 direct interconnects with Tennessee Gas Pipeline
- Single interconnect with PNGTS in Berlin
- Supplement pipeline gas with on-system LNG (3) and propane (3)



# Portfolio Diversity

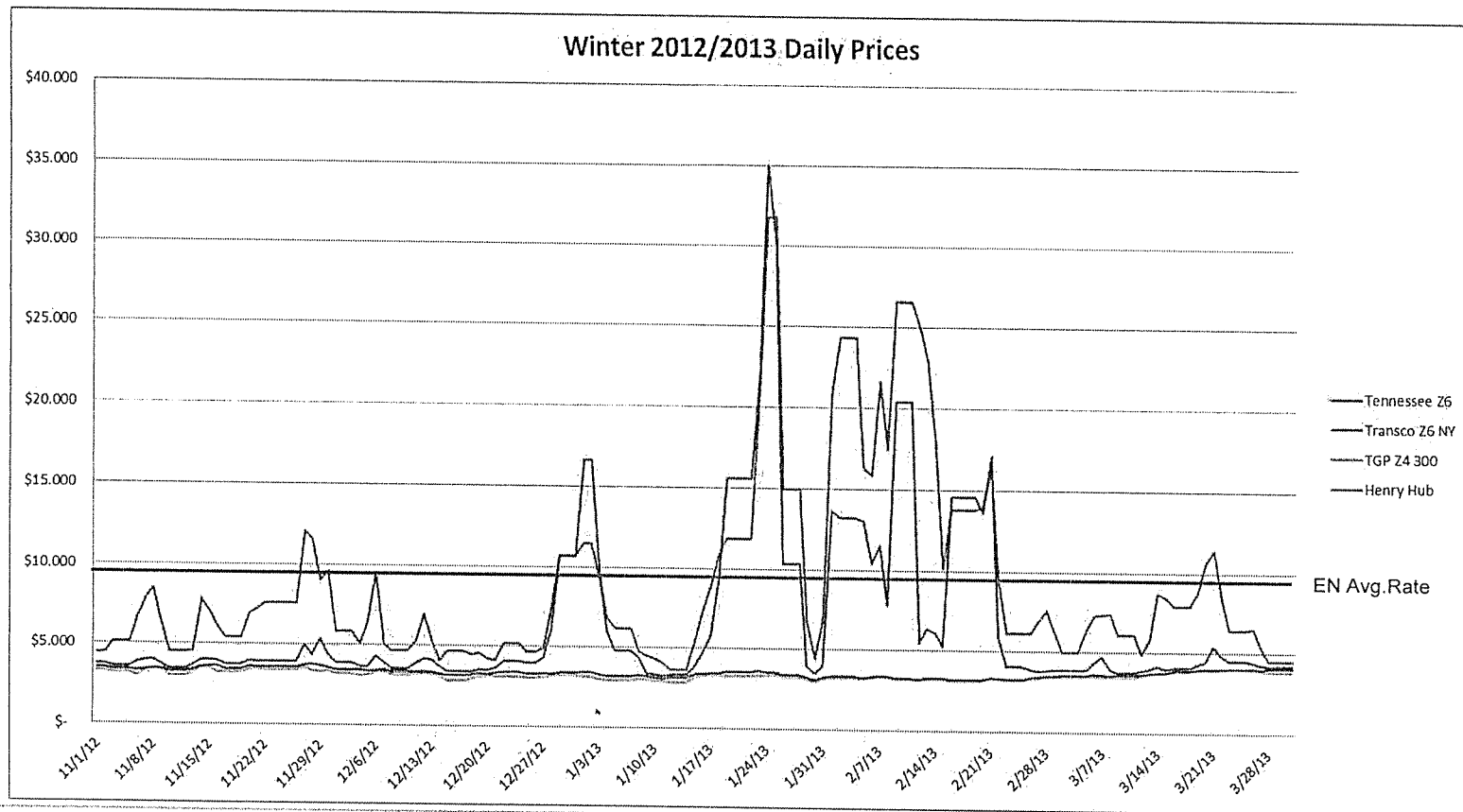
- Combination of pipeline, underground storage and on-system peaking resources
- Gulf, Marcellus, Canadian and Market Area purchase points

**EnergyNorth Design Day Resources  
2013-14**



# Pricing Diversity

Diversity of supply helps to minimize price spikes but...



...new pipeline infrastructure is long-term solution



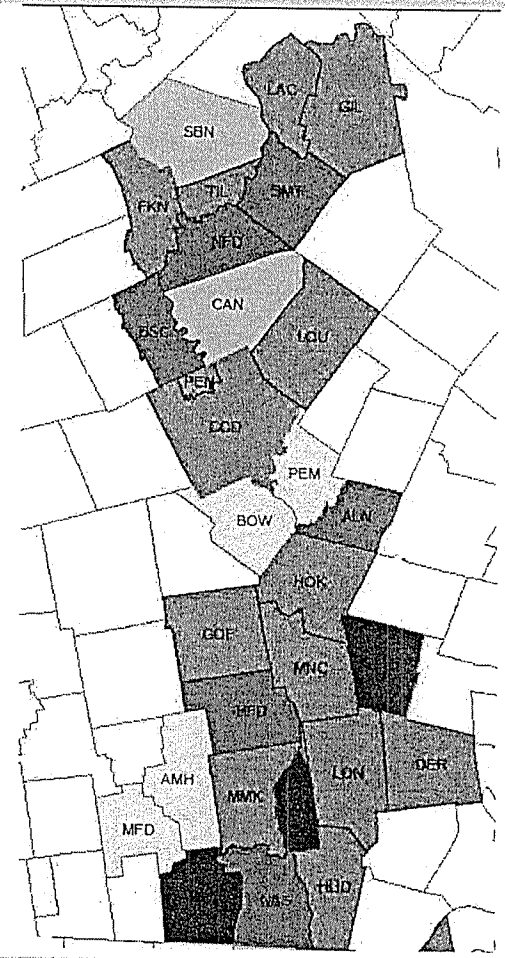
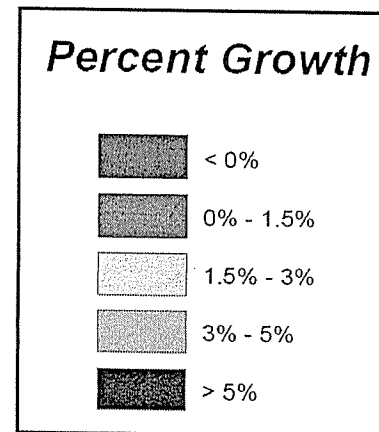
# Current Growth...Future Opportunity

## Opportunities

- 15,000 potential customers within 100 feet of gas main
- Over 80,000 potential customers more than 100 feet

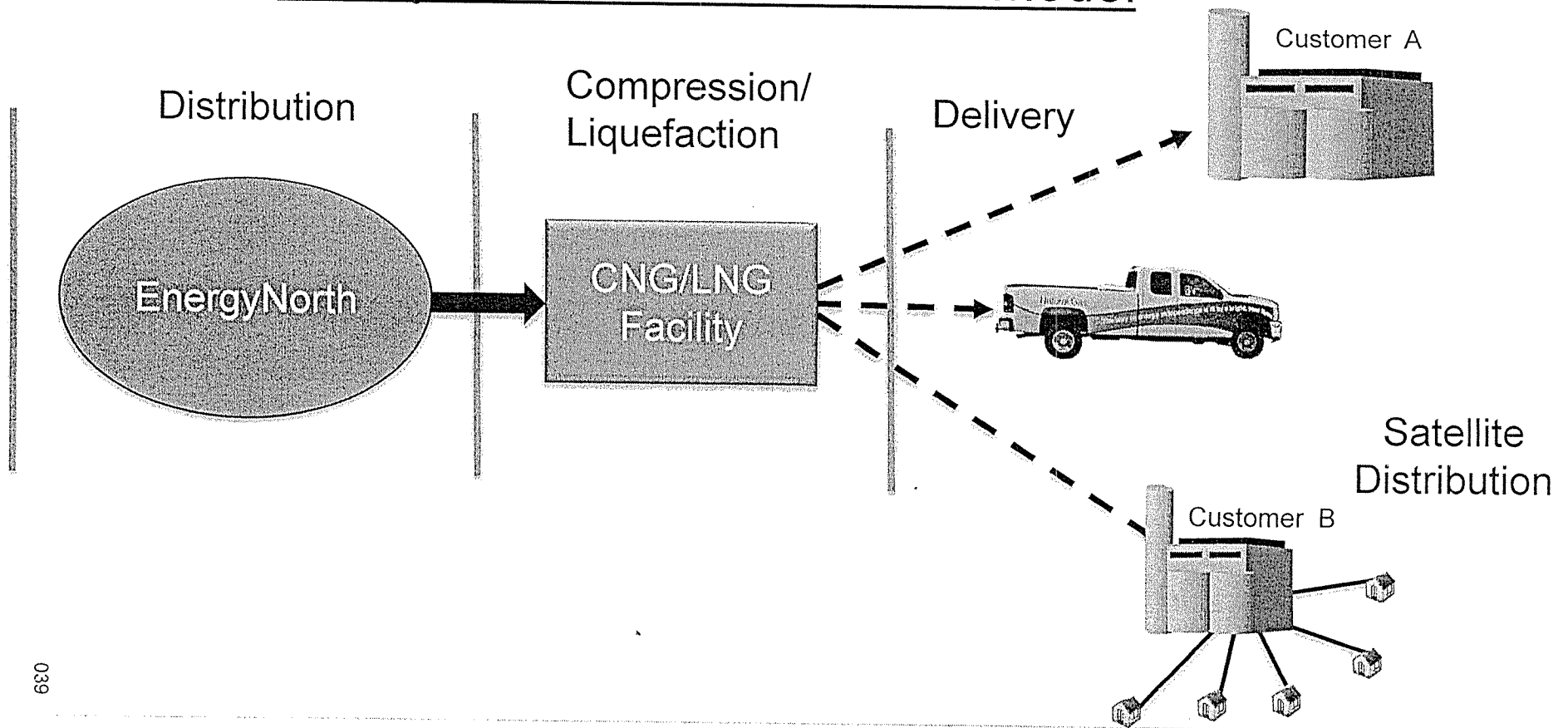
## Challenges

- Geology – *The Granite State*
- Geography - *Load Pockets*
- Costs – *Traditional Pipeline*



# Overcoming The Challenge

## Liberty CNG/LNG Distribution Model

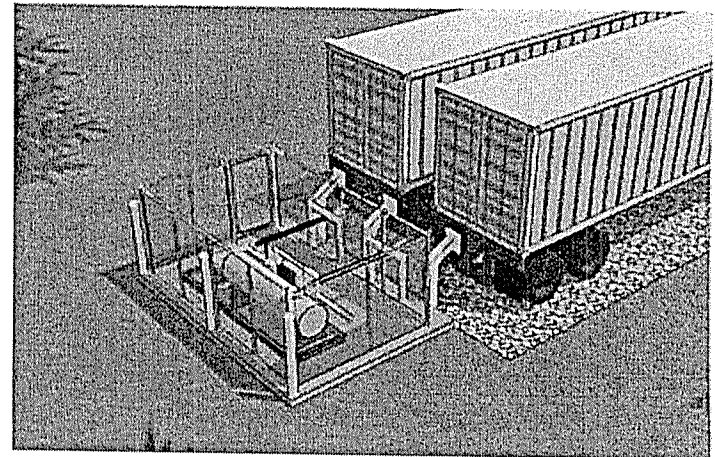


039



# New England Leading The Way

- New England states are seeing increased delivery by truck of CNG and LNG to industrial facilities, paper mills, etc.
- Companies include:
  - NG Advantage
  - OsComp Systems
  - Irving Oil
  - AVSG
- Liberty working closely with several companies to develop and deliver natural gas services to those areas lacking natural gas pipeline infrastructure.



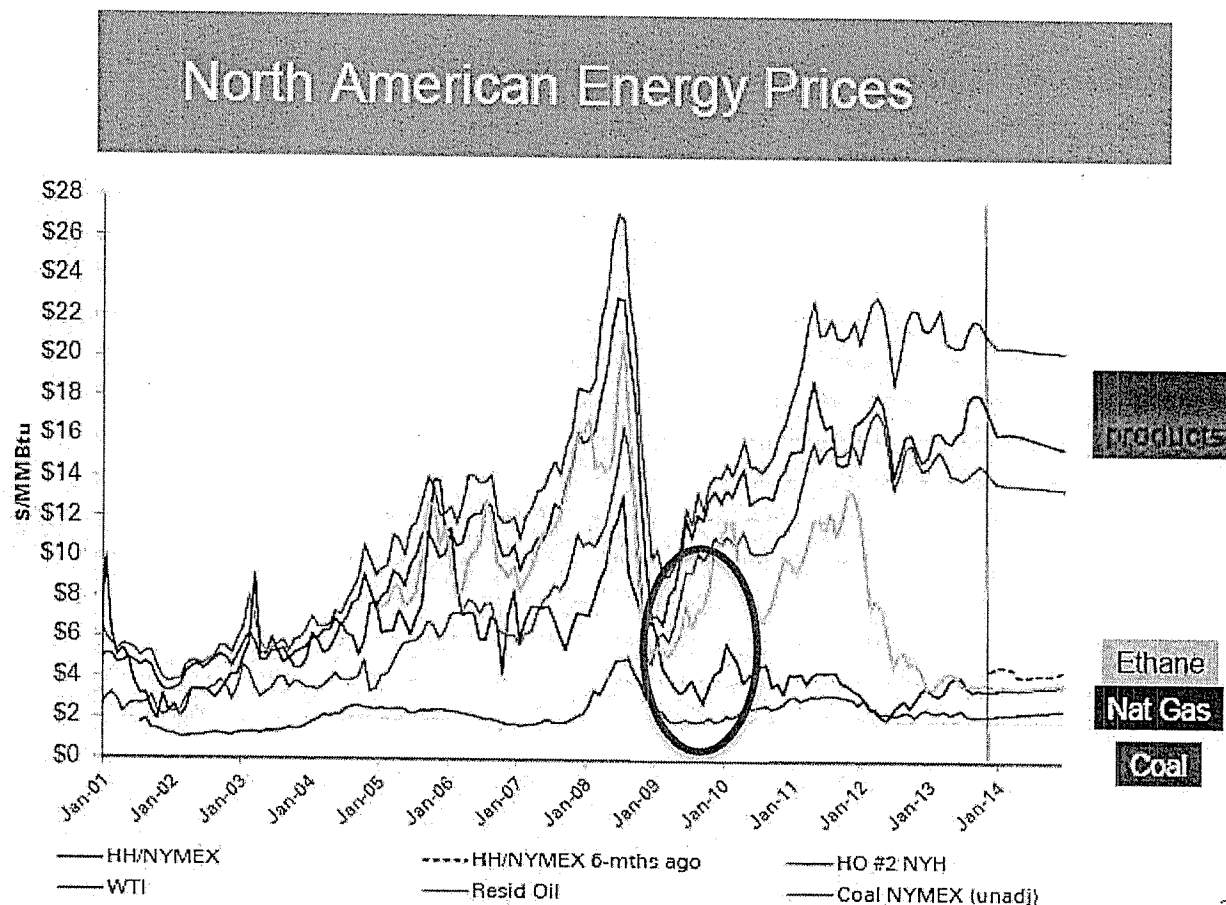
*Illustration: NG Advantage*





# Why Natural Gas Products?

- Natural gas decoupled from oil products in 2009
- Coincident with growth in Marcellus shale production
- Low natural gas prices are here to stay
  - Natural gas futures currently trading below \$5.00 until 2020



Source: Various, Nov 1, 2013



# The Economics Are Compelling

## CNG - Fueling

Input	Cost per DGE
Natural Gas	\$ .56
Transport Costs & Fees	\$ .19
Distribution Charges	\$ .09
Maintenance per DGE	\$ .26
Federal and State Taxes	\$ .25
Fuel Card Fees per DGE	\$ .05
Electricity Costs per DGE	\$ .15
CNG at the Pump	\$1.55
Avg. Diesel Price	\$3.82

## LNG - Thermal

Input	Cost per MMBtu
Natural Gas	\$3.78
Transport Costs & Fees	\$1.50
Distribution Charges	\$ .68
Delivered Cost to LNG Facility	\$6.58
Liquefaction Cost (w/Fuel at 15%)	\$3.25
Trucking (Mileage Based)	\$1.00
Vaporization cost	\$ .50
Total Delivered Cost	\$10.71
Oil Equivalent per Dth	\$21.88
Propane Equivalent per Dth	\$17.57

042



# Questions?

---

# Thank You!





**Liberty Utilities**

**REQUEST FOR INDICATIVE BIDS  
TO PROVIDE COMPRESSED NATURAL GAS (CNG)  
AND/OR LIQUEFIED NATURAL GAS (LNG)  
"CNG/LNG" TO DARTMOUTH COLLEGE**

**Competitive Energy Services, LLC**

*File No. 3672.00  
January 16, 2014*

EXECUTIVE SUMMARY .....2

A. FUEL SUPPLY .....3

B. SERVICE PERIOD.....4

C. COST/BID STRUCTURE.....4

D. FUEL AVAILABILITY.....4

E. CNG/LNG TRAILERS.....4

F. LEAD TIME.....4

G. UNLOADING SITE.....4

H. CONTRACT TERMS.....4

Attachment A	LNG/CNG/Pipeline Conceptual Layout
Attachment B	LNG/CNG/Pipeline Conceptual Equipment Layout
Attachment C	Conceptual LNG/CNG/Pipeline Schematic
Attachment D	Simplified LNG/CNG/Pipeline Schematic

January 16, 2014  
20140116 RIB CNG LNG to Dartmouth College.docx

Page 2  
3672.00

## EXECUTIVE SUMMARY

Liberty Utilities (Liberty) is pleased to provide a response to this request for indicative bids for supply of natural gas to Dartmouth College.

A key component of Liberty's comprehensive growth strategy is focused on the development of satellite natural gas distribution systems to serve areas of New Hampshire that are currently stranded from existing gas pipelines and where extension of the pipeline infrastructure is uneconomical for both Liberty and the customer. Our satellite LDC strategy for the Hanover/Lebanon region is to serve not only Dartmouth College, but also the residential and commercial loads of downtown Hanover, Centerra Business Park, and, in the fullness of time, the Dartmouth Hitchcock Medical Center. A longer term portion of our strategy is to continually expand the system after the initial build-out is complete in an effort to bring low cost natural gas to more customers in the Hanover region beyond the downtown center. Our fuel supply plan for satellite LDCs is to use a combination of LNG and CNG with each supplied to a central operations facility that will have the LNG storage and vaporization equipment and the CNG decompression equipment. The central operations center is intended to be located in low density industrial zones to minimize the impact of trucking and noise. A critical element of our expansion plan is to allow new natural gas customers to become full utility customers of Liberty Utilities and benefit from our obligation to serve, fuel procurement services, 24-hour customer care center, energy efficiency programs, and other services that are traditionally provided by a regulated utility.

Liberty's mission is to provide a reliable and cost-efficient supply of natural gas and other energy services to meet the current and future needs of our customers. We maintain gas rates and charges at as low a level as possible consistent with safety and supply reliability. Further, we recognize and embrace our responsibility to serve our customers promptly and courteously. Liberty recognizes its special, regulated role as the provider of energy services vital to the well-being of residential consumers and to the economic success of commercial and industrial customers.

Liberty seeks to fulfill our civic and charitable responsibilities, to enhance the vitality of our service area, to maintain our role as a leading corporate citizen in the community, with an outstanding reputation for integrity and public spiritedness. Finally, in all our efforts, we will conduct ourselves and our business in accordance with the highest ethical principles.

Liberty currently serves approximately 90,000 natural gas customers in New Hampshire. Our pipeline resources include:

- Capacity on seven (7) interstate pipelines and four (4) underground storage facilities
- Seven (7) direct interconnects with Tennessee Gas Pipeline's New Hampshire transmission system.
- A single interconnect with PNGTS in Berlin, NH.
- Three (3) LNG peak shaving facilities and three (3) propane/air peak shaving facilities.

January 16, 2014  
20140116 RIB CNG LNG to Dartmouth College.docx

Page 3  
3672.00

With respect to Section 4 Products and Services Requested of the Request for Indicative Bids (RIB), we offer the following responses.

**A. FUEL SUPPLY**

With respect to facility location, Liberty is planning to design, procure and construct an LNG/CNG station at a centralized off campus location which will allow Liberty to serve Dartmouth College, residential, and business customers in the Hanover/Lebanon area. This facility will also have the capacity to be expanded to accommodate a CNG vehicle refueling station that could be utilized by the Dartmouth fleet along with local business and private vehicles.

Please see the attached drawings which provide conceptual overviews of the satellite natural gas distribution system. It is anticipated that LNG will be the primary source of natural gas supplemented by CNG dependent on pricing and system demand dynamics.

The following bullet points outline Liberty's approach to fuel supply:

- **LNG:** Liberty is planning to install, own and operate an LNG vaporization facility to be sited at an off campus location. Liberty will procure and arrange delivery from regional LNG providers utilizing industry leading hedging strategies.
- **CNG:** Liberty is planning to install, own and operate a CNG decompression station within the same satellite facility. Dependent on market and weather conditions as well as distribution system demands, Liberty will utilize the delivery of CNG as a supplement to the primary LNG fuel source.
- **Distribution Piping:** Liberty will install, own, and operate approximately 4 miles of HDPE piping that will supply the natural gas to Dartmouth College as well as Liberty's other local customers. Liberty will be responsible for the installation of all underground supply service piping along with the installation of the gas meter.
- Liberty will generate monthly bills reflecting actual usage by the customers subject to any applicable New Hampshire Public Utilities tariff.
- **Expedited LNG Service:** In an effort to expedite the fuel switch to natural gas, Liberty suggests that consideration be given to serving a portion of Dartmouth College's fuel requirements with natural gas supplied from a portable LNG vaporization system. This option could be implemented while construction of the permanent LNG/CNG facility and associated piping infrastructure is underway. A similar system is currently being utilized successfully at the University of Massachusetts -Amherst. LNG storage can be accomplished by the use of LNG trailers and a direct-fired portable water bath vaporizer. This option could be implemented within a 3 month

January 16, 2014  
20140116 RIB CNG LNG to Dartmouth College.docx

Page 4  
3672.00

time frame with respect to securitization of the LNG commodity, equipment and required permits.

#### **B. SERVICE PERIOD**

We understand that the RIB is stipulating 5 and 10 year contract terms. Liberty will offer standard terms and conditions for firm service that it provides all its regulated customers.

#### **C. COST/BID STRUCTURE**

A unique advantage of being served by a regulated natural gas utility is a mandated focus of providing a reliable and cost effective supply of fuel. Since Liberty will manage all elements contained in the cost/bid structure presented, Liberty is offering an indicative price range of [REDACTED] per MMBTU.

#### **D. FUEL AVAILABILITY**

Liberty would be constructing a regulated satellite natural gas distribution system. As a regulated gas utility Liberty would be subject to existing NHPUC storage requirements. As such, no interruption of service is anticipated.

#### **E. CNG/LNG TRAILERS**

As part of Liberty's fuel procurement process the delivery of LNG and CNG from all available sources to the facility will be coordinated by Liberty.

#### **F. LEAD TIME**

Liberty would welcome a discussion with Dartmouth College so that a timeline for the conversion can be built into Liberty's proposed expansion strategy for the Hanover/Lebanon region. Nonetheless, a fall of 2016 in-service date for expedited LNG service or CNG service is achievable while the broader distribution system is built-out.

#### **G. UNLOADING SITE**

Please refer to Section A above.

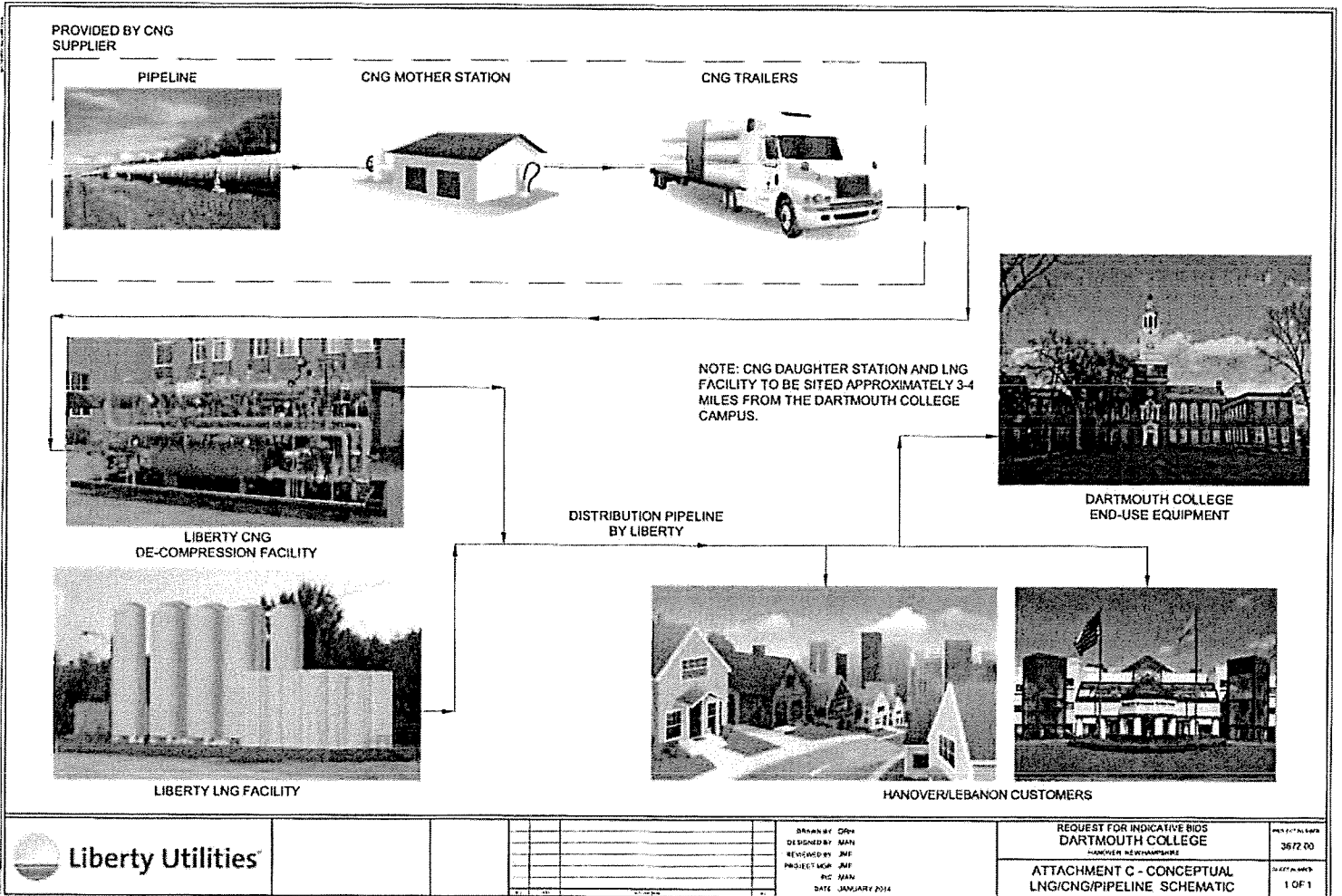
#### **H. CONTRACT TERMS**

Please refer to Section B above.

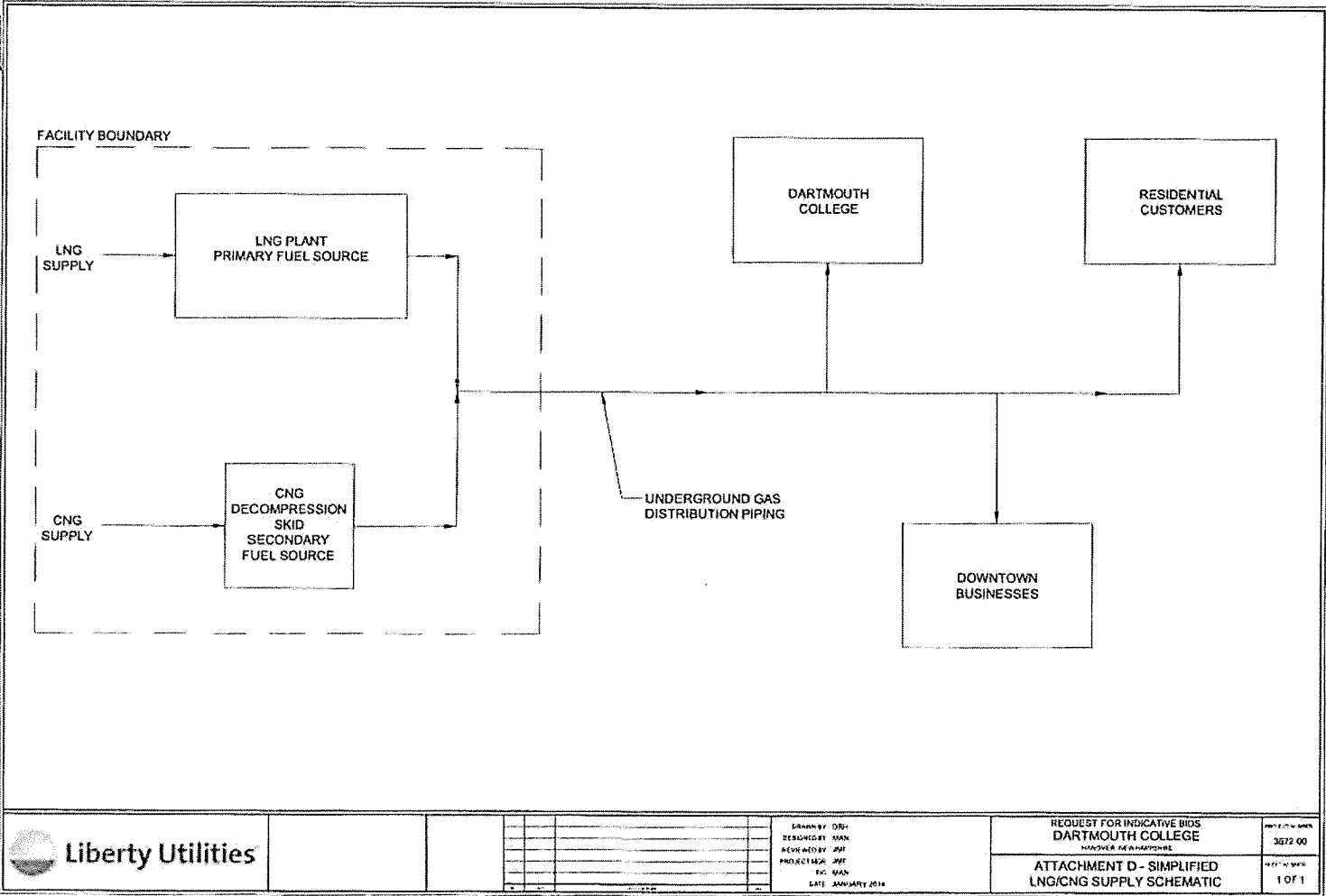


## ATTACHMENT C

### CONCEPTUAL LNG/CNG/PIPELINE SCHEMATIC



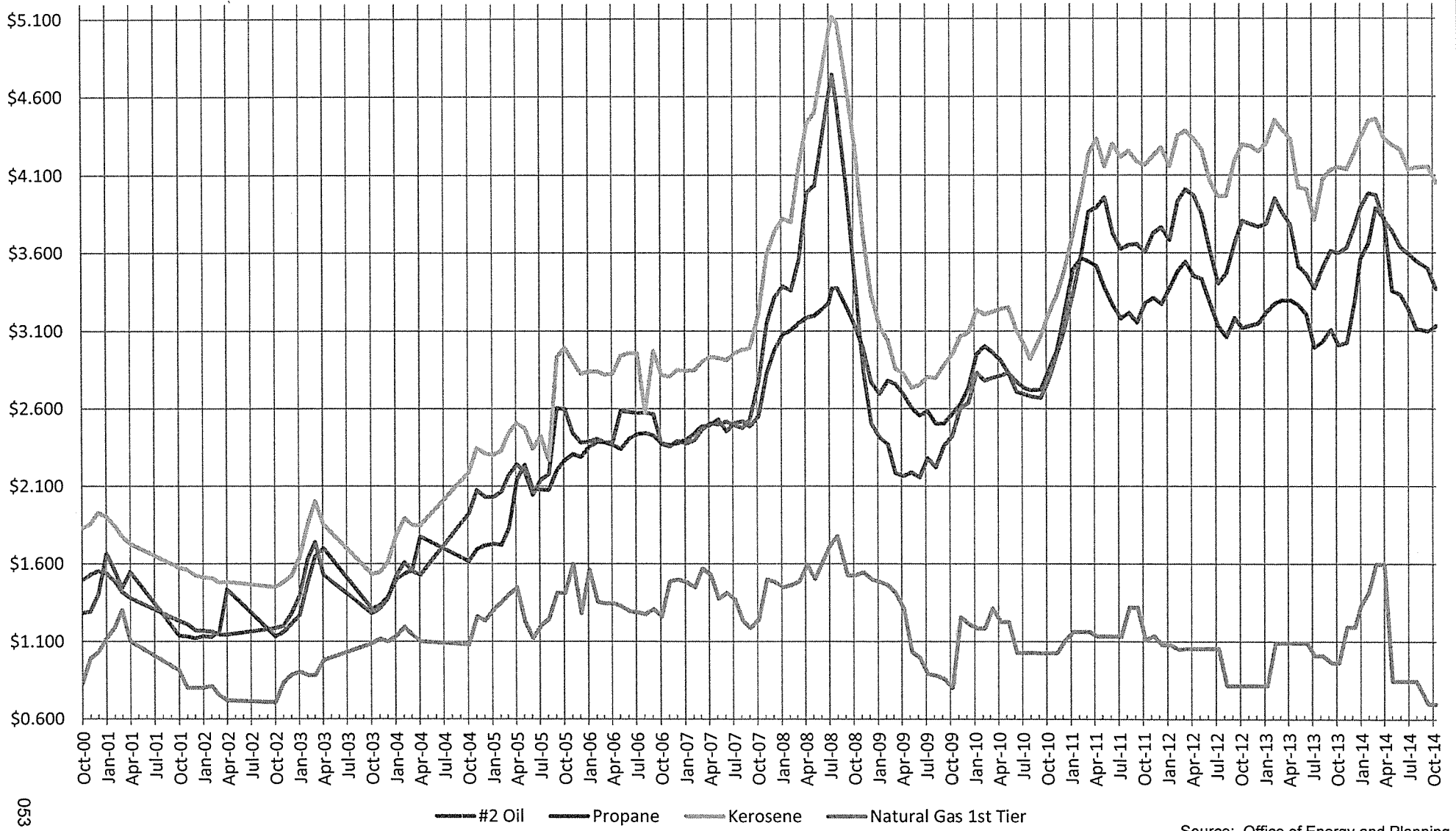
**ATTACHMENT D**  
**SIMPLIFIED LNG/CNG/PIPELINE SCHEMATIC**



## New Hampshire 14 Year Heating Fuel Price Trend; October 2000 - September 2014

### Actual Prices per Gallon or Therm

Prices surveyed on Mondays October - April; starting in 2005, prices also surveyed on first Mondays in remaining months



Source: Office of Energy and Planning

# Industrial Plant LNG Fuel Conversion

## Case Study

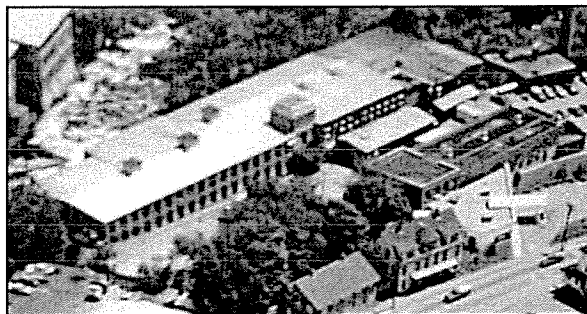
**Company:** Kleen Laundry and Dry Cleaning Services, Inc.

**Business:** Commercial Laundry

**Location:** Lebanon, NH

**2011 Fuel Consumption:** 830,000 gallons of Propane

**Conversion Date:** February 2012



### Background

Kleen, Inc. is a commercial laundry processing the linens for 26 hospitals, nursing homes and clinics in New Hampshire, Vermont and Maine. Since 1996, Kleen, Inc. had burned propane as its primary fuel for their boilers and dryers. The unpredictability of propane prices and the high cost of propane led Kleen, Inc. to investigate other fuel options. Kleen, Inc. looked very closely at a biomass system in 2009 before deciding that the biomass system did not meet all of their goals. Kleen, Inc. continued to investigate other options and started to look at liquefied natural gas (LNG) in December of 2010. After fully vetting LNG and visiting multiple LNG installations, Kleen, Inc. decided that a conversion to LNG met all of their goals.

### Process

After receiving proposals from multiple LNG suppliers, Kleen, Inc. awarded their installation and fuel supply business to Prometheus Energy of Houston, TX. Prometheus Energy provided the design and engineering for the project, and worked with the city of Lebanon, NH, in the permitting and approval process. Prometheus Energy structured a turnkey solution, coordinating the complete installation from delivery of equipment, to site work, and commissioning. Prometheus Energy worked closely with Kleen, Inc. on the conversion of the fuel consuming equipment, providing technical expertise and advice throughout the entire conversion process. The fuel system includes the LNG storage tank, gas vaporization equipment and gas distribution system.

### Results

The savings resulting from the fuel conversion have been impressive. Below are the fuel costs for the months of April and May 2011 vs. the fuel costs for April and May 2012.

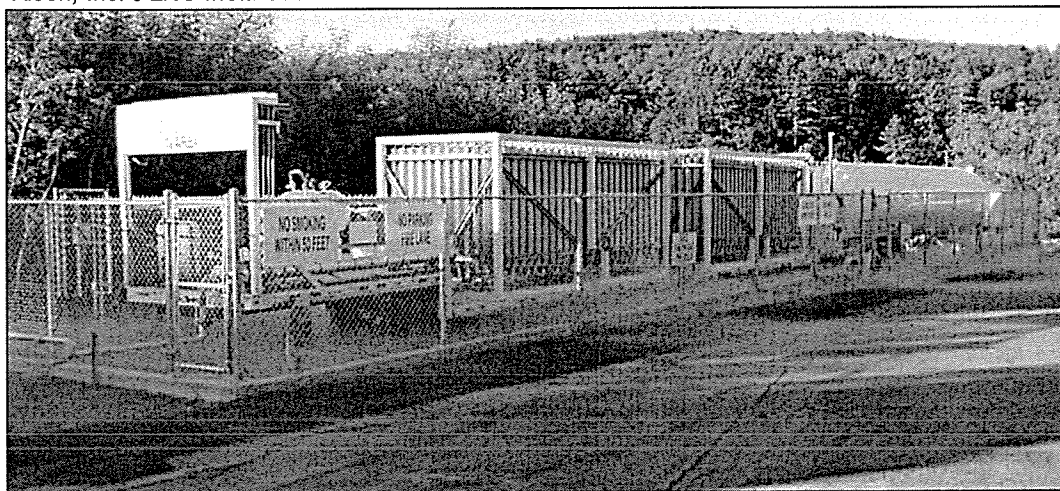
April/May 2011  
\$155,120

April/May 2012  
\$103,126

Difference  
\$51,994

% Difference  
33.5%

*Kleen, Inc.'s LNG Installation*



*In addition to the cost savings, Kleen, Inc. is also experiencing a 10% lower level of CO<sub>2</sub> greenhouse gas emissions.*

*"Prometheus Energy's expertise and experienced team enabled the success of this project"*  
—Greg Gosselin,  
President of Kleen, Inc.



**PROMETHEUS**energy

832-456-6500 - [info@prometheusenergy.com](mailto:info@prometheusenergy.com)  
[www.prometheusenergy.com](http://www.prometheusenergy.com)

## Liberty Utilities New Hampshire Award Summary

01/08/2015

- The 2012 AGA Safety Achievement Award for achieving the lowest reportable motor vehicle accident rate among combination companies.
- LU NH was awarded by EPA the EnergyStar Sustained Excellence Award in 2013 & 2014.
- LU NH was awarded by EPA the EnergyStar Partner of the Year Award for implementation of the EnergyStar Homes program in 2013 & 2014.
- LU NH was awarded by EPA the EnergyStar Partner of the Year Award for implementation of the Home Performance with Energy Star program in 2013.
- LU NH was awarded by EPA the EnergyStar Housing Leadership Award in 2013.

Same information in table format

Recognition	Year	Organization	Comment
Energy Star Partner of the Year for implementation of the EnergyStar Homes program	2013 & 2014	EPA	<ul style="list-style-type: none"> <li>• For achieving highest number of ENERGY STAR Certified new construction homes that exceeded the local and state code requirements.</li> </ul>
EnergyStar Sustained Excellence Award	2013 & 2014	EPA	<ul style="list-style-type: none"> <li>• Recognizing our exemplary marketing of the ENERGY STAR program.</li> <li>• We had to submit a list of our branding activities on the ENERGY STAR program.</li> </ul>
EnergyStar Partner of the Year Award for implementation of the Home Performance with Energy Star program	2013	EPA	<ul style="list-style-type: none"> <li>• For achieving highest number of ENERGY STAR Certified retrofit projects that exceeded the local and state code requirements.</li> </ul>
EnergyStar Housing Leadership Award	2013	EPA	<ul style="list-style-type: none"> <li>• For demonstrating superior dedication and results in all aspects of the ENERGY STAR program.</li> </ul>
AGA Safety Achievement Award	2012	American Gas Association	<ul style="list-style-type: none"> <li>• Lowest reportable motor vehicle accident rate among combination companies.</li> </ul>

THIS PAGE INTENTIONALLY LEFT BLANK





**Liberty Utilities®**

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 15-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition for Expansion of Franchise to the Town of Hanover and City of Lebanon, New  
Hampshire

**DIRECT TESTIMONY  
OF  
FRANCISCO C. DAFONTE**

July 24, 2015

**I. INTRODUCTION**

**Q. Please state your name and business address.**

A. My name is Francisco C. DaFonte. My business address is 15 Buttrick Road,  
Londonderry, New Hampshire 03053.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Liberty Utilities Service Corp. as the Vice President, Energy  
Procurement for Liberty Utilities (EnergyNorth Natural Gas) Corp. (“EnergyNorth” or  
“the Company”).

**Q. On whose behalf are you testifying today?**

A. I am testifying on behalf of EnergyNorth.

**Q. Mr. DaFonte, please state your educational background and professional  
experience.**

A. I attended the University of Massachusetts at Amherst where I majored in Mathematics  
with a concentration in Computer Science. In the summer of 1985, I was hired by  
Commonwealth Gas Company (now NSTAR Gas Company) where I was employed  
primarily as a supervisor in gas dispatch and gas supply planning for nine years. In 1994,  
I joined Bay State Gas Company (now Columbia Gas of Massachusetts) where I held  
various positions including Director of Gas Control and Director of Energy Supply  
Services. At the end of October 2011, I was hired as the Director of Energy Procurement

1 by Liberty Energy Utilities (New Hampshire) Corp. and promoted to Sr. Director in July  
2 2013 and Vice President in July 2014. In this capacity, I provide gas procurement  
3 services to EnergyNorth.

4 **Q. Have you previously testified before this Commission?**

5 A. Yes, I have testified on numerous occasions in various filings, including the Company's  
6 most recent Least Cost Integrated Resource Plan filing in Docket No. DG 13-313, its  
7 Special Contract and Lease Agreement with Innovative Natural Gas, LLC d/b/a  
8 iNATGAS pertaining to construction of a compressed natural gas (CNG) facility in  
9 Concord, New Hampshire, its request for approval of Precedent Agreement between  
10 EnergyNorth and Tennessee Gas Pipeline Company for capacity on the proposed  
11 Northeast Energy Direct Pipeline in Docket No. DG 14-380 and numerous semi-annual  
12 cost of gas filings.

13 **Q. What is the purpose of your testimony today?**

14 A. My testimony discusses the Company's experience and capabilities associated with  
15 natural gas resource planning, liquefied natural gas (LNG) and propane logistics and,  
16 specifically, the benefits associated with the provision of LNG and CNG service to the  
17 Town of Hanover and the City of Lebanon, New Hampshire, assuming the Company is  
18 awarded franchise rights for those municipalities.

1    **Q.     Please provide the experience and capabilities of the Company's Energy**  
2       **Procurement group.**

3    A.     The Company's Energy Procurement group is comprised of 14 highly capable and  
4           experienced personnel with an average of over 15 years of energy industry experience.  
5           The Energy Procurement group is responsible for demand forecasting, scheduling,  
6           purchasing, retail choice and overall portfolio planning and logistics, including the  
7           solicitation and scheduling of LNG and propane supplies to its three LNG and four  
8           propane facilities.

9    **Q.     Please describe EnergyNorth's existing LNG and propane facilities and the role they**  
10       **play in meeting customer needs.**

11   A.     EnergyNorth has three LNG facilities located in Manchester, Concord and Tilton and  
12           three propane facilities located in Nashua, Manchester and Tilton that are connected  
13           directly to its distribution system, and a fourth "satellite" propane facility in Amherst that  
14           is used solely for storage. These facilities are part of the Company's diversified portfolio  
15           of assets, which include various pipeline transportation contracts on seven interstate  
16           pipelines and four underground storage facilities in Pennsylvania and New York. The  
17           LNG facilities each have a storage capacity of approximately 4,200 Dth and the propane  
18           facilities have a storage capacity of approximately 137,000 Dth. Combined, these  
19           facilities can provide over 47,000 Dth of peak day supply to supplement EnergyNorth's  
20           interstate pipeline capacity.

1   **Q.     How are these facilities used?**

2   A.     These LNG and propane facilities are used primarily for supplemental supply on the  
3           coldest winter days, but in some cases they are used to provide pressure support for  
4           EnergyNorth's distribution system. Because the LNG facilities have small storage  
5           capacities in comparison to the high gas demand during extended cold periods during the  
6           winter, it is necessary to refill them on almost a daily basis. The refilling logistics of the  
7           EnergyNorth LNG facilities would be similar to those required for "off pipeline" service  
8           territories.

9   **Q.     How has the Company managed the trucking and refill requirements of its LNG**  
10       **and propane facilities during the past two colder than normal winters?**

11   A.     As mentioned earlier, the limited LNG storage requires almost daily trucking of LNG to  
12           replenish the Company's inventory in preparation for the fuel requirements in subsequent  
13           days. For example, in each of the past two winter periods, the Company has used over  
14           500,000 dekatherms (Dth) of LNG. Given that its LNG facilities only hold 12,600 Dth,  
15           that translates into approximately 40 full turns of its LNG inventory and over 500  
16           truckloads of LNG. In fact, the Company operated its Tilton facility for over 70  
17           consecutive days this past winter for pressure support on the system. It did this with no  
18           reliability issues even in the face of several large snowstorms and blizzards where roads  
19           were shut down for a period of time.

1     **Q.     Would the “off pipeline” distribution systems in Hanover and Lebanon be subject to**  
2     **similar logistical planning?**

3     A.     While this type of frequent and recurring trucking is needed for small capacity LNG  
4     facilities, the Company would install sufficient and scalable LNG storage tanks so as to  
5     require less trucking. This onsite storage would also be used satisfy the Puc 500 rules  
6     requirement that the LDC have sufficient storage capacity to satisfy a seven day cold  
7     snap. Nevertheless, EnergyNorth’s experience in managing trucking logistics positions it  
8     to reliably meet the needs of all potential customers in the proposed Hanover and  
9     Lebanon “off pipeline” distribution system through a combination of LNG and CNG  
10    fuels.

11    **Q.     What are the benefits of relying on both LNG and CNG fuels to supply the “off**  
12    **pipeline” distribution systems in Hanover and Lebanon?**

13    A.     As stated in Mr. Clark’s testimony, fuel diversification in a centralized distribution  
14    system means that customers are not reliant on a single fuel source, which can expose  
15    customers to the price vagaries inherent in that fuel source from time to time. In addition,  
16    having both LNG and CNG supplies allows the Company to better manage trucking  
17    logistics to optimize delivery and price. That is, with a secondary fuel supply, the  
18    Company can expand its list of suppliers to include those from a greater distance, which  
19    in the case of LNG in particular, could be more cost-effective given that some LNG is  
20    priced off low cost Marcellus gas supply. Knowing that it can rely on one fuel source

1 while awaiting truck delivery from the other fuel source provides optionality, which leads  
2 to lower cost and enhanced reliability.

3 **Q. How does EnergyNorth currently contract for LNG supplies?**

4 A. The Company conducts a comprehensive RFP process on a semi-annual basis for winter  
5 and summer supply and refill. The RFP process is necessary to determine the “best-cost”  
6 supply that takes into consideration both price and non-price factors such as reliability,  
7 flexibility and viability. The RFP is issued to all potential LNG providers in order to get  
8 the best possible pricing. In addition, the Company also issues a trucking RFP to  
9 determine the best available service for transporting LNG from LNG suppliers who do  
10 not offer a delivered service.

11 **Q. What are the benefits of combining the LNG requirements for EnergyNorth with**  
12 **those for the “off pipeline” distribution system in Hanover and Lebanon?**

13 A. Combining the requirements of both EnergyNorth and the satellite distributions system  
14 would lead to greater economies of scale and a streamlined request for proposal (RFP)  
15 process. EnergyNorth already has well-established relationships with LNG suppliers.  
16 Adding more volume in a combined RFP would provide negotiating leverage and allow  
17 for the potential awarding of volumes to multiple LNG providers, which would enhance  
18 supplier diversity. In addition, trucking logistics would be enhanced as trucks could be  
19 diverted from one LNG facility to another based on need.

1   **Q.   Does EnergyNorth have any prior experience demonstrating that economies of scale**  
2       **combined with its RFP process provide customer savings?**

3   A.   Yes. After its acquisition of the New Hampshire Gas Company, located in Keene, New  
4       Hampshire, Liberty's Energy Procurement group took over the propane procurement  
5       process. Using its comprehensive RFP process, relationships with other propane suppliers  
6       as well as combining its propane needs with those of the Keene Division, the Company  
7       saved approximately \$0.45 per Dth or approximately 11% for Keene customers.

8   **Q.   Please describe the logistics of providing propane service to the Company's Keene**  
9       **Division and how it compares to the potential provision of LNG and CNG service to**  
10      **Hanover and Lebanon?**

11 A.   The Company's Keene Division has similar fuel procurement logistics to what would be  
12      encountered if it served the "off pipeline" distribution systems for Hanover and Lebanon.  
13      That is, the Keene Division is an "off pipeline" system served only via propane  
14      throughout the year. While the Hanover and Lebanon fuel supplies would be more  
15      diverse through the use of both LNG and CNG, the systems each require a constant  
16      supply of fuel year round that must be managed via trucking and reliable inventory  
17      management. With its experience in providing a reliable and least-costs supply service to  
18      the Keene Division, the Company is well positioned to provide that same quality of  
19      service to future customers in Hanover and Lebanon, assuming the Company is awarded  
20      franchise rights for those municipalities.



1    **Q.     Does this conclude your testimony?**

2    A.     Yes, it does.

THIS PAGE INTENTIONALLY LEFT BLANK

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 15-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition for Expansion of Franchise to the Town of Hanover and City of Lebanon, New  
Hampshire

**DIRECT TESTIMONY  
OF  
RICHARD G. MACDONALD**

July 24, 2015

1    **I.       INTRODUCTION**

2    **Q.       Please state your name and business address.**

3    A.       My Name is Richard G. MacDonald. My business address is 130 Elm Street, Manchester,  
4            New Hampshire, 03101-2716.

5    **Q.       By whom are you employed and in what capacity?**

6    A.       I am employed by Liberty Utilities Service Corp. as the Director of Gas Operations for  
7            Liberty Utilities (EnergyNorth Natural Gas) Corp. (“EnergyNorth” or “the Company”).

8    **Q.       On whose behalf are you testifying today?**

9    A.       I am testifying on behalf of EnergyNorth.

10   **Q.       Mr. MacDonald, please state your educational background and professional**  
11       **experience.**

12   A.       In 1977, I received an Associate’s Degree in Applied Science in Industrial Electricity  
13            from the NH Community College in Nashua, NH. In 1997, I received an Associate’s  
14            Degree in Mechanical Engineering Technology from the New Hampshire Technical  
15            Institute in Concord, NH. In July of 2012, I assumed the position of Director Gas  
16            Operations for EnergyNorth. My responsibilities as Director include managerial oversight  
17            of all gas operations and construction processes.

18            From 1977 to 2000, I was employed by EnergyNorth Natural Gas, Inc. where I held  
19            various supervisory and managerial positions in gas operations. From 2000 to 2008, I

1 was employed by KeySpan Energy Delivery where I was the Manager of Field  
2 Operations and Construction. In 2008, I accepted a position at National Grid as the New  
3 England Resource Planning Manager responsible for operating and maintenance work  
4 plans and capital construction project planning for the New England region and held this  
5 position until 2012.

6 **Q. Have you previously testified before this Commission?**

7 A. Yes, I testified in Docket No. DG 06-045, EnergyNorth's Petition for Termination of  
8 Propane Service to Kaunas Circle, Manchester, NH, as well as recent Cast Iron/Bare  
9 Steel dockets, DG 13-149 and DG 14-041.

10 **Q. What is the purpose of your testimony today?**

11 A. My testimony discusses the Company's plans for constructing and operating a gas  
12 distribution system in the Town of Hanover and the City of Lebanon, New Hampshire,  
13 assuming the Company is awarded franchise rights for those municipalities.

14 **Q. Please provide a general description of the facilities that will be constructed.**

15 A. The Company will install gas mains from the location of the liquefied natural gas (LNG)  
16 vaporization and compressed natural gas (CNG) decompression facility, as described in  
17 Mr. Clark's testimony, to the initial anchor customers and lead residential and  
18 commercial customers. Such construction will include installation of plastic gas mains  
19 and service lines, which will be designed and sized appropriately to support the initial  
20 customer base as well as expected growth from customers requesting service during or

1 following construction. These facilities will be installed and maintained under  
2 EnergyNorth's existing maintenance and construction standards and in accordance with  
3 industry standards and all applicable codes.

4 **Q. Please describe how the gas distribution system will be constructed.**

5 A. The Company will issue a request for proposal (RFP) for the construction of the  
6 distribution system consistent with contracts we issue in our normal course of business  
7 throughout the EnergyNorth service area. We will issue the RFP to: (a) qualified  
8 contractors that have previously provided services to EnergyNorth and who have  
9 demonstrated, through successful completion of projects, their ability to meet our  
10 standards of safety, reliability, and performance; and/or (b) contractors that have a  
11 demonstrated expertise within the scope of work identified in the RFP. EnergyNorth has  
12 worked with a pool of qualified contractors such as RH White Construction, Inc.,  
13 Midway Utility Contractors LLC and Mears Construction LLC that have successfully  
14 completed multi-year contracts for construction services. These qualified contractors  
15 have offices and/or staging areas within our service territories, are familiar with the  
16 subsurface conditions of New Hampshire, and have considerable experience in the  
17 construction of gas distribution systems and facilities. The contract strategy ultimately  
18 selected will depend largely on the scope and amount of work over the initial startup  
19 period and on the long-term growth estimates and projections. All main and service  
20 facilities will be constructed to EnergyNorth's current operating, maintenance and  
21 construction standards, which meet or exceed US Department of Transportation Pipeline

1 and Hazardous Materials Safety Administration (PHMSA) and New Hampshire State  
2 Chapter Puc 500 rules and any and all other applicable federal state and local standards or  
3 permitting requirements.

4 **Q. What is the time frame for construction of the distribution system?**

5 A. The time frame will be dependent upon when approvals are received, the location of the  
6 LNG/CNG facility, and the number and location of anchor customers to be served from  
7 this facility. Construction of the distribution system will commence in parallel with the  
8 construction of the LNG/CNG facility. The major distribution system construction to  
9 support the growth opportunities will likely be performed in phases over a two- to three-  
10 year period.

11 **Q. How will the Company support the safe operation of the plant and distribution**  
12 **system?**

13 A. The LNG/CNG facility and distribution system will be constructed and operated in  
14 accordance with current established operating and maintenance standards and procedures,  
15 with which EnergyNorth has extensive experience. The location of operations personnel  
16 to support the day-to-day operation of the proposed gas facilities will be managed from  
17 our Lebanon Operations facility and customer service walk-in center. The staffing  
18 support for the processes and customers will be a combination of current and incremental  
19 employees working out of the Lebanon Operations Center. These employees will receive  
20 all required certification training and training necessary to support the gas operations

1 processes. The intent is for the Lebanon team to support gas operations similar to that of  
2 EnergyNorth's Keene Division.

3 **Q. How will the Company construct the distribution system within these communities?**

4 A. The Company will meet with the City of Hanover and Town of Lebanon municipal and  
5 public works officials to determine the specific local requirements for utility use and  
6 occupancy within their public Rights-of-Way (ROWs). Additional meetings will be  
7 scheduled as needed to review the proposed preferred routes for this project and  
8 coordinate to an appropriate level the short- and long-term scope of the gas distribution  
9 system construction project. EnergyNorth has an excellent working relationship with the  
10 New Hampshire Department of Transportation (NHDOT). We will work closely with the  
11 local state division highway road agents and engineers to review and submit any NHDOT  
12 road permits for construction. Since the Company coordinates its excavation and  
13 restoration activities for its utility maintenance and construction processes in 29 cities and  
14 towns across New Hampshire within our existing service territories, we have extensive  
15 knowledge and experience to accomplish this effectively in a manner that is the least  
16 disruptive to local traffic, businesses and residences.

17 **Q. How will the Company meet the emergency response requirements?**

18 A. The Company will have the necessary resources reporting out of the Lebanon Operations  
19 facility to meet the current emergency response requirements of Puc 504.07. The  
20 monitoring of the gas system reliability and dispatching of emergency job orders will be



1 supported by the Emergency Dispatch and Gas Control Center located at Liberty's  
2 Corporate office in Londonderry, New Hampshire.

3 **Q. Will the addition of this franchise area place any additional burden on existing**  
4 **resources that will impact service to EnergyNorth's existing customers?**

5 A. No, it will not. Gas dispatching and emergency response contact will be handled from the  
6 Company's Londonderry headquarters. Operational and customer related functions will  
7 be managed locally in Hanover/Lebanon. This staffing structure is similar to how  
8 EnergyNorth manages its Keene Division. The Company successfully transitioned the  
9 Keene Division into its operations without adverse effect on existing EnergyNorth  
10 customers and expects to similarly transition the new franchise area, assuming the  
11 Company is awarded franchise rights.

12 **Q. Please describe the staffing requirements and operation of the LNG facility.**

13 A. The LNG/CNG facility will be designed with the latest, proven equipment and  
14 technology available. The Company expects to automate most control and safety  
15 functions. Staffing will be adequate to handle day-to-day facility tasks such as off-  
16 loading of LNG transports, connecting CNG trailers, performing maintenance and  
17 monitoring functions. EnergyNorth's Production and Instrumentation/Regulation team  
18 will manage this facility and assure reliability and compliance. The Gas Control team in  
19 Londonderry will monitor the facility with the current SCADA system deployed today at  
20 other EnergyNorth production facilities.

1    **Q.     Does this conclude your testimony?**

2    A.     Yes, it does.



**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 15-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Petition for Expansion of Franchise to the Town of Hanover and the City of Lebanon, New  
Hampshire

**DIRECT TESTIMONY**

**OF**

**STEVEN E. MULLEN**

July 24, 2015

**I. INTRODUCTION**

**Q. Please state your name and business address.**

A. My name is Steven E. Mullen. My business address is 15 Buttrick Road, Londonderry, NH 03053.

**Q. By whom are you employed and in what capacity?**

A. I am employed by Liberty Utilities Service Corp. ("Liberty") as Manager, Rates and Regulatory. I am responsible for rates and regulatory affairs for Liberty Utilities (EnergyNorth Natural Gas) Corp. ("EnergyNorth" or "the Company") and Liberty Utilities (Granite State Electric) Corp.

**Q. On whose behalf are you testifying today?**

A. I am testifying on behalf of EnergyNorth.

**Q. Mr. Mullen, please state your professional experience and educational background.**

A. Prior to joining Liberty in 2014, I was employed by the New Hampshire Public Utilities Commission from 1996 through 2014, in various roles. From 1996 through 2008, I held positions first as a PUC Examiner, then as a Utility Analyst III and Utility Analyst IV.

In those roles, I had a variety of responsibilities that included field audits of regulated utilities' books and records in the electric, telecommunications, water, sewer and gas industries, rate of return analysis, review of a wide variety of utility filings and presentment of testimony before the Commission. In 2008, I was promoted to Assistant

1 Director of the Electric Division. Working with the Electric Division Director, I was  
2 responsible for the day-to-day management of the Electric Division, including decisions  
3 on matters of policy. In addition, I evaluated and made recommendations concerning  
4 rate, financing, accounting and other general industry filings. In my roles at the  
5 Commission, I represented Commission Staff in meetings with utility officials, outside  
6 attorneys, accountants and consultants relative to the Commission's policies, procedures,  
7 Uniform System of Accounts, rate case, financing and other industry and regulatory  
8 matters.

9 From 1989 through 1996, I was employed as an accountant with Chester C. Raymond,  
10 Public Accountant in Manchester, NH. My duties involved preparation of financial  
11 statements and tax returns, as well as participation in year-end engagements.

12 In 1989, I graduated from Plymouth State College with a Bachelor of Science degree in  
13 Accounting. I attended the NARUC Annual Regulatory Studies Program at Michigan  
14 State University in 1997. In 1999, I attended the Eastern Utility Rate School sponsored  
15 by Florida State University. I am a Certified Public Accountant and have obtained  
16 numerous continuing education credits in accounting, auditing, tax, finance and utility  
17 related courses.

18 **Q. Have you previously testified before this Commission?**

19 **A.** Yes. I have testified in numerous proceedings before the Commission.

1   **Q.    What is the purpose of your testimony today?**

2    A.    My testimony discusses the Company's plans for establishing rates and charges for  
3           customers in the Town of Hanover and the City of Lebanon, New Hampshire, following  
4           Commission approval of the franchise expansion request and construction of the gas  
5           supply and distribution system.

6   **Q.    How will the rates, charges and terms of service for customers in the expanded**  
7       **franchise area be established?**

8    A.    As customers in Hanover and Lebanon will be customers of EnergyNorth, the rates,  
9           charges and terms of service in EnergyNorth's current tariff will apply to those  
10          customers, with the following exceptions:

- 11           •   The Cost of Gas (COG) rate applicable to customers in Hanover and Lebanon will  
12               be separately calculated and a separate provision will be added to EnergyNorth's  
13               tariff; and
- 14           •   Due to the nature of the liquefied natural gas (LNG) and compressed natural gas  
15               (CNG) supply strategy discussed in Mr. Clark's testimony, customers in those  
16               communities will not be allowed the option to be transportation customers, at  
17               least initially.

1    **Q.    Please explain why the COG rate for the Hanover and Lebanon customers would be**  
2       **separately calculated from the COG rate applicable to other EnergyNorth**  
3       **customers.**

4    A.    The supply strategy that would be developed for the Hanover/Lebanon franchise territory  
5       would use both LNG and CNG, but not natural gas from an interstate or intrastate  
6       pipeline. Therefore, it would be a self-contained system. As such, the gas supply costs  
7       would be distinct from those that are included in the COG rate that is charged to other  
8       EnergyNorth customers.

9    **Q.    How would the Hanover/Lebanon COG rate be calculated?**

10   A.    The COG rate applicable to customers in those communities would include the  
11       commodity costs of acquiring the LNG and CNG to supply the system. In addition, as  
12       the LNG and CNG storage, vaporization, decompression and related facilities would be  
13       used for supply purposes, the COG rate would include the revenue requirement  
14       associated with the LNG and CNG plant investments. The total commodity and facility  
15       costs would then be divided by the total forecasted therm sales to calculate the COG rate.

16   **Q.    Does the Company have an estimate of the total cost to construct the supply facility**  
17       **or of the COG rate?**

18   A.    Not at this time. As discussed in the testimony of Mr. Clark, the Company is developing  
19       plans to construct a supply facility that will be scalable in size to best suit the needs of a  
20       growing customer base. In order to estimate the COG rate, we would need an estimate of

1 the cost of the facility, as well as an estimate of therm sales, which will depend on the  
2 number of customers on the system at any given time, as well as their annual therm  
3 usage. However, as explained in Mr. Clark's testimony, LNG and CNG provide for  
4 significant economic advantages as compared to alternative fuels, so the resultant pricing  
5 is expected to be beneficial to customers.

6 **Q. How often would the COG rate for the Hanover/Lebanon area be adjusted?**

7 A. Similar to EnergyNorth's existing COG rate, the COG rate for the Hanover/Lebanon area  
8 would be adjusted twice a year, with the same summer and winter COG rate periods.

9 **Q. Would it be appropriate to charge the same delivery rates to the Hanover/Lebanon**  
10 **customers as customers in other areas of EnergyNorth's service territory?**

11 A. Yes. Assuming approval of the franchise expansion, EnergyNorth would construct a  
12 distribution system for delivery of gas to its customers. This system would be no  
13 different than the distribution system that exists in the remainder of EnergyNorth's  
14 service territory. Therefore, the costs of constructing, owning, operating and maintaining  
15 the distribution system should not differ in any material way. That also justifies the  
16 application of the same general terms and conditions that currently exist in  
17 EnergyNorth's tariff. Given that there would be no difference in the distribution system  
18 constructed in the Hanover/Lebanon service territory as compared to the rest of  
19 EnergyNorth's system, for ratemaking purposes the costs associated with the



1 Hanover/Lebanon distribution system would be included in EnergyNorth's total  
2 distribution plant and operation and maintenance costs.

3 **Q. Would the applicable terms and conditions also include the same customer rate**  
4 **classifications?**

5 A. Yes. Those customer rate classifications include residential non-heating, residential  
6 heating, low-income residential heating, and small, medium and large commercial and  
7 industrial rate classes that differentiate based on both annual and winter usage.

8 **Q. Would the Local Distribution Adjustment Clause (LDAC) apply to all customers in**  
9 **the Hanover/Lebanon service territory?**

10 A. Yes. Consistent with the terms of the tariff, the LDAC (which includes charges for  
11 demand-side management lost revenues and program costs, energy efficiency programs,  
12 certain environmental remediation costs for the clean-up of former manufactured gas  
13 sites in New Hampshire, and lost revenues and program costs associated with the  
14 Residential Low Income Assistance Program) is applicable to all therms sold or  
15 transported by the Company and is used to recover costs of general applicability to all  
16 customer classes. As Hanover/Lebanon customers would be EnergyNorth customers, it  
17 would be appropriate that they be charged the LDAC rate. This would also provide the  
18 new EnergyNorth customers in this new service territory access to the Company's award  
19 winning CORE energy efficiency programs.

1   **Q.     Why would customers not be allowed the option to be transportation customers?**

2   A.     LNG and CNG supplies would be obtained by trucking in the commodity. If a customer  
3           wished to obtain its own supply, that would necessitate the customer making its own  
4           trucking arrangement, which would then need to be coordinated with the Company's own  
5           supply scheduling. If customers were able to obtain their own supply, the logistical  
6           challenges would become more complex. Therefore, at least initially, all customers  
7           would be sales customers. That said, the Company would evaluate potential alternatives  
8           and would not rule out providing transportation-only service if there were a demand for  
9           such service.

10   **Q.     Could there be situations where it may be appropriate to serve certain customers**  
11           **pursuant to a special contract?**

12   A.     Yes. Consistent with Section 5(C) of EnergyNorth's tariff, there may be circumstances,  
13           such as a large dual-fuel customer, where a customer may be served pursuant to a special  
14           contract that involves such terms as longer service periods, revenue guarantees through  
15           minimum take-or-pay amounts or other terms to ensure recovery of the Company's  
16           investment in the system and facilities necessary to serve a particular customer's needs.  
17           Any such situations would be evaluated on a case-by-case basis.

18   **Q.     Does this conclude your testimony?**

19   A.     Yes, it does.