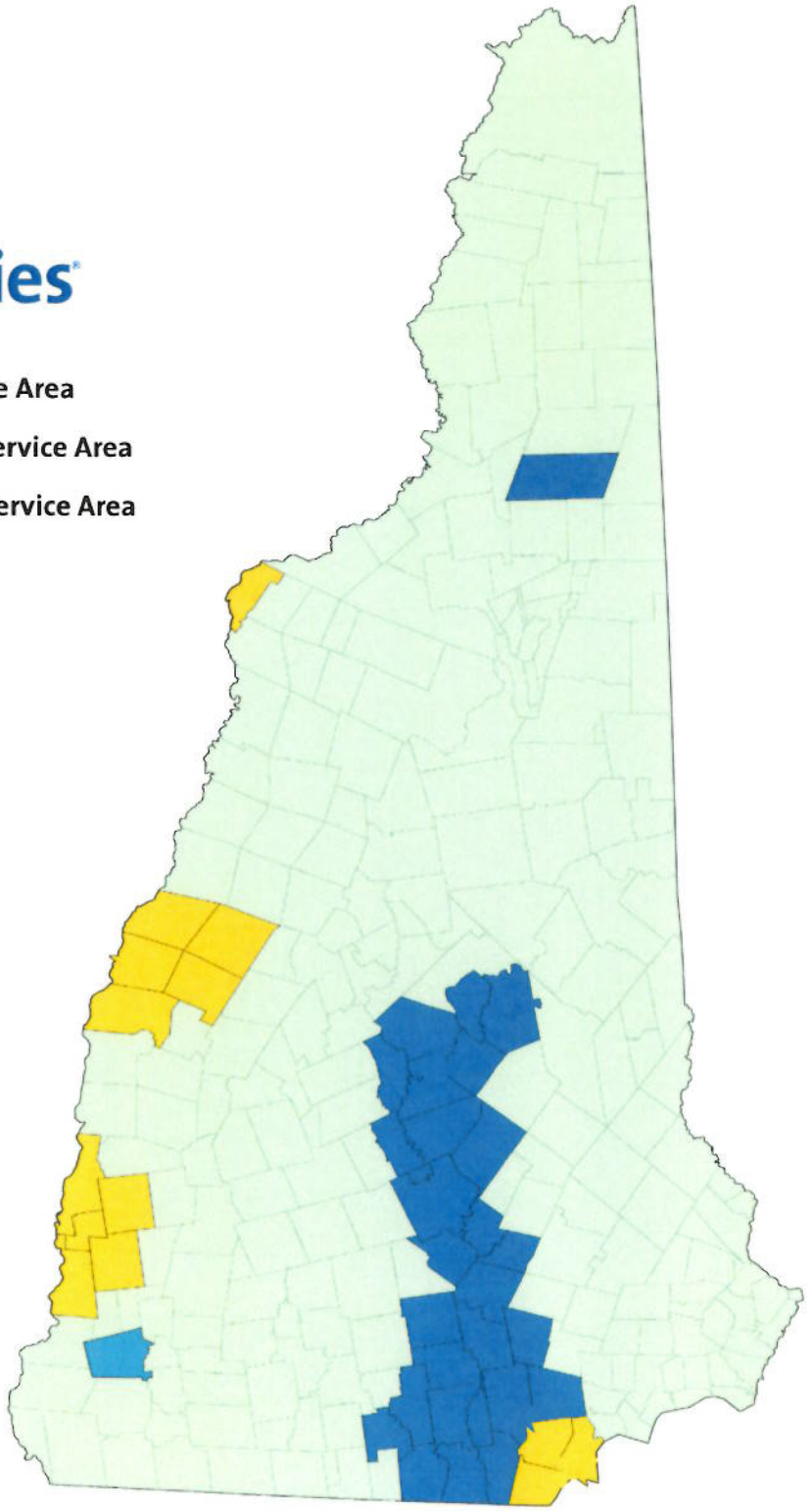
Combined Franchise Area

Liberty Utilities

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



Liberty Utilities[SM]

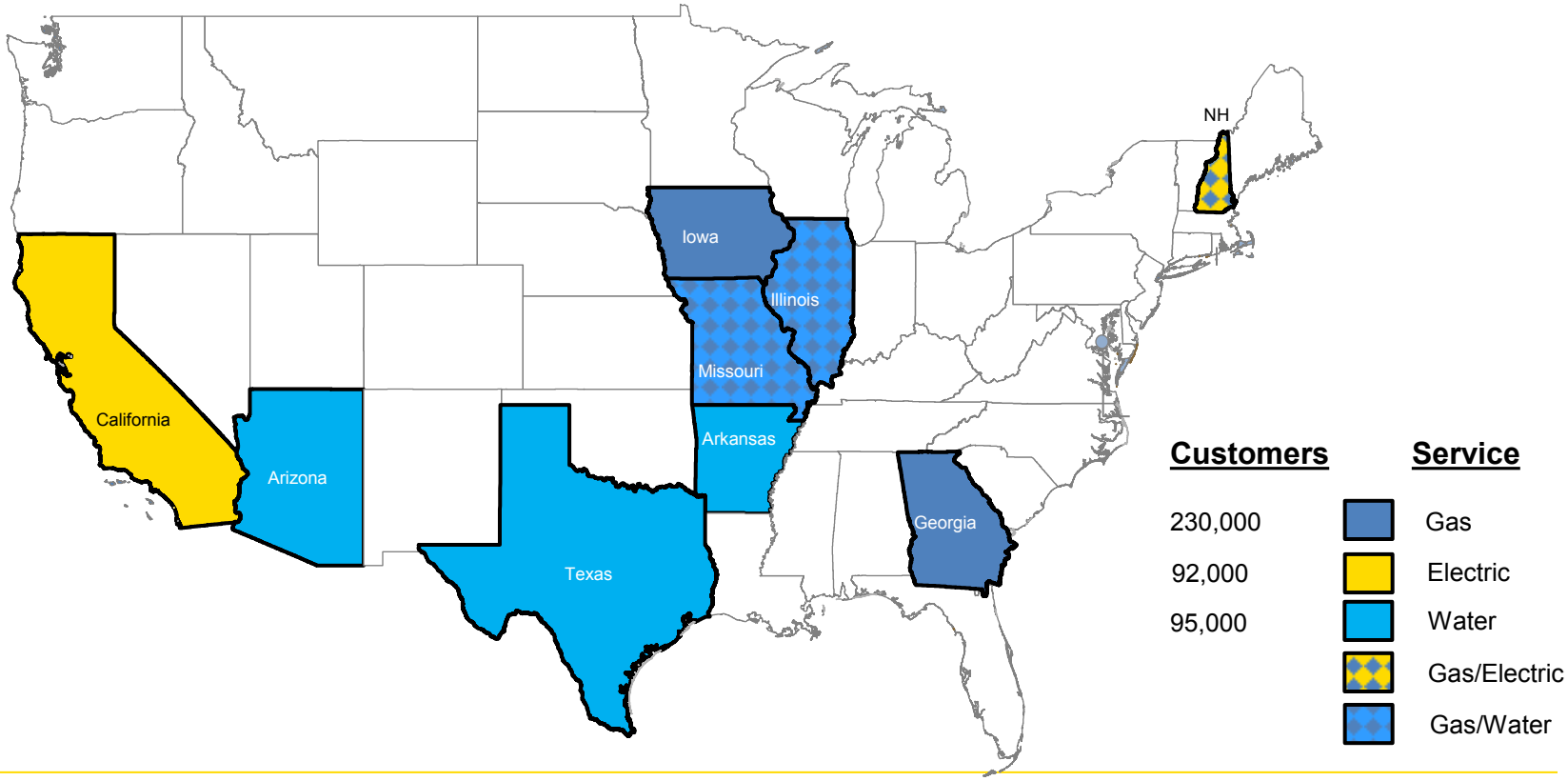
Pricing, Growth, Opportunity…
The LDC Perspective

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

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

About Liberty Utilities

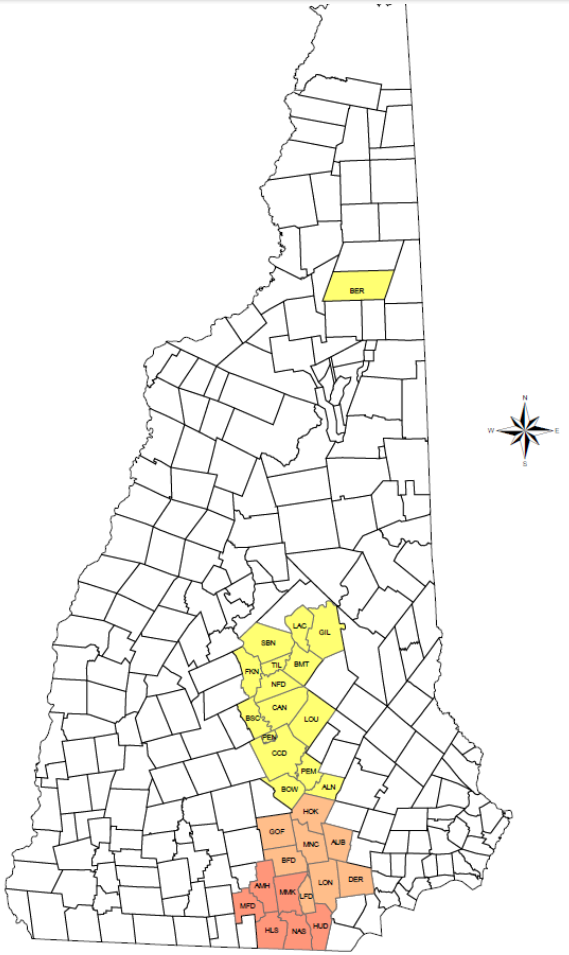
- 29 gas, electric and water utilities across the U.S.
- Serving over 410,000 customers



027

EnergyNorth Natural Gas, Inc.

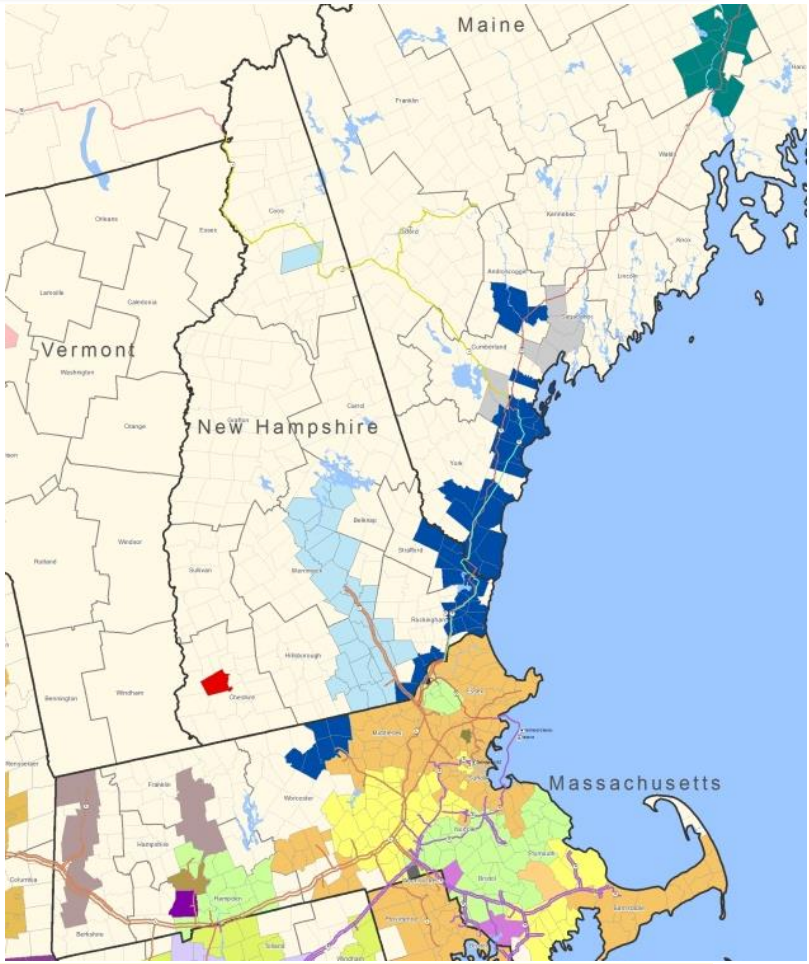
- Largest Liberty Utility
- Almost 90,000 Natural Gas Customers
- Footprint in southern to central NH
- Isolated system in Berlin
- Largest concentration of customers in Nashua and Manchester



028

Pipeline Resources

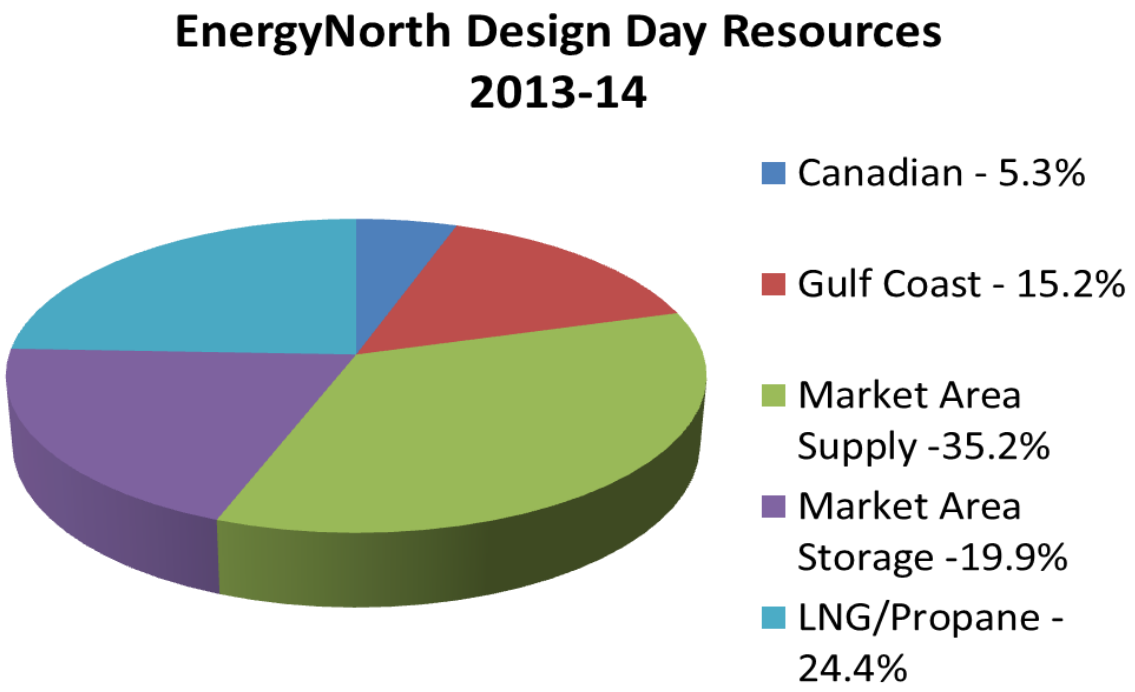
- Capacity on 7 interstate pipelines and 4 underground storage facilities
- 7 direct interconnects with Tennessee Gas Pipeline
- Single interconnect with PNGTS in Berlin
- Supplement pipeline gas with on-system LNG (3) and propane (3)



029

Portfolio Diversity

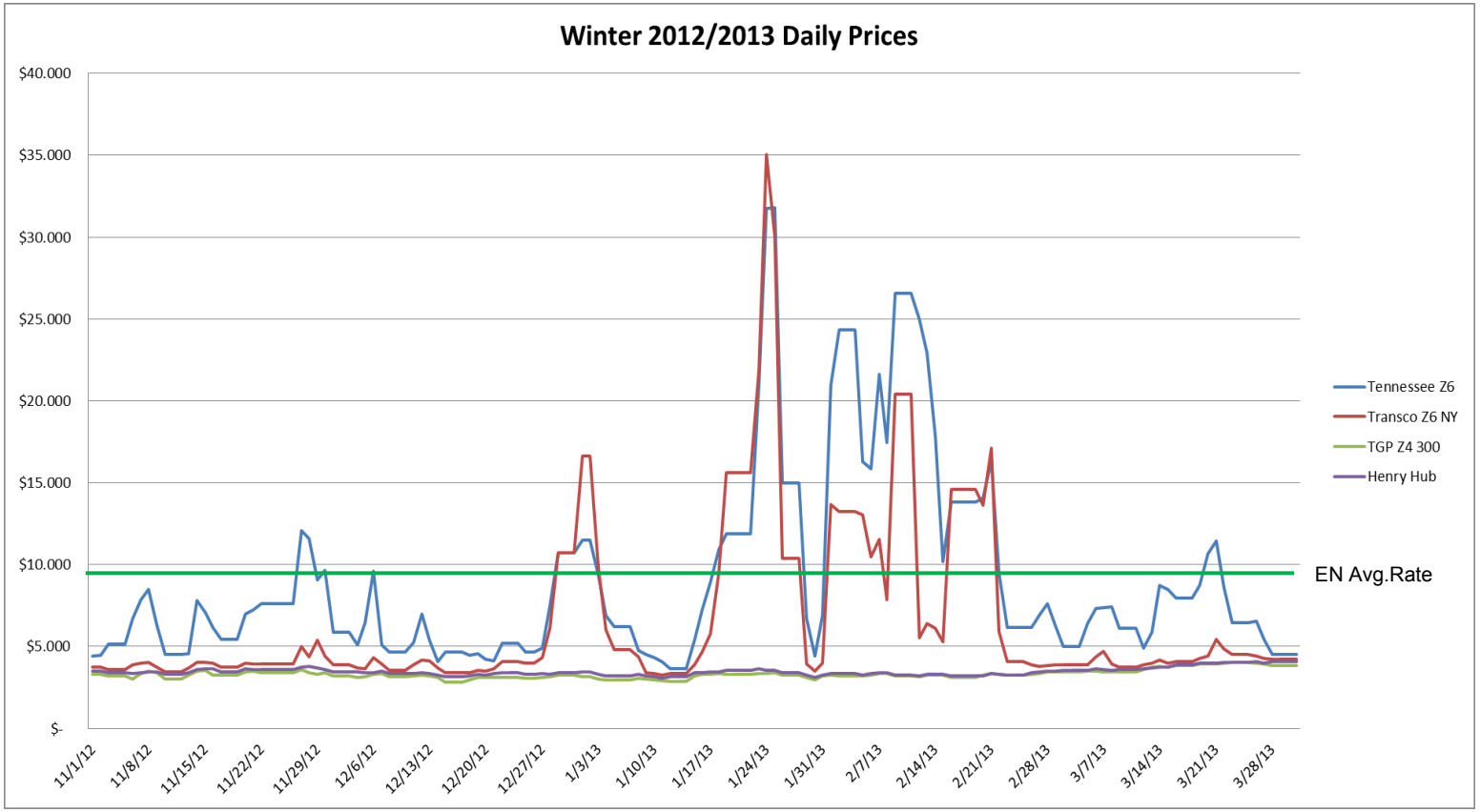
- Combination of pipeline, underground storage and on-system peaking resources
- Gulf, Marcellus, Canadian and Market Area purchase points



030

Pricing Diversity

Diversity of supply helps to minimize price spikes but…



…new pipeline infrastructure is long-term solution

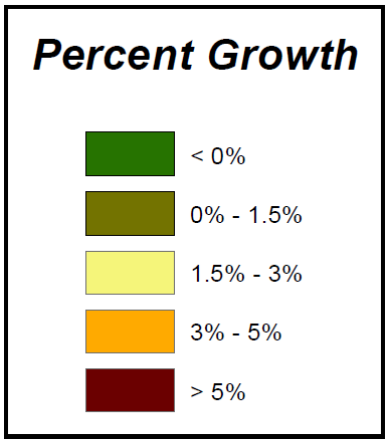
Current Growth…Future Opportunity

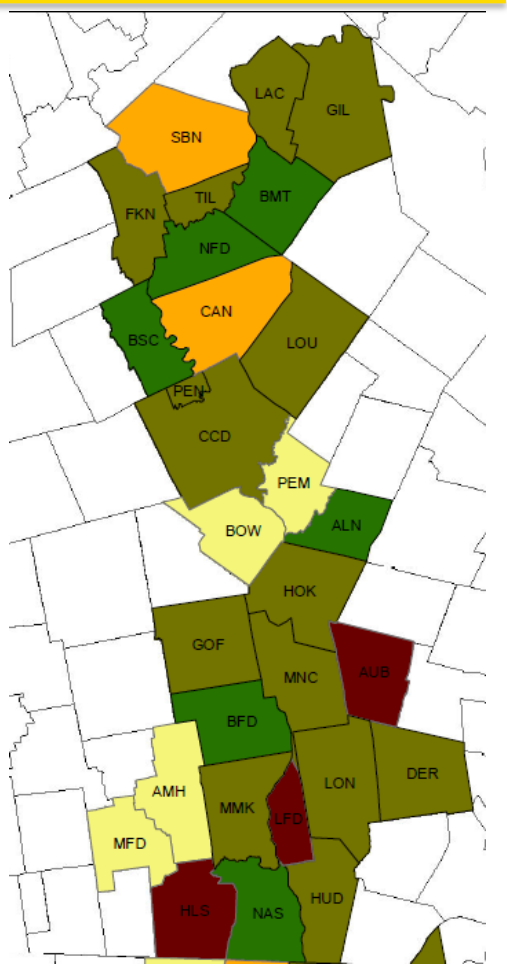
Opportunities

- 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*

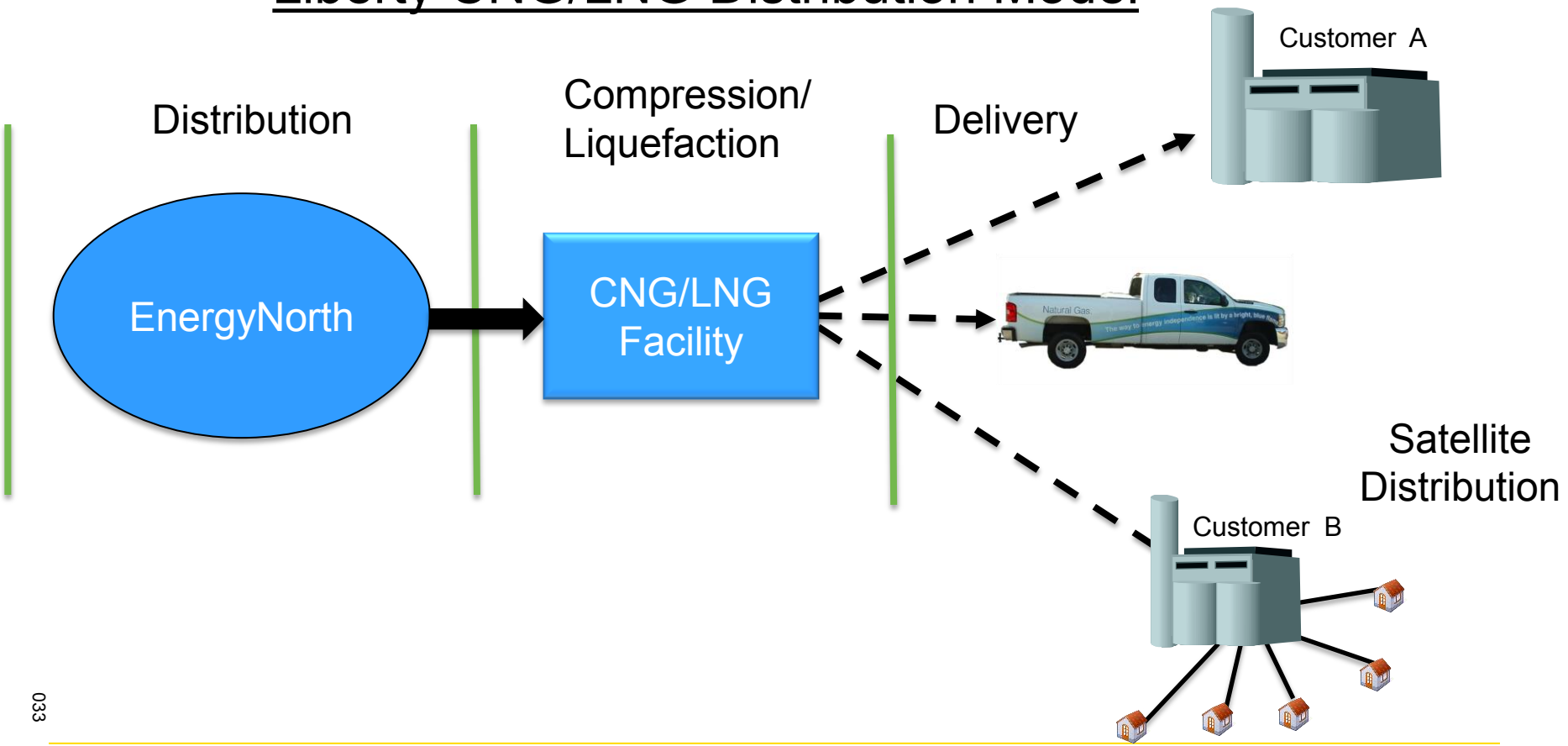




032

Overcoming The Challenge

Liberty CNG/LNG Distribution Model



033

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

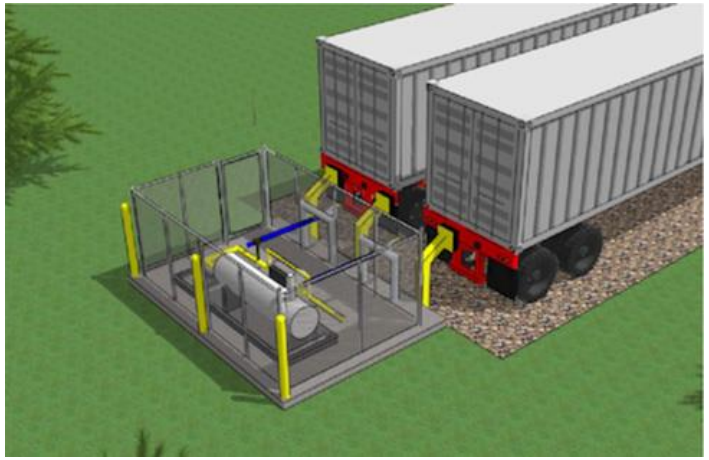


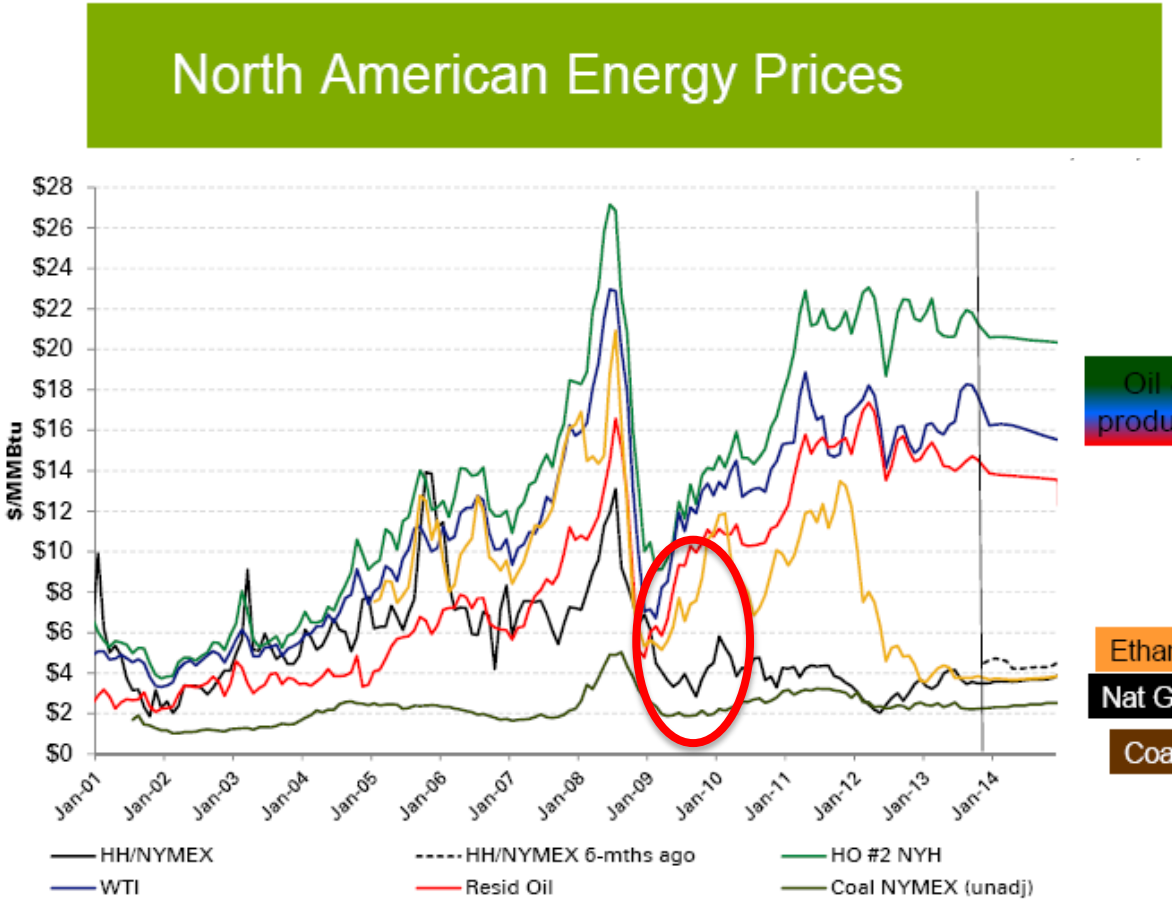
Illustration: NG Advantage

- Liberty working closely with several companies to develop and deliver natural gas services to those areas lacking natural gas pipeline infrastructure.

034

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

036

Wholesale propane and heating oil prices per EIA as of 11/18/13
US diesel price per EIA as of 11/18/13
Natural gas price per NYMEX 12 month strip as of 11/22/13

Questions?

Thank You!

037

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

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.

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

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

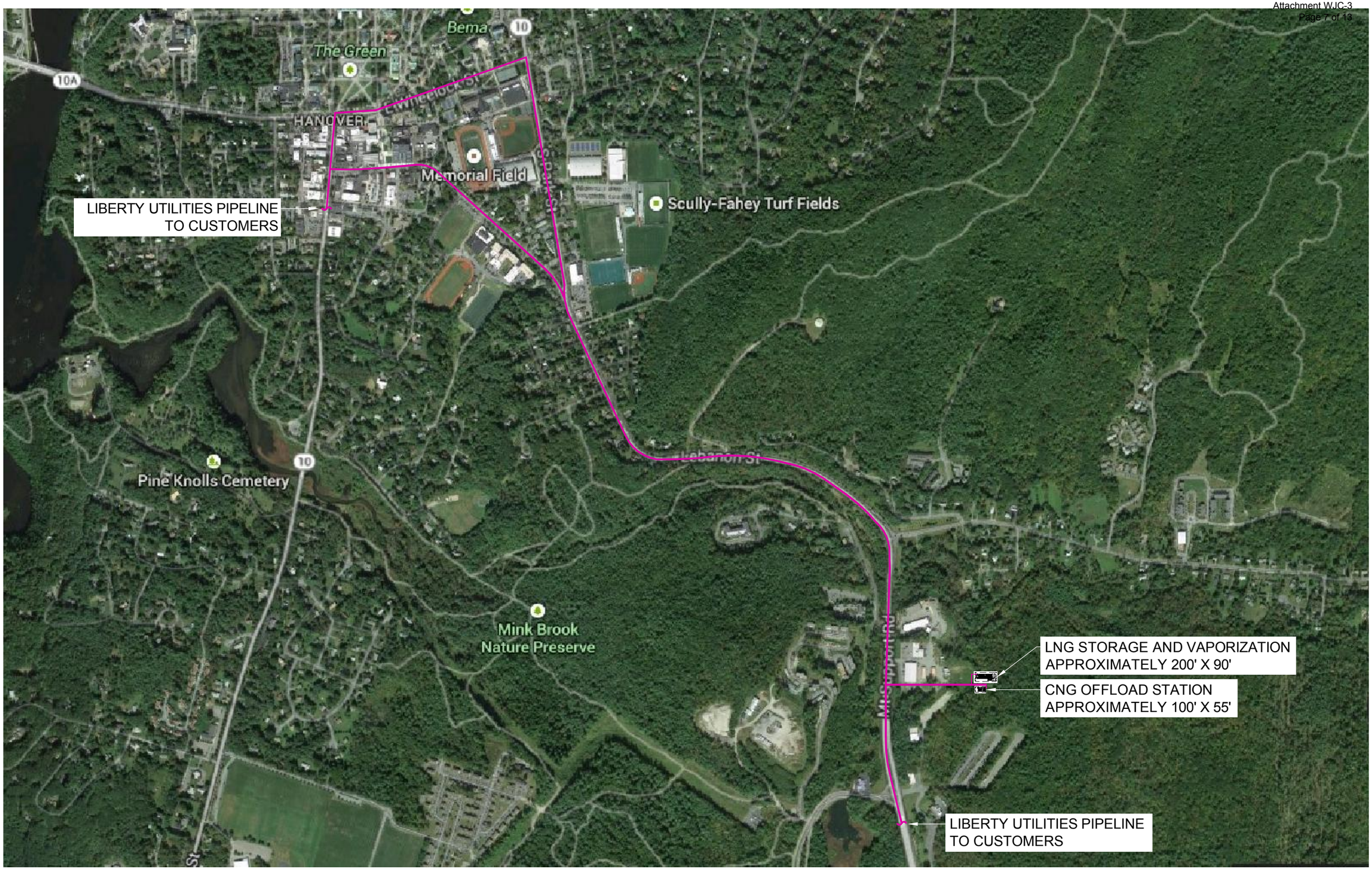
Please refer to Section A above.

H. CONTRACT TERMS

Please refer to Section B above.

ATTACHMENT A

LNG/CNG/PIPELINE CONCEPTUAL LAYOUT



Liberty Utilities℠

GRAPHICAL SCALE
5,000' 2,500' 0' 5,000' 10,000'

NO.	DATE	DESCRIPTION	BY

DRAWN BY: DRH
DESIGNED BY: MAN
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: JANUARY 2014

REQUEST FOR INDICATIVE BIDS
DARTMOUTH COLLEGE
HANOVER, NEW HAMPSH RE

PROJECT NUMBER: 3672.00

ATTACHMENT A - LNG/CNG/PIPELINE CONCEPTUAL LAYOUT

SHEET NUMBER: 1 OF 1

ATTACHMENT B

LNG/CNG/PIPELINE CONCEPTUAL EQUIPMENT LAYOUT

Liberty Utilities℠

GRAPHICAL SCALE
500' 250' 0' 500' 1,000'

NO.	DATE	DESCRIPTION	BY

DRAWN BY: DRH
DESIGNED BY: MAN
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: JANUARY 2014

REQUEST FOR INDICATIVE BIDS
DARTMOUTH COLLEGE
HANOVER, NEW HAMPSH RE

ATTACHMENT B - LNG/CNG/PIPELINE CONCEPTUAL EQUIPMENT LAYOUT

PROJECT NUMBER: 3672.00

SHEET NUMBER: 1 OF 1

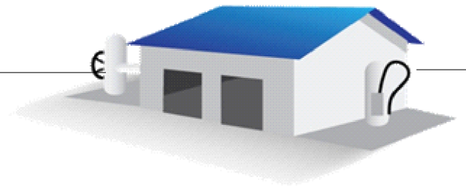
ATTACHMENT C

CONCEPTUAL LNG/CNG/PIPELINE SCHEMATIC

PROVIDED BY CNG SUPPLIER

PIPELINE

CNG MOTHER STATION



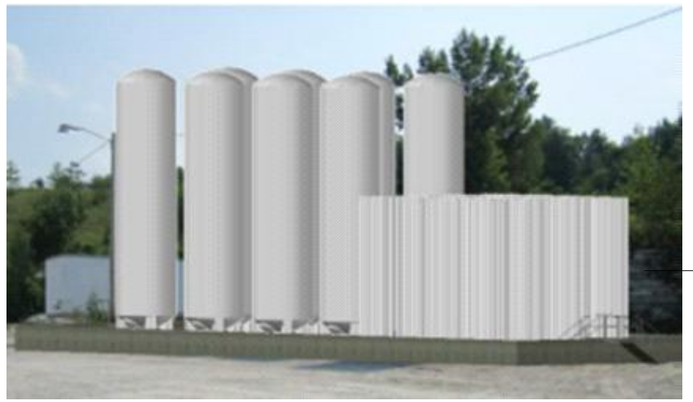
CNG TRAILERS

LIBERTY CNG
DE-COMPRESSION FACILITY

NOTE: CNG DAUGHTER STATION AND LNG FACILITY TO BE SITED APPROXIMATELY 3-4 MILES FROM THE DARTMOUTH COLLEGE CAMPUS.

DARTMOUTH COLLEGE
END-USE EQUIPMENT

DISTRIBUTION PIPELINE
BY LIBERTY



LIBERTY LNG FACILITY

HANOVER/LEBANON CUSTOMERS

Liberty Utilities℠

NO.	DATE	DESCRIPTION	BY

DRAWN BY: DRH
DESIGNED BY: MAN
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: JANUARY 2014

REQUEST FOR INDICATIVE BIDS
DARTMOUTH COLLEGE
HANOVER, NEW HAMPSH RE

PROJECT NUMBER: 3672.00

ATTACHMENT C - CONCEPTUAL
LNG/CNG/PIPELINE SCHEMATIC

SHEET NUMBER: 1 OF 1

048

ATTACHMENT D

SIMPLIFIED LNG/CNG/PIPELINE SCHEMATIC

FACILITY BOUNDARY

LNG SUPPLY

LNG PLANT
PRIMARY FUEL SOURCE

CNG SUPPLY

CNG
DECOMPRESSION
SKID
SECONDARY
FUEL SOURCE

UNDERGROUND GAS
DISTRIBUTION PIPING

DARTMOUTH
COLLEGE

RESIDENTIAL
CUSTOMERS

DOWNTOWN
BUSINESSES

Liberty Utilities℠

NO.	DATE	DESCRIPTION	BY

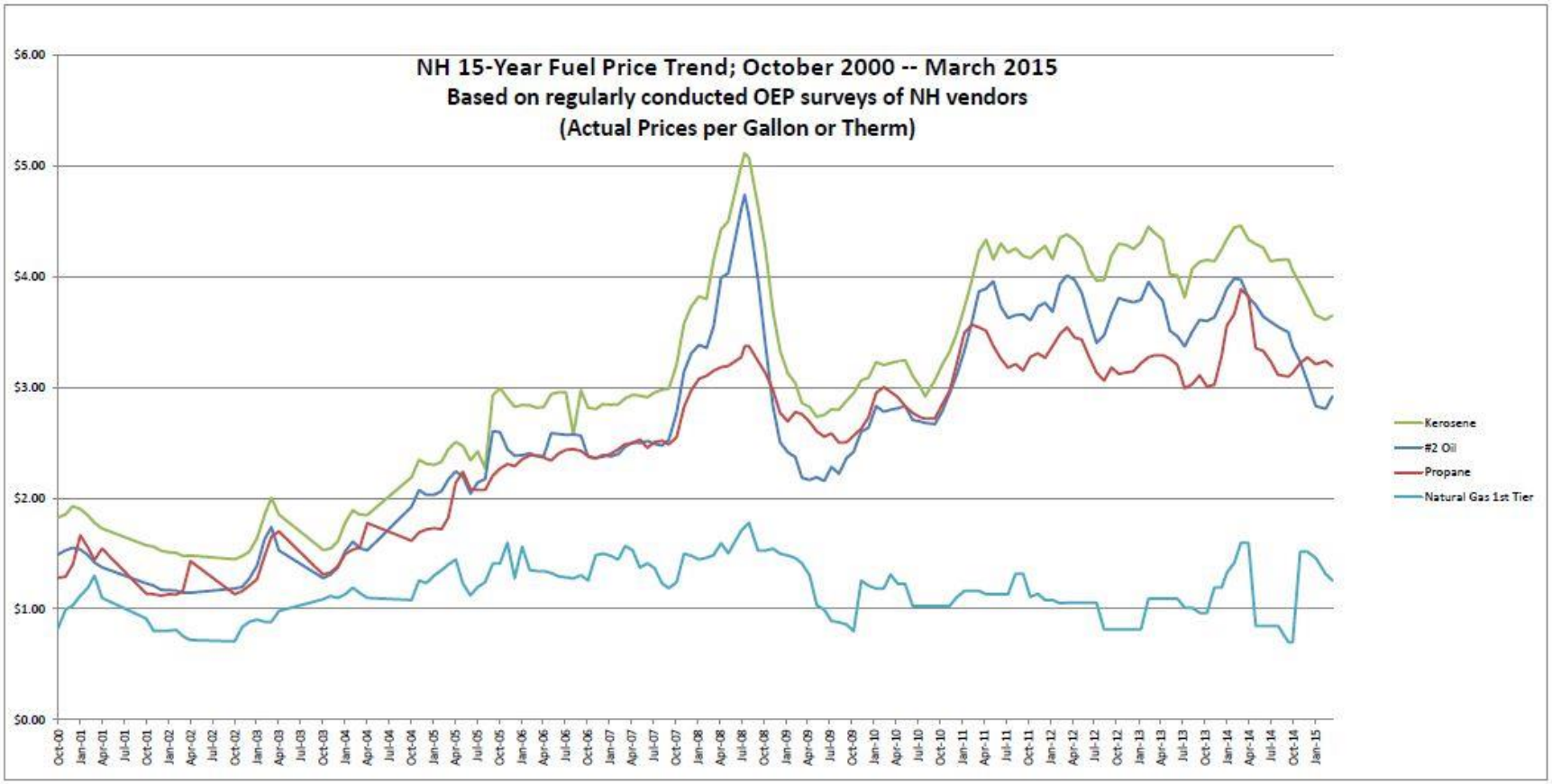
DRAWN BY: DRH
DESIGNED BY: MAN
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: JANUARY 2014

REQUEST FOR INDICATIVE BIDS
DARTMOUTH COLLEGE
HANOVER, NEW HAMPSH RE

ATTACHMENT D - SIMPLIFIED
LNG/CNG SUPPLY SCHEMATIC

PROJECT NUMBER: 3672.00

SHEET NUMBER: 1 OF 1


NH 15-Year Fuel Price Trend; October 2000 -- March 2015
Based on regularly conducted OEP surveys of NH vendors
(Actual Prices per Gallon or Therm)
$6.00
$5.00
$4.00
$3.00
$2.00
$1.00
$0.00
Kerosene
#2 Oil
Propane
Natural Gas 1st Tier

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	April/May 2012	Difference	% Difference
$155,120	$103,126	$51,994	33.5%

Kleen, Inc.'s LNG Installation

In addition to the cost savings, Kleen, Inc. is also experiencing a 10% lower level of CO_2 greenhouse gas emissions.

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

PROMETHEUSenergy

832-456-6500 - info@prometheusenergy.com
www.prometheusenergy.com

Liberty Utilities New Hampshire Award Summary

11/16/2016

- 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, 2015 & 2016
- LU NH was awarded by EPA the EnergyStar Partner of the Year Award for implementation of the EnergyStar Homes program in 2013, 2014, 2015, & 2016.
- 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, 2015 & 2016	EPA	• For achieving highest number of ENERGY STAR Certified new construction homes that exceeded the local and state code requirements.
EnergyStar Sustained Excellence Award	2013, 2014, 2015 & 2016	EPA	• Recognizing our exemplary marketing of the ENERGY STAR program. • We had to submit a list of our branding activities on the ENERGY STAR program.
EnergyStar Partner of the Year Award for implementation of the Home Performance with Energy Star program	2013	EPA	• For achieving highest number of ENERGY STAR Certified retrofit projects that exceeded the local and state code requirements.
EnergyStar Housing Leadership Award	2013	EPA	• For demonstrating superior dedication and results in all aspects of the ENERGY STAR program.
AGA Safety Achievement Award	2012	American Gas Association	• Lowest reportable motor vehicle accident rate among combination companies.

compressors allow operation at temperatures as low as 5°F.[135] Both types of systems require electricity to drive the pumps.

Both of these technologies can contribute to lowering energy usage and costs in the state. However, as with all heating system conversions, up-front costs can be a barrier. While utility rebates for both technologies are currently available, the State should consider also making financing available to customers who wish to install these systems when combined with efficiency improvements. Alternatively, Green Mountain Energy in Vermont has developed an innovative approach that has seen success: under their Cold Climate Heat Pump Rental Program, customers rent equipment, with prices ranging from $43-$53 a month.[136] This helps consumers avoid the high up-front price while getting the technology out in the market.

Consumer knowledge may also be a barrier, as these technologies are somewhat new and complex. The State should provide information to help consumers understand the benefits and costs of these technologies. One area that can be particularly challenging for consumers is conducting a cost-benefit analysis, as heat pumps effectively heat with electricity and can therefore be difficult to compare to the costs of an existing fossil fuel system. One action that could be helpful for consumers would be for the State to provide data on installations already existing in state, such as New York's State Energy Research and Development Authority (NYSERDA) has done with solar installations.[137]

5.4.4 NATURAL GAS

Natural gas will continue to play a role in meeting New Hampshire's electrical and thermal energy needs. As indicated in the Business As Usual forecast, natural gas currently provides 16% of residential heating needs, 44% of commercial thermal needs and 54% of industrial thermal needs.[138] In total, only 51 New Hampshire cities and towns have access to natural gas, and the state's two gas utilities, Unitil and Liberty, only serve approximately 117,000 customers. Based on recent data from the EIA, at current prices consumers who switch to gas from heating oil or propane could expect to cut their annual fuel costs in half.[139] However, even with the lower cost of natural gas today, New Hampshire is still prone to supply and cost fluctuations. In the winter of 2013 -2014, the region did not have enough supply for both heating and electrical generation needs. This resulted in higher prices and volatility, especially on the coldest days.[140] While New Hampshire has limited influence over natural gas transmission and pipeline expansion, the State is engaged in regional efforts to explore ways to encourage additional pipeline capacity in the region. The State should continue such coordination efforts, ensuring that New Hampshire's interests are represented in larger decision-making forums, and exploring other opportunities such as reducing usage through efficiency and conservation.

On the local distribution side, although the New Hampshire PUC has regulatory authority over Liberty and Unitil, the technical and economic barriers to additional gas expansion remain difficult to overcome. The

[135] http://energy.gov/energysaver/articles/air-source-heat-pumps
[136] http://www.greenmountainpower.com/customers/heat-pump-rental/cold-climate-heat-pump-rental-program-/
[137] http://www.nyserda.ny.gov/About/Newsroom/2014-Announcements/2014-07-31-NYSERDA-Announces-Availability-of-Information-About-Nearly-10000-Solar-Projects.aspx
[138] http://www.eia.gov/state/seds/
[139] http://www.eia.gov/todayinenergy/detail.cfm?id=13311
[140] http://www.eia.gov/forecasts/steo/special/pdf/2013_sp_01.pdf

high cost per mile of pipeline expansion can prohibit expansion to areas that are not densely developed. This barrier is compounded by limits on allowable payback periods for expansions. In recognition of the importance of access to natural gas across New Hampshire, the PUC recently changed the acceptable payback period limit for Liberty Utilities. The new line extension policy provides for a 20 year payback on residential and a 10 year payback on commercial and industrial line extensions. This will help Liberty bring natural gas to more customers in communities that are already served by the local gas distribution network.

The State should closely monitor any distribution expansion that occurs as well as remaining active in regional discussions of transmission expansion. The State should also continue supporting policies that increase the utilization of existing infrastructure in order to provide access to natural gas to more customers already on existing networks, while minimizing environmental disruption and making existing systems more cost effective.

RECOMMENDED FUEL DIVERSITY STRATEGIES

In order to foster sustainable, diverse energy development, we need consistent policies that support this approach.[141] By continuing to build a regulatory framework that supports diverse energy sources while respecting communities and natural resources, the State will help consumers, businesses, utilities, and investors gain confidence in investing in these areas.

Recommendation 10 - EVALUATE RPS TARGETS AND ACP PRICES

Summary and Rationale: New Hampshire's ACP prices are lower than other states in the region, and this presents a challenge for in-state development of renewables to meet the state's RPS goals, particularly for solar. In order to realize the full economic and security benefits of renewable energy, the State needs to adjust ACPs to be more in line with others in the region. The State may also wish to examine the class requirements, as the Resource Potential revealed solar PV to be the technology with the largest untapped potential in New Hampshire, yet the RPS has a relatively low requirement for solar (0.3%). This indicates that the RPS targets may not be aligned with each source's potential, a possibility that is reinforced by the PUC's recent proceedings to adjust targets in other classes.[142] Rather than continue to make adjustments on a somewhat 'emergency' basis, the State should examine the RPS targets holistically and compare them to the economic and technical potential for each source.

Design Considerations: While regular evaluation of the targets against remaining potential will be important to ensure that the RPS is working, the state must be careful to also maintain certainty for the market. Market participants have been quite vocal about the fact that changes should be done at prescribed intervals and announced well in advance, noting that investor confidence requires stability and long term policies. The recent, frequent changes have eroded that confidence and delayed New Hampshire's progress toward fuel diversity and energy resiliency. As noted by the National Renewable

[141] http://www.puc.nh.gov/Sustainable%20Energy/Reports/New%20Hampshire%20Independent%20Study%20of%20Energy%20Policy%20Issues%20Final%20Report_9-30-2011.pdf, p. 7-3.
[142] http://www.puc.state.nh.us/Regulatory/Docketbk/2014/14-104.html.

Energy Laboratory, "RPS targets should be stable, ramp up steadily over time and not be subject to sudden or uncertain shifts."[143]

Recommendation 11 - CONSIDER RATE DESIGN CHANGES TO PROPERLY VALUE DG

Summary and Rationale: Dynamic pricing such as time-of-use (TOU) or real-time-pricing (RTP), discussed in the Grid Modernization section as important demand-side tools, are also tools for consumers to manage peak demand. These mechanisms can also be used on the supply side to reward distributed generation (DG) for the value it provides to the grid. In contrast to feed-in-tariffs, which set a cost-based fixed price for renewable energy supplied to the grid, or net metering with flat rates that ignore the time value component of power production, net metering with dynamic pricing mechanisms pays a premium for DG power that is produced during times of peak demand. With advanced metering infrastructure, these pricing mechanisms can be developed to properly value the power provided by DG assets.

Design Considerations: This recommendation needs to be considered in context with several others, such as any grid modernization efforts and recommendation Sub-Recommendation 12.B: (Continue to Expand Net Metering Opportunities).

Recommendation 12 - ENCOURAGE SMALL SCALE DEVELOPMENT

In the current energy landscape, the major inhibitors to small scale energy generation are the availability of investment funds, existence of incentives, and stakeholder knowledge. Taken together, the recommendations below can inform specific actions for bringing small scale and distributed clean energy to its full potential in New Hampshire.

Sub-Recommendation 12.A: INCREASE LEVERAGING OF PRIVATE FINANCING

Summary and Rationale: One barrier to greater renewable energy development is lack of access to capital. Traditional loan products are poorly suited for many installations, and commercial lenders have not yet fully embraced the potential of renewable energy loans. The State should explore using a portion of the Renewable Energy Fund to provide a credit enhancement that could attract private financing and connect consumers to lenders more easily.

The State should also work with utilities to increase the usage of the Distributed Energy Statute, RSA 374-G, which allows utilities to partner with customers to install small scale clean energy generation.

Design Considerations: As New Hampshire's renewable market develops, the need for coordinated administration of various programs will increase. Coordination of programs and financing can reduce overhead costs, enable comprehensive data collection, and increase efficiency in marketing, planning, and delivery. New programs funded by the REF, such as financing, should be developed in collaboration with existing institutions and efficiency programs to ensure full coordination. Additionally, the State should ensure that any loan products offered are clearly defined and consistent to reduce market confusion.

[143] http://www.nrel.gov/tech_deployment/state_local_governments/basics_portfolio_standards.html.

Sub-Recommendation 12.B: CONTINUE TO EXPAND NET METERING OPPORTUNITIES

Summary and Rationale: In 2013, NH expanded the State's net metering policy to allow group net metering.[144] This allows multiple customers within the same utility territory to enter into an agreement for shared use of renewable energy generated by one of the customers.[145] By spreading the costs and benefits across a group of customers, group net metering provides an important tool for funding small scale distributed renewables. While the adoption of group net metering was an important advancement, the State should consider further incentivizing independent generation by increasing the size of "small customer-generator" beyond the current 100kW cap in PUC 900 rules.

Design Considerations: Raising the net metering cap will require consideration of integration issues, particularly grid reliability. Utilities and other stakeholders should be involved in an informal process led by the PUC to determine the best level for New Hampshire.

Sub-Recommendation 12.C: EXPAND LOCAL RENEWABLE PROPERTY TAX EXEMPTIONS

Summary and Rationale: Towns should be encouraged to adopt Renewable Energy Property Tax Exemptions, as allowed under current statute (RSA 72:61 through 72). While this policy may not have a large impact on the overall installations of renewable energy in the state in the short term, it may help some individuals make the choice to invest in these systems. It is also relatively simple to implement, and low cost.

The state should also consider expanding the range of technologies eligible for the property tax exemption. In order to achieve maximum fuel diversity, the statute should be flexible enough to allow property owners to take advantage of all beneficial new technologies. It may be simpler for RSA 72 to simply reference the RPS statute (RSA 362:F), which already defines all types of renewable energy that qualify under that law.

Design Considerations: Consistency is important so that installers and consumers all have a common understanding of the policy. The Office of Energy and Planning, together with the Department of Revenue Administration and other interested stakeholders, should work to develop best practices and model processes and to assist towns in implementing the property tax exemptions.

Sub-Recommendation 12.D: STREAMLINE LOCAL PERMITTING FOR SMALL SCALE SOLAR PV

Summary and Rationale: To continue to decrease the cost of residential solar PV for New Hampshire's consumers, the State should continue to support efforts to reduce the 'soft' costs associated with solar electric installations. 'Soft' costs typically include all the permitting, interconnection, and inspection requirements, along with the time industry spends dealing with the inconsistencies among these requirements at the local level. Other states have streamlined and standardized local permitting processes, reducing overall costs for residential solar installations. New Hampshire should explore implementing best practices to make permitting, installing, and inspecting solar electric less time consuming. The Office of Energy & Planning is currently engaged with other New England States to

[144] SB98 http://www.gencourt.state.nh.us/legislation/2013/SB0098.pdf .
[145] http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=NH01R .

examine 'soft-costs' and interconnection processes specifically for residential solar PV, and to develop and share best practices for streamlining processes where possible. The results of this effort should be implemented throughout the State.

Design Considerations: While current work is focused specifically on residential solar electric, the state may wish to examine permitting for additional types of small scale distributed generation to ensure that it is not an undue burden.

Recommendation 13 - INCREASE CONSUMER FUEL CHOICE AND REDUCE NEAR TERM COSTS

While transitioning to renewables and increasing resiliency through distributed generation are important goals, the state is also facing big challenges when it comes to consumer costs associated with its dependency on expensive and volatile heating fuels. Increasing the fuel options available to consumers will be important to helping them manage their risks and costs.

Sub-Recommendation 13.A: CONVERT CUSTOMERS WITH EXISTING ACCESS TO NATURAL GAS

Rationale and summary: Natural gas currently offers considerable cost savings as compared to other fuels, and also burns more cleanly than fuel oil, providing local and global air quality benefits. Focusing on distribution-side efforts, the State should work to fully utilize the capacity of existing gas pipelines. This can reduce heating costs for customers and keep more dollars in state in the short term – dollars that can then be invested in efficiency and renewable energy for long-term sustainability. One tool that may be particularly effective in driving conversions for on-main customers is to provide financing for efficient gas furnaces. While the State currently offers rebates for high-efficiency furnaces, they cover only a small portion of the cost of a new system, and consumers may have difficulty obtaining capital for the remaining cost. Offering financing programs could help more customers benefit from heating system upgrades.

Design Considerations: As with any fuel, it is critical to ensure that it is being used as efficiently as possible, and any gas conversion programs should be carefully paired with efficiency programs.

Sub-Recommendation 13.B: MONITOR DEVELOPMENT OF TRUCKED CNG

Rationale and summary: Some areas are simply too remote to justify investments in natural gas distribution network extensions. However, the market has recognized a demand for natural gas even in these locations, and a number of companies are now making investments to offer trucked CNG service to larger customers, or to campus settings with a large anchor customer. The State should monitor these developments and work to clarify and simplify the permitting processes for such installations.

Design Considerations: The state should encourage targeted, strategic installations for trucked CNG in areas where the impact will be maximized. While many of these companies are not subject to the jurisdiction of the PUC, the state could encourage knowledge sharing and general coordination among these firms, and encourage customers to undertake efficiency improvements when they take advantage of CNG opportunities.

HANOVER AND LEBANON EXPANSION PLAN

Natural gas expansion to the Upper Valley

The Hanover and Lebanon expansion plan creates a framework for Liberty Utilities (EnergyNorth Natural Gas) Corp. ("Liberty Utilities" or "the Company") to utilize to ensure the successful deployment of natural gas service to those Upper Valley communities. This expansion plan includes the Company's sales and marketing strategy, engineering analysis, operational analysis, fuel procurement strategies and other recommendations that will allow for the successful integration of natural gas into the communities for future residential, commercial and industrial customers.

The primary objectives of the expansion plan are as follows:

- Ensure the financial viability of the project by establishing certain safeguards before construction of the project commences.
- Provide an understanding of how the Hanover and Lebanon franchises fit within the existing Liberty Utilities operational structure.
- Create a five-year development plan for expansion, area-by-area within the communities of Hanover and Lebanon, to ensure a positive net present value (NPV) analysis over a ten-year time horizon.
- Ensure that there are no negative impacts on the continued expansion within the existing Liberty Utilities footprint that could result from increased capital spending associated with this Hanover and Lebanon development.
- Deliver positive impacts and benefits to existing Liberty Utilities customers by spreading the Company's fixed costs over an expanding customer base, which could have beneficial impacts on future revenue requirements.
- Increase earnings potential for the Company that would assist in making capital dollars available for future projects in development.
- Provide exceptional customer service to future natural gas customers located in the Upper Valley, while maintaining service levels for current Liberty Utilities gas and electric customers.
- Take advantage of creative opportunities in the development of a fuel procurement strategy to optimize bill impact for these customers while expansion of the system is in process.
- Ensure that new energy efficiency opportunities become available to these customers upon their conversion to natural gas.
- Provide for economic growth and development in both communities, through the availability of additional low-cost fuel choice.

Due to the unique nature of this off-pipeline local natural gas distribution system, the potential benefits for existing and future customers, as well as positive financial results associated with the project, Liberty Utilities has developed this expansion plan as both an internal framework and as a supporting document for our regulator.

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Hanover-Lebanon Development

Expansion Plan

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I. Executive Summary

This Expansion Plan provides a detailed analysis of Liberty Utilities' plan to expand natural gas service to the Upper Valley communities of Hanover and Lebanon. The expansion will occur over several years and will make natural gas available to a large number of residential, commercial and industrial customers. The "backbone" of the distribution system will begin at the fuel storage facility, to be located adjacent to the Lebanon Landfill in West Lebanon, and extend approximately 11.5 miles to the downtown Hanover area. Appendix I-1.

The chief sections contained within the Expansion Plan include:

- Sales and Marketing
- Engineering and Operations
- Fuel Procurement
- Financial Analysis
- Community Relations

Liberty Utilities is pursuing its plan to expand natural gas to the Upper Valley in order to provide the benefits of natural gas to customers seeking an alternative fuel source for heating, processing, vehicle, and domestic needs. These benefits include price stability, efficiency, reduced emissions compared to competitor fuels, safety and convenience. Liberty Utilities has achieved a record number of conversions over the last several years within its existing franchise footprint due to these benefits in addition to having a fully staffed, trained and professional sales department. The Company believes that given the option, consumers in the Upper Valley will also choose to take advantage of the great benefits associated with natural gas. In fact, three large commercial customers within the proposed franchise area are already utilizing natural gas, which is currently delivered via truck to their facilities in the forms of compressed natural gas (CNG) or liquefied natural gas (LNG). One of these customers has already signed a Letter of Intent (LOI) with Liberty Utilities to become a customer and receive service piped directly to its business location. Confidential Appendix I-2.

Although this expansion project will be the largest in the recent history of Liberty Utilities, it is nonetheless consistent with the Company's organic growth and expansion strategy. In January 2015, Liberty Utilities closed on the acquisition of the New Hampshire Gas Company located in Keene, New Hampshire**.** New Hampshire Gas is now the Keene Division of Liberty Utilities. The Keene Division has approximately 1,250 customers served by an underground distribution network of approximately 30 miles of pipelines. The fuel provided to these customers is a low Btu mix of propane and air. Liberty Utilities acquired that system because it saw an opportunity to reduce customers' bills and increase profitability by converting the system to natural gas, which will enable the expansion of the customer base and distribution network. Liberty Utilities is in the process of converting the propane-air system and expects to have natural gas flowing to certain customer segments by spring of 2017 utilizing CNG. The Company is

in the process of designing and permitting a larger facility that will support the full conversion of existing customers, as well as expansion to other areas within the region. As part of this conversion process, Liberty Utilities has gained experience operating an "off-pipeline" system, as well as innovative and competitive fuel procurement strategies which will both be explained in more detail later in this Expansion Plan.

In August 2016, Liberty Utilities received Commission approval for a Managed Expansion Program (MEP) in Order No. 25,933 (August 4, 2016). Key aspects of the Order include:

- Liberty Utilities shall offer new MEP distribution rates at a 30% premium, in effect for 10 years from the time a main extension is placed in service and the first customer takes service off of that main, in order to eliminate or reduce the required customer contribution along a new main extension.

- MEP is to be implemented on a four-year pilot basis. The Company will report to the Commission annually on the results of the program. After three construction seasons of experience, the Company will submit a request to the Commission to extend or modify the program.

- Liberty Utilities must use a discounted cash flow analysis (DCF) to evaluate expansion projects estimated to cost more than $1,000,000.

- Liberty Utilities will not start construction of an expansion project until enough prospective customers have committed to take service such that anticipated revenue, over a period of eight years for residential customers and six years for commercial customers, equals at least 25% of the projected cost of construction for the project.

- The Company will offer up to 100 feet of service extensions at no charge to any residential customer who commits to taking service prior to installing a new or replacement main, irrespective of whether they take heating service.

These MEP rates and new tariff provisions are available and applicable to the Hanover/Lebanon expansion project. MEP rates will enable service be extended to a larger number of customers in Hanover/Lebanon that may otherwise find paying for a new gas service uneconomic. The tariff provision enabling a free service of up to 100 feet without becoming a heating customer will have a beneficial impact on construction costs as it will allow for a higher initial saturation rate during construction. This higher initial saturation rate will provide for additional distribution revenue during the project's development. Allowing a free service of up to 100 feet for non-heating customers will also reduce construction costs in future years as customers convert from more expensive heating fuels to natural gas. During this conversion process, the Company will only need to update the rate classification of those customers without having to reopen the street in order to extend a new gas service line to the premises.

The newly approved tariff changes requiring a DCF analysis for projects in excess of $1,000,000 will also apply to the Hanover and Lebanon expansion. The DCF analysis and other financial impacts can be found in Section II-D of this Expansion Plan. The requirement that 25% of committed revenues over an eight- or six-year period equal at least 25% of the anticipated construction costs will also apply to the Hanover and Lebanon expansion. This requirement will act as a safeguard for existing Liberty Utilities customers and help ensure that the Company will successfully bring natural gas to the Upper Valley.

In Docket No. DG 15-362, Liberty Utilities petitioned for new franchises in the Towns of Pelham and Windham. The Company reached a settlement agreement with Staff, the OCA, and the Town of Pelham, the only intervening party to the docket. The Commission held a hearing on October 25, 2016 and the Company is currently awaiting a decision. There are three significant aspects to that docket which relate to the Hanover/Lebanon expansion. First, Liberty Utilities demonstrated that it is committed to expanding natural gas through traditional, on-pipeline, projects. The initial expansion into Windham will be an extension of the distribution system located in the adjacent town of Hudson, while the initial expansion into Pelham will begin from a new take station connected to the existing Concord Lateral owned by Tennessee Gas Pipeline (TGP).

Second, DG 15-362 demonstrates that the Company can work closely with local town officials throughout the development process to ensure their concerns and needs are met. Liberty Utilities officials consistently met with officials from Pelham and Windham, their engineering consultants, leaders of town departments and made presentations to both Boards of Selectmen on multiple occasions. The result was a unanimous recommendation from the Board of Selectmen in each town to support the expansion of natural gas. Liberty has already begun, and will continue to utilize similar strategies during the development and construction of this expansion project. More details of this community outreach will be found in Section III of this Expansion Plan.

Finally, Liberty Utilities has implemented a new web-based tool which will significantly enhance the Company's ability to evaluate new expansion projects as well as market to potential customers within new and existing target areas. The Company partnered with ICF International (ICF) to develop a Strategic Intelligence Management System (SIMS) and a Gas Availability Tool, both of which will be available on Liberty Utilities' website. A copy of the contract between Liberty Utilities and ICF is provided in Confidential Appendix I-3. A detailed analysis of these tools and examples of their use can be found in Section II-A. The SIMS dashboard can determine the potential prospect count and annual expected consumption of customers located within a geographic region. The SIMS output data for the communities of Hanover and Lebanon are as follows:

		Total Prospect Count	Usage Metrics (therms)		Annual Load (therms)
			Median	Average	
Hanover	Residential	[redacted]	[redacted]	[redacted]	[redacted]
	Commercial	[redacted]	[redacted]	[redacted]	[redacted]
Lebanon	Residential	[redacted]	[redacted]	[redacted]	[redacted]
	Commercial	[redacted]	[redacted]	[redacted]	[redacted]
West Lebanon	Residential	[redacted]	[redacted]	[redacted]	[redacted]
	Commercial	[redacted]	[redacted]	[redacted]	[redacted]
	Total	[redacted]	[redacted]	[redacted]	[redacted]
	ADTH				[redacted]

Conclusion

Liberty Utilities has conducted a thorough analysis of the expansion potential of natural gas to serve the communities of Hanover and Lebanon. This analysis included customer, financial, operational, engineering, energy procurement and community strategies. The Company has also received recent approval of certain tariff changes and enhancements that facilitate expansion opportunities while offering safeguards to existing customers. Together with Liberty Utilities' consistent demonstration of its managerial, financial and technical proficiencies, the Company submits that it is uniquely positioned to construct and operate the system proposed to serve these communities.

II. Marketing, Operations, and Cost/Benefit Analysis

A. Sales and Marketing Plan

1. Introduction

This Sales and Marketing plan provides a summary of the strategies and systems that will be deployed by the New Hampshire based sales team to ensure a successful outcome with regard to the Hanover and Lebanon natural gas expansion project.

The gas sales team is led by a regional manager, Lisa DeGregory, who has decades of experience creating, implementing, and managing natural gas conversion programs and strategies within the utility industry. Ms. DeGregory and her team are located in the Manchester, New Hampshire office. The team includes the following positions, responsibilities, and staffing levels:

- Two commercial account managers. These managers are divided into northern and southern service territories, with Manchester as the dividing line. The account managers are responsible for responding to commercial customers' billing or energy efficiency inquiries, as well as business updates that will result in load profile changes. The account managers are also responsible for all new gas conversions within their assigned territories and all new commercial construction activity. The account managers will be responsible for these activities for the initial phases of the Hanover and Lebanon expansion.

- A single marketing analyst responsible for both company branding and advertising efforts. Company branding is done through traditional and non-traditional methods, including newspaper ads, event sponsorship, and being present in the communities we serve. Advertising efforts are geared towards gas sales, and are done mainly through direct mail and email blasts to potential customers. The marketing analyst is also responsible for tracking the effectiveness of conversion programs through the Company's customer relationship management (CRM) system, and acquiring prospective customer data utilizing Liberty Utilities' newest tool, the SIMS dashboard. The marketing analyst will be responsible for all such efforts in the Hanover and Lebanon area.

- A single sales supervisor who oversees a team of four employees responsible for all aspects of a residential conversion to natural gas, from the initial inquiry until an account number is established and a gas meter has been set. The existing sales supervisor and the existing residential sales team will be responsible for the Hanover and Lebanon expansion efforts.

- Two residential sales representatives responsible for ensuring an efficient and exceptional level of service throughout the conversion process. The sales representatives work with the customer and their contractor with regards to service/riser/meter location, contributions in aid of construction (CIAC), if any, expected timeframe and execution of a Service Line Agreement (SLA).

- Two sales coordinators who assist with account creation process, as well as post sales activities. These activities include tracking sold jobs in the CRM system to ensure customers have completed or are in the process of completing the conversion within the nine month timeframe stipulated in the Liberty Utilities tariff. The coordinators will also contact new customers to inform them of the scheduled service line installation date and answer any questions the customer may have prior to the construction. These activities have led to superb customer satisfaction metrics for the sales department.

2. Customer Relationship Management System

Overview

The New Hampshire Sales and Marketing team utilizes a cloud-based customer relationship management system (CRM). This CRM system captures all data, as it relates to prospective customers before and after a sale is made. Examples of data captured include customer name, customer address, current fuel source, future projected load, and the account manager assigned to the customer.

Marketing Functionality

For marketing purposes, the CRM system is primarily used to capture leads that come in via telephone, email, or through website forms that are sent directly to the sales and marketing inbox. Marketing outreach efforts include direct mail, email blasts, letters, door hangers, newspaper ads, radio ads, and company branding through event or team sponsorships. All have a lead source attributed to them so when a prospective customer calls in, one of the Post Sales Coordinators can ask what prompted them to call. Based on their response, the appropriate lead source is entered. The functionality of the CRM system also allows the user to run a report to determine how many leads came in from a specific campaign. This allows the marketing department to assess what marketing methods are working, and which are not.

Sales Functionality

Every address entered into the CRM system is designated as either a lead or an opportunity. A “lead” is a prospective customer who has contacted the Company and expressed their interest in obtaining natural gas. What designates it a lead and not an opportunity is whether the address has not yet been researched to see if natural gas is available to the interested individual. The post-sale coordinator responsible for managing

the lead will research the property in question using a combination of Google Maps and the Company's internal mapping system to determine if natural gas is available.

If natural gas is not available, the address remains in the post-sale coordinator's name, and the status is moved to "no gas service available." If natural gas is available, the lead is assigned to a gas sales representative to be worked, at which point it becomes an "opportunity." After the sales representative receives the opportunity, the status of the opportunity is changed to working. From there, the representative will contact the prospective customer and begin the sales cycle. Throughout the sales cycle, every significant point of the sale has an attributed status.

- Working – The residential sales representative is working the opportunity, providing information to the prospective customer that natural gas is the appropriate choice for them, giving them financing/rebate information, and answering any questions they may have.

- Closed Lost – No Sale – The potential customer has decided not to move forward with converting to natural gas.

- Contract Sent – The Service Line Agreement (SLA) has been sent to the prospective customer to be completed and returned.

- Closed Sold/Won – The signed SLA is received from customer, at which point the service is sent to Gas Operations for scheduling.

- Awaiting Action – The sales representative has a date for conversion/meter set and knows that the meter will be on within 45 days.

- Booked – The meter has been set, and the Company is officially receiving revenue from the customer.

From the moment a qualified lead becomes an opportunity, every stage through the selling process is recorded in the CRM system. The sales representative working with the prospective customer records all points of contact made, including notes, emails, phone calls, and site visits. The CRM system also allows sales representatives to schedule activities for themselves serving as a reminder of events that must occur at specific times throughout the sales cycle. Examples of pertinent information which is captured in the CRM system are:

- Property owner's name and contact information
- Service address where meter/service will be installed
- Type of project: residential, commercial, industrial or new construction

- Fuel to replace: oil, propane, electric
- Gross profit margin (GPM) or estimated annual distribution revenue
- Contribution in aid of construction (CIAC) if applicable
- Natural gas input captured in cubic feet per hour (CFH)
- Annual estimated consumption in dekatherms (ADTH)
- Customer Rate Classification
- Customer meter number
- Customer account number
- Any relevant attachments such as executed service line agreement

Management Capability

The CRM System provides management across various departments with real time data essential for both long and short term planning. Each opportunity has a field within the CRM titled "Estimated Booked Date," which is the estimated date the gas meter will be turned on. The sales representative is responsible for entering and updating this field as the project moves through its lifecycle. This field is critical for internal goal setting as it forecasts what projects are currently in the pipeline for various time horizons. This allows for realistic and achievable goal setting for the gas sales team. These reports are also utilized by the Sales Manager for projections to senior leadership on estimated quarterly and annual metrics such as GPM, ADTH and meter additions. The Sales Manager will also apply this data when establishing team and individual sales quotas.

The reports are also shared with the Gas Operations team which allows for optimal utilization of both external and internal crews as well as internal staffing resources. With uncertain end dates for the construction season in New Hampshire it is imperative that optimization of these resources is achieved so the Company can deliver on the expectations set with our customers as well as the successful completion of projects such as Liberty Utilities' annual cast iron, bare steel (CIBS) replacement program to the satisfaction of all stakeholders.

Another critical application for these reports is growth forecasting as it relates to energy procurement. Liberty Utilities is responsible for completing a Least Cost Integrated Resource Plan which, in part, has projections for demand during future years. The CRM system sales reports provide a baseline growth scenario over previous years which can be utilized, along with reports of what is currently in the sales pipeline, to determine what future resources will be required to serve our customer's needs.

3. Market Assessment

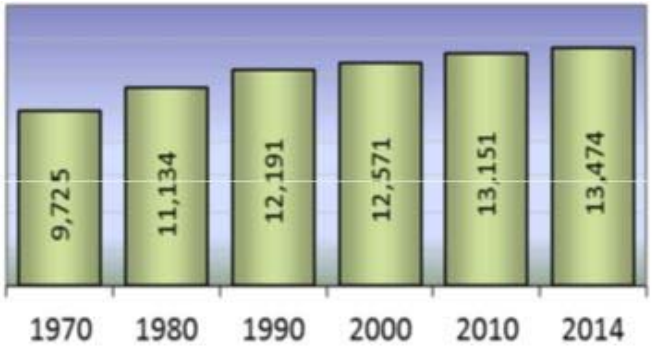
The communities of Hanover and Lebanon are located in the Upper Valley adjacent to the Connecticut River and bordering Vermont. Liberty Utilities is the local electric distribution company for these communities and has an operations center located at 407 Miracle Mile, Lebanon. Having an established presence in the communities provides Liberty Utilities a unique perspective on the economy and culture of the region. Our largest key accounts are actively managed by the Electric Key Account Manager. This involves constant contact via phone and site visits to meet the business needs of those customers. This can involve upgrades to existing electrical service due to production increases, energy efficiency upgrades to the facility and available rebates, billing and service questions, or just general conversations regarding their business and related energy cost impacts. These ongoing relationships provide insight into the regional and business culture. Businesses and residents understand the impact energy costs can have to financial health of a company, as well as household economics. However, they also have a keen understanding of the role energy plays in the environment and will fully understand the benefits of natural gas when compared with current alternative fuel choices in heating their homes and powering their businesses.

The communities of Hanover and Lebanon have a large and diversified mix of businesses. These range from educational institutions like Dartmouth College, to health care providers such as Dartmouth Hitchcock Medical Center and Alice Peck Hospital, to manufacturers and processors such as Hypertherm and Kleen Laundry, aggregate and asphalt companies, to small family-owned businesses. Market research indicates a potential annual load for these communities to be approximately 3.4 million dekatherms, and the potential customer base of approximately 9,225 customers. Section II D will demonstrate the financial opportunity associated with the Hanover and Lebanon expansion.

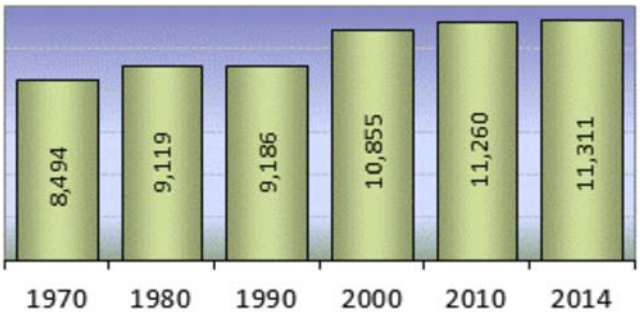
Population trends are also on the rise in these communities, which bodes well for future expansion into the region. Population trends for the communities are as follows:

Lebanon Population Trend

(http://www.nhes.nh.gov/elmi/products/cp/index.htm)



Hanover Population Trend



Another positive market indicator for these communities is the economic statistics and trends. Critical among these are the current unemployment rates, projected job growth rates, and various income demographics. These metrics exceed national averages. See below for tables containing economic data for Hanover and Lebanon obtained from the following sources:

(http://www.bestplaces.net/economy/city/new_hampshire/hanover)

(http://www.bestplaces.net/economy/city/new_hampshire/lebanon)

ECONOMY	Hanover, New Hampshire	United States
Unemployment Rate	2.30%	5.20%
Recent Job Growth	0.28%	1.59%
Future Job Growth	38.25%	37.98%
Sales Taxes	0.00%	6.00%
Income Taxes	0.00%	4.60%
Income per Cap.	$34,140	$28,555
Household Income	$94,063	$53,482
Family Median Income	$129,000	$65,443

ECONOMY	Lebanon, New Hampshire	United States
Unemployment Rate	1.80%	5.20%
Recent Job Growth	0.00%	1.59%
Future Job Growth	38.20%	37.98%
Sales Taxes	0.00%	6.00%
Income Taxes	0.00%	4.60%
Income per Cap.	$34,226	$28,555
Household Income	$52,825	$53,482
Family Median Income	$71,868	$65,443

4. Marketing Strategies

Liberty Utilities will utilize proven marketing and outreach strategies that have resulted in three record setting years in row for new customer additions to the Liberty Utilities system. The Company will also utilize new technology, developed in conjunction with ICF International, to produce even greater conversion metrics and improve efficiency of the entire process. ICF has delivered on the initial work product, which included customer data acquisition from third party entities and existing Liberty Utilities customer data. This data is now aggregated and available for all of Liberty Utilities' existing

franchise areas, including the Keene Division and the potential new franchises of Windham, Pelham, Hanover, and Lebanon. ICF incorporated all gas main data within the SIMS portal as well as utilization for the new Gas Availability Tool.

The SIMS dashboard will be primarily utilized as a customer acquisition tool. Company representatives will be able to search for potential new customers in various manners. Three critical search criteria will be distance from main, existing fuel type, and potential to convert. In instances where Liberty Utilities does not have gas main installed in a community, such as Hanover and Lebanon, the Company will be able to direct ICF to upload future infrastructure installations into SIMS.

Another unique search option will be the ability to search on a map by "drawing" around a potential block of customers. Within the drawn area all prospective targets will appear as a red icon. For an example of this, please refer to Confidential Appendix II-1. From here, an employee will be able to click the red icon for a customer card which will contain information such as name, age of home, size of home, fuel type, and income information. For an example of this please refer to Confidential Appendix II-2.

The Company will also be capable of exporting a customer list of all prospects contained within the search box, which will be utilized for targeted direct mail messaging. For an example of this export, please refer to Confidential Appendix II-3.

The Gas Availability Tool will be embedded within the Liberty Utilities website. A customer will have the ability to enter their address, or any other address where they may wish to know about the availability of natural gas. Once the address is confirmed, a result will be displayed with a message that gas is or is not available. The Company has the ability to dictate at which distance a "gas is available" message will appear. If gas is available, the customer will have the option to complete an online Service Line Agreement or speak directly with a sales representative. The sales page will also contain information such as savings versus competing fuels, energy efficiency rebates, potential financing options, and contractor referral information. The Gas Availability Tool will capture and save all responses to a "gas is not available" result. This information will be used to develop a heat map of areas with high interest in natural gas which will be evaluated for future expansions.

5. Implementation Strategies

Once potential customer information has been developed for potential expansion, the next steps for the sales representative and the marketing analyst include the following:

a) Using acquired data, a series of letters and direct mail postcards will be sent to potential residential and commercial prospects along the planned expansion route to determine the level of interest. Prospects will be provided with the phone number of the sales department in Manchester where they can call and speak with someone

regarding the proposed project. All comments and concerns of those who call will be recorded in the CRM system.

b) Newspaper ads will be placed in the Valley News, which will provide information regarding the expansion. The sales phone number will be listed for residents of Hanover and Lebanon to call with questions they may have.

c) Brochures on the project will be available at the Liberty Utilities walk-in center in Lebanon, at other satellite locations within the two towns, and other locations to be determined later.

d) Liberty Utilities' social media pages will be used to keep potential and current customers aware of the progress of the expansion project.

e) Local television and/or radio ads will be considered to ensure all residents are aware of what the project will entail.

f) A designated space will be created within Liberty Utilities' existing Lebanon walk-in center for prospective customers wishing to meet with a Liberty Utilities Gas Sales Representative. All meetings will be scheduled in advance by calling the sales team, or by speaking with a Customer Service Representative located at the Lebanon office.

g) A town meeting will be held in each town. Residents from both Hanover and Lebanon will be invited to attend to learn more about natural gas availability and conversions. Liberty Utilities employees from different departments will be available to provide additional information to residents and business owners. Liberty Utilities will also invite local plumbing and heating contractors.

The Company will also be presenting potential new customers with various energy efficiency opportunities during the conversion process. These offerings will allow customers to take advantage of programs which offer incentives to install high efficiency equipment and perform other energy saving measures either at the time of installation or subsequent years. Liberty Utilities has received numerous awards over the years which are summarized below.

Recognition	Year	Organization	Comment
Energy Star Partner of the Year for implementation of the EnergyStar Homes program	2013, 2014, 2015 & 2016	EPA	• For achieving highest number of ENERGY STAR Certified new construction homes that exceeded the local and state code requirements.
EnergyStar Sustained Excellence Award	2013, 2014, 2015 & 2016	EPA	• Recognizing our exemplary marketing of the ENERGY STAR program. • We had to submit a list of our branding activities on the ENERGY STAR program.
EnergyStar Partner of the Year Award for implementation of the Home Performance with Energy Star program	2013	EPA	• For achieving highest number of ENERGY STAR Certified retrofit projects that exceeded the local and state code requirements.
EnergyStar Housing Leadership Award	2013	EPA	• For demonstrating superior dedication and results in all aspects of the ENERGY STAR program.
AGA Safety Achievement Award	2012	American Gas Association	• Lowest reportable motor vehicle accident rate among combination companies.

Liberty Utilities has successfully implemented diverse marketing and branding campaigns within Liberty Utilities' existing franchise areas, which have led to record conversion metrics for 2015 and 2016. These campaigns focused on various segments of the natural gas prospect universe. Examples of some specific campaigns are as follows:

- On-main residential conversion prospects: Appendix II-4
- On-main commercial conversion prospects: Appendix II-5
- Residential prospects slightly off main (main extensions and MEPS): Appendix II-6
- Commercial prospects slightly off main (main extensions and MEPS): Appendix II-7
- General company branding/involvement – Past efforts include sponsorship of a local sports team, sponsorships of local events including the Best of NH party and Green Your Fleet, and getting employees involved in volunteer work in the communities we serve.

Past marketing efforts to home and business owners have been performed using the following methods:

- Direct mail postcards: Appendix II-8
- Email blasts: Appendix II-9
- Letters: Appendix II-10
- Newspaper ads: Appendix II-11
- Handouts: Appendix II-12
- Door hangers: Appendix II-13

Liberty Utilities conducted a marketing campaign in 2015 to home and business owners in Hanover and Lebanon. The purpose of the campaign was to gauge the interest in natural gas. The campaign consisted of the following efforts:

- Property owner names and addresses were purchased from a third party data company
- One letter was sent three times to all residential property owners: Appendix II-14
- One letter was sent three times to all commercial property owners: Appendix II-15
- A newspaper ad was placed in the Valley News from September 6, 2015 through September 28, 2015 to alert home and business owners of the request for service filed with the New Hampshire Public Utilities Commission, in addition to the public meeting held by Liberty Utilities on September 29, 2015: Appendix II-16
- A brochure was created to provide those inquiring with additional information about the scope of the project: Appendix II-17
- Liberty Utilities sponsored several events in Hanover and Lebanon, including the Lebanon Chamber of Commerce Wings and Wheels event, the CHaD Hero race, and the Hanover Chamber of Commerce Golf Tournament.

Liberty Utilities is prepared to take immediate action to convert 60% of the potential commercial and residential prospects along the installation of a new main. The Company's outreach plan will include marketing initiatives, planned community and public relations activities, establishment of new relationships within the community including business leaders, and the launch of an outreach program to all trade channel partnerships within the community.

Upon approval of the Hanover and Lebanon franchises the Company plans to:

- Take immediate action to finalize agreements and service requests with anchor industrial and commercial accounts and new construction developments.
- Implement trade channel partnership to assist in oil, propane, and electric conversions accounts.
- Develop a third party financing package.
- Introduce energy efficiency products and services.
- Establish metrics to measure our sales success.

On a longer term basis the Company will work diligently to ensure that it:

- Meets yearly sales goals.
- Maintains key relationships with members of the community.
- Maintains key account relationships with anchor customers.
- Maintains key relationships with public works, including public officials, building inspector and town engineers.

The sales organization structure allows the potential prospect to convert to natural gas with ease. The sales design enables potential customers to get detailed information on a personal level. Liberty Utilities' sales team provides information relating to the return on investment based on propane and oil conversion costs. After the initial contact the prospect will be provided with direct sales contact for all future inquires. The prospect will not face the frustration of multiple menu options from an 800 phone number. Based on the efficiency of the process listed below, Liberty Utilities will not be required to hire additional sales personnel to handle the increased number of conversion customers.

The new customer process can be broken out as follows:

- Call comes into the marketing 800 number
- Prospect is qualified and assigned to a sales representative
- Sales representative assigns to engineering for review (if applicable)
- Sales representative provides an application for service
- Application for service is completed by the prospect and returned to sales representative
- Sales representative scans the signed application and attaches to the CRM system record
- Completed application is forwarded to construction for services installation
- Post sales coordinator emails customer service for shell account request
- Post sales coordinator receives call from customer to schedule meter installation
- Post sales coordinator executes meter installation
- Meter is booked in the CRM system

6. Large Commercial and Industrial Customers

The communities of Hanover and Lebanon have multiple large commercial and industrial customers that could potentially serve as anchor loads. Liberty Utilities has identified ten potential anchor customers within this group totaling an anticipated annual consumption of 1.2 million Dth. Liberty Utilities has a signed letter of intent from one such customer and is working with the other potential anchors to secure contracts. The ten potential anchor customers, distance from the storage facility, and their annual estimated volumes are:

Potential Customers	ADTH	Current Fuel	Distance	Rate Class	Discussions
Dartmouth College	[redacted]	[redacted]	10.4 miles	[redacted]	[redacted]
DHMC	[redacted]	[redacted]	8 miles	[redacted]	[redacted]
Kleen Laundry	[redacted]	[redacted]	5 miles	[redacted]	[redacted]
Pike Industries	[redacted]	[redacted]	1700'	[redacted]	[redacted]
Alice Peck Hospital	[redacted]	[redacted]	4.6 miles	[redacted]	[redacted]
Hypertherm	[redacted]	[redacted]	6.1 miles	[redacted]	[redacted]
Timken	[redacted]	[redacted]	3.5 miles	[redacted]	[redacted]
Upper Valley Plaza	[redacted]	[redacted]	1.2 miles	[redacted]	[redacted]
Valley Square Shopping	[redacted]	[redacted]	4500'	[redacted]	[redacted]
Centerra Business Park	[redacted]	[redacted]	7.9 miles	[redacted]	[redacted]
Total ADTH	**1,199,000**				
** denotes anticipated special contract					

As shown in the table above, two of these customers are already utilizing some form of delivered natural gas, while the majority are utilizing propane as their fuel choice. Customers that utilize propane for their heating and processing loads are of particular interest. In most instances existing propane equipment can be converted to natural gas without the expense of changing the existing equipment in its entirety. Most often, the existing equipment can be field converted to natural gas by changing the equipment orifice and/or gas valve. In addition, propane is currently one of the most expensive energy options in New Hampshire as shown on the table below from the New Hampshire Office of Energy and Planning as of November 8, 2016.

Fuel Type	Price/Unit	Heat Content Per Unit (BTU)	Price Per Million BTU
Fuel Oil (#2)	$2.14/Gallon	138,690	$15.40
Propane	$2.98/Gallon	91,333	$32.65
Kerosene	$2.81/Gallon	135,000	$20.85

Fuel Type	Price/Unit	Heat Content Per Unit (BTU)	Price Per Million BTU
Natural Gas 1st Tier (<20 Therms)	$1.12/Therm	100,000	$11.21
Natural Gas 2nd Tier (>20 Therms)	$1.07/Therm	100,000	$10.67
Electricity	$0.1632/kWh	3,412	$47.82

7. Summary

Liberty Utilities has a proven track record of implementing successful customer expansion opportunities over multiple years. The Company has achieved unprecedented growth in a climate of lower oil and propane prices which demonstrates not only the sales team's ability to execute, but also the demand for natural gas in the market place as the desired fuel choice due to economic, environmental, and convenience factors. Liberty Utilities has conducted extensive market research through a "boots on the ground" approach along with other traditional marketing outreach as well as new and innovative technologies such as the SIMS dashboard created by ICF International. The Company has successfully enhanced portions of its tariff that would allow expansion in a prudent manner that safeguards the existing customer base. The Company firmly believes there is a market for natural gas in these communities that warrants expansion of the Liberty Utilities franchise area.

B. Engineering and Operations Plan

1. Introduction

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

A conventional local distribution network has an interconnection with an interstate pipeline company. At this interconnection, a local distribution company (LDC) would receive shipments of natural gas from its supplier, regulate pressure down to LDC operating pressure (typically 60 PSI or less), add mercaptan, which is a gas odorant, and distribute the gas to customers. Because there is no interstate pipeline within 50 miles of the Hanover/Lebanon franchises with which to interconnect, the Company plans to construct an LNG storage and vaporization facility, along with a CNG decompression facility, to supply the natural gas to the distribution system and its customers.

LNG will be trucked to the facility and off-loaded into LNG storage tanks. From the tanks, the liquid will be vaporized into gaseous form, odorized, and injected into the distribution system. This same procedure has been working reliably and safely at Liberty Utilities' current LNG plants for approximately 40 years. The Company has three LNG facilities currently in operation on the Liberty Utilities system. Liberty Utilities also includes the Keene Division which is an off pipeline system utilizing propane/air as its primary fuel source. All of these facilities are monitored by the Company's secure Dispatch and Emergency Control department located at the Londonderry headquarters.

This control room is manned 24 hours a day, seven days a week. The Keene Division and the existing LNG facilities are monitored by this team and are wired into the supervisory control and data acquisition (SCADA) system. Liberty Utilities will be utilizing this same team and control room for monitoring of the Hanover/Lebanon system as well.

CNG will also be trucked to the facility and attached to decompression skids, which will decompress the gas from approximately 3600 PSI to the working LDC pressure of approximately 60 PSI and injected into the system. This process has expanded rapidly over the years and has been working reliably and safely in New Hampshire for many private customers. The Liberty Utilities facility would be capable of bringing natural gas to more customers by aggregating demand through a local distribution system.

The engineering and operations plan includes design of the fuel storage facility, as well as the local distribution system that will be installed to serve our customers located within the communities. Determining factors included in the engineering criteria for the LNG storage and vaporization facility and the CNG decompression equipment are the ability to permit the facility locally, adherence to PUC 500 rules for gas service, adherence to NFPA 59A standards and the ability to expand the facility as demand necessitates.

2. Potential Site Plan

The Company began reviewing potential sites for the fuel storage facility in 2015 with an emphasis on the criteria listed above. After thorough evaluation, including meetings with the City of Lebanon and Liberty's own engineer, Sanborn, Head Associates, several parcels were ranked as the leading candidates. The particular location that Liberty intends to use for this project is zoned correctly, located close to an interstate highway where trucks would not have to travel through residential neighborhoods to reach the facility, would not negatively impact existing traffic conditions along Route 120, was large enough to not only accommodate the initial load but that of future expansions and met NFPA 59A requirements for vapor dispersion, thermal radiation and proximity to an airport. Sanborn Head completed a Phase 1 Fatal Flaw analysis of the site and confirmed the site as suitable for a combined LNG/CNG facility. Design basis for this analysis was:

SANBORN HEAD

Design Basis Liberty Utilities - Lebanon NH Site Fatal Flaw Analysis					
Equipment/Service	Fluid	Flow Rate	Pressure	Temperature	Comment
LNG Offloading	LNG	[redacted]	[redacted]	[redacted]	[redacted]
LNG Tanks	LNG	[redacted]	[redacted]	[redacted]	[redacted]
Vaporized LNG	Natural Gas	[redacted]	[redacted]	[redacted]	[redacted]
NG Sendout	Natural Gas	[redacted]	[redacted]	[redacted]	[redacted]
LNG Vaporizer	TBD	[redacted]	[redacted]	[redacted]	[redacted]
Boil Off Gas	Natural Gas	[redacted]	[redacted]	[redacted]	[redacted]
Boil Off Gas (after ambient heat exchanger)	Natural Gas	[redacted]	[redacted]	[redacted]	[redacted]

Confidential Appendix II-18 contains the full scope, analysis, and recommendation for the parcels which support development as an LNG and CNG fuel storage location. The site was evaluated based on full buildout of the Hanover and Lebanon communities over multiple years. Assumptions included certain large industrial customers with dual-fuel capability would remain dual-fuel, negotiation of a special contract exempting their load from the 7-day on site storage requirements in the Puc 500 Rules. Based on this, it was determined that LNG storage requirements, at full build, would include four 60,000 gallon horizontal storage vessels. Therefore, the fatal flaw analysis included thermal and vapor modeling utilizing four 60,000 gallon tanks.

Liberty Utilities' broker concluded that the combined parcels that would be required to construct the storage facility had a potential market value of slightly over [redacted]. For the complete Market Assessment please refer to Confidential Appendix II-19. However, the parcels were not on the open market and the owners did not have a pressing need to sell. In addition, after discussions with City representatives, this location was the only area that fit into the city's Master Plan as an industrial use. The City also stated it was not planning on adding any future industrial zones to the Master Plan. With that as background, the Company negotiated an option to buy the land for a final purchase price of [redacted]. The complete Option Agreement is attached as Confidential Appendix II-20.

3. LNG/CNG Fuel Storage

Liberty Utilities will operate this facility in accordance with all Puc 500 rules governing natural gas service while simultaneously offering the most cost effective commodity available to our customers. Therefore, the Company intends to utilize both LNG and CNG as fuel delivery options. According to Liberty Utilities' market assessment, there is considerable potential load in these communities which would make the storage requirements associated with 100% CNG utilization cost prohibitive. As a result, the Company will design a more cost effective, scalable, LNG storage option which will adhere to all local and federal regulations. However, there is a robust and diverse

availability of CNG in the northeast market which may be a better economic choice for customers. A more detailed analysis of the available pricing is presented in Section C. The Company intends to issue a Request for Proposal (RFP) for a turnkey service of delivered CNG to its facility. It is anticipated that this turnkey service will include the natural gas commodity, compression services, delivery to the Lebanon facility, and all associated decompression equipment to be located at the facility up to the transfer meter. Although this equipment will be owned and operated by a third party, Liberty Utilities anticipates the equipment will be subject to inspection by the Safety Division of the Commission as it will be connected to and supplying a regulated distribution company.

Puc 506.03 - On Site Storage - of the New Hampshire Code of Administrative Rules will apply to the Liberty storage facility and states:

Puc 506.03 On-site Storage.

(a) Unless separately addressed in a utility's integrated resource plan as defined in Puc 510.01(e), and approved by the commission pursuant to an adjudicatory proceeding pursuant to Puc 200, each utility shall determine its maximum projected design week demand based on the coldest historical consecutive 7-day period, otherwise known as the 7-day design demand, and determine the amount of firm gas supply to be furnished by natural gas pipeline deliveries and on-site storage inventory, if any, necessary to satisfy the 7-day design demand.

(b) In connection with the operation of its peak shaving facilities, each utility shall retain a minimum on-site storage inventory volume for peak-shaving between December 1 and February 14 of each year that is equivalent to the volume of on-site storage inventory deemed necessary to satisfy the 7-day design demand as determined in (a) above.

(c) Railway tank cars on the utility's rail sites shall be considered as on-site storage.

(d) A utility may count as on-site storage 70% of the guaranteed daily delivery capability over a 5 day period from a firm bulk fuel supply point or off-site storage facility for any situation in which the utility:

(1) Owns or leases tank trucks;

(2) Has a firm fuel supply purchase contract; or

(3) Has a dedicated supply and delivery service contract.

(e) As of February 15 of each year, the above minimum on-site storage inventory volume may be reduced to 75% of the December 1 requirement above.

(f) As of March 1 of each year, the above minimum on-site storage inventory volume may be reduced to 50% of the December 1 requirement above.

(g) Each utility shall notify the commission's safety division each week during the period from December 1 through April 1 of its on-site storage inventory levels.

(h) The information required by (e) and (d) above shall be submitted by electronic mail or through the commission's electronic report filing system (ERF) consistent with Puc 202.05 on each Tuesday, or the next day following a state holiday.

As previously discussed, Liberty Utilities has three LNG facilities located in Manchester, Concord, and Tilton, and three propane facilities located in Nashua, Manchester, and Tilton that are connected directly to its distribution system. The Company also owns and operates a fourth "satellite" propane facility in Amherst that is used solely for storage. These facilities are part of the Company's diversified portfolio of assets, which include various pipeline transportation contracts on seven interstate pipelines and four underground storage facilities in Pennsylvania and New York. The LNG facilities each have a storage capacity of approximately 4,200 Dth and the propane facilities have a storage capacity of approximately 137,000 Dth. Combined, these facilities provide over 47,000 Dth of peak day supply to supplement Liberty Utilities' interstate pipeline capacity.

These LNG and propane facilities are used primarily for supplemental supply on the coldest winter days, but in some cases they are used to provide pressure support for Liberty Utilities' distribution system. Because the LNG facilities have small storage capacities in comparison to the high gas demand during extended cold periods during the winter, it is necessary to refill them on an almost a daily basis. For example, over the past three years, the Company has used an average of approximately 250,000 dekatherms (Dth) of LNG each winter. Given that its LNG facilities only hold 12,600 Dth, which translates into approximately 20 full turns of its LNG inventory and over 270 truckloads of LNG each winter period. In fact, the Company operated its Tilton facility for over 70 consecutive days during the winter of 2014-2015 for pressure support on the system. It did this without reliability issues, even in the face of several large snowstorms and blizzards, when roads were shut down for a period of time. While this type of frequent and recurring trucking is needed for small capacity LNG facilities, the Company would install sufficient and scalable LNG storage tanks, so as to require less trucking.

Liberty Utilities' experience in managing trucking logistics demonstrates its ability to reliably meet the needs of all potential customers in the proposed Hanover and Lebanon "off pipeline" distribution system through a combination of LNG and CNG fuels.

4. Storage Scalability

As previously mentioned, storage scalability is an important factor in design planning for the fuel storage facility. Since the Hanover and Lebanon Expansion Project will occur over multiple years, storage requirements during the initial phases will be lower. Another factor affecting storage, both initially and into the future, is the potential of large anchor customers who have dual fuel capability and who can enter into a special "interruptible" contract. This could dramatically lower Liberty Utilities' storage requirements, while having a beneficial impact on all other customers' rates. The Company intends to charge customers in the Hanover and Lebanon region the same tariff distribution rates as

customers within the existing Liberty Utilities service territories, with the exception of the Cost of Gas (COG). This is explained in further detail in the Financial Plan and Analysis chapter. However, contained within the COG will be the Company's allowed return on the capital cost of this investment along with the pass through commodity costs. In order to keep these COG rates as low as possible during the initial phases of construction, which will allow for a more rapid saturation rate, a less capital intensive solution is optimal. However, as annual firm customer throughput increases, additional LNG storage will be required as well as more CNG decompression trailers and equipment. The ability to add these storage solutions on an "as needed" basis will have a beneficial impact on the economics of the project.

Liberty Utilities' proposed site is capable of accommodating four 60,000 gallon LNG storage tanks and several CNG decanting facilities. In order to reduce bill impacts, the Company will seek permits for the ultimate design criteria required to serve the full system buildout, but will only add storage and equipment on an "as needed" basis.

5. Distribution System Construction and Operation

The Company intends to install gas mains from the location of the liquefied natural gas (LNG) vaporization and compressed natural gas (CNG) decompression facility, to the initial anchor customers and lead residential and commercial customers located along the initial phase of the project. Such construction will include installation of polyethylene gas mains and service lines, which will be designed and sized appropriately to support the initial customer base, as well as expected growth from customers requesting service during or following construction. These facilities will be installed and maintained under Liberty Utilities' existing maintenance and construction standards and in accordance with industry standards and all applicable codes.

Typically, in construction projects of this scale, the Company will issue a request for proposal (RFP) for the construction of the distribution system consistent with contracts issued in the normal course of business throughout Liberty Utilities' service area. Step one in this process will be to issue an RFP to: (a) qualified contractors that have previously provided services to Liberty Utilities and who have demonstrated, through successful completion of projects, their ability to meet our standards of safety, reliability, and performance; and/or (b) contractors that have a demonstrated expertise within the scope of work identified in the RFP. Liberty Utilities has worked with a pool of qualified contractors such as RH White Construction, Inc., Midway Utility Contractors LLC, and Mears Construction LLC that have successfully completed multi-year contracts for construction services. These qualified contractors have offices and/or staging areas within our service territories, are familiar with the subsurface conditions of New Hampshire, and have considerable experience in the construction of gas distribution systems and facilities. The contract strategy ultimately selected will depend largely on the scope and amount of work over the initial startup period and on the long-term growth estimates and projections. All main and service facilities will be constructed to Liberty Utilities' current operating, maintenance and construction standards, which meet or

exceed US Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), New Hampshire Chapter Puc 500 rules and any and all other applicable federal state and local standards or permitting requirements.

Construction activity will begin when all regulatory approvals are received, when the final location of the LNG/CNG facility is determined, and when the number and location of customers to be served has been developed. Construction of the distribution system will commence in parallel with the construction of the LNG/CNG facility. The major distribution system construction to support the growth opportunities will likely be performed in phases over a two- to three-year period. The Company will meet with the City of Lebanon and Town of Hanover municipal and public works officials to determine the specific, local requirements for utility use and occupancy within their public Rights-of-Way (ROWs). Additional meetings will be scheduled as needed to review the proposed preferred routes for this project and coordinate to an appropriate level the short- and long-term scope of the gas distribution system construction project. Liberty Utilities has an excellent working relationship with the New Hampshire Department of Transportation (NHDOT). Liberty Utilities will work closely with the local state division highway road agents and engineers to review and submit any NHDOT road permits for construction. Since the Company coordinates its excavation and restoration activities for its utility maintenance and construction processes in 29 cities and towns across New Hampshire within our existing service territories, we have extensive knowledge and experience to accomplish this effectively in a manner that is the least disruptive to local traffic, businesses and residences.

The Company will have the necessary resources reporting out of the Lebanon Operations facility to meet the current emergency response requirements of Puc 504.07. The monitoring of the gas system reliability and dispatching of emergency job orders will be supported by the Emergency Dispatch and Gas Control Center located at Liberty's corporate office in Londonderry, New Hampshire.

The fuel storage facility and distribution system will be constructed and operated in accordance with current, established operating and maintenance standards and procedures, with which Liberty Utilities has extensive experience. The location of operations personnel to support the day-to-day operation of the proposed gas facilities will be managed from our Lebanon Operations facility and customer service walk-in center, both located at 407 Miracle Mile. The Company envisions utilizing this facility as a combination gas/electric customer service and operations center. Liberty Utilities would be able to employ existing personnel to perform common tasks such as meter reading, bill payment and customer service. Employees would charge their time appropriately to either Granite State or Liberty Utilities. This should result in direct benefit to existing Granite State customers. There would also be synergies for existing Liberty Utilities customers. It is not anticipated that Liberty Utilities would need to hire any incremental dispatch, finance, call center, or senior leadership employees to accommodate these new franchise towns. Therefore, these current costs would be spread

among new customers of these new franchise areas resulting in beneficial impact to existing Liberty Utilities customers. These synergies will also result in lower operating costs and lower rates for new customers in Hanover and Lebanon.

The staffing support for the operations area will be a combination of current and incremental employees working out of this Lebanon Operations Center. These employees will receive all required certification training and as well as any supplemental training necessary to support the gas operations processes. The intent is for the Lebanon team to support gas operations similar to that of Liberty Utilities' Keene Division. The Company anticipates, in the early stages, to locally support the day-to-day gas operations with the following, full-time, incremental employees:

- 1- Supervisor of Gas Operations
- 2- Gas Operations Field Technicians

Functions and processes supported by these employees will include:

- Emergency response and leak investigation
- Dig Safe mark-outs for damage prevention
- Customer metering field processes
- Mandated inspections and surveys
- Maintenance and repair of the underground facilities
- Production facility operation and maintenance
- Unloading of LNG transports
- Connection of CNG transports

The total estimated incremental cost on an annual basis for these employees is approximately $248,000.

In addition to these incremental employees the company expects to purchase the following equipment necessary to provide service along with the associated costs:

- 1- ¾ ton Pickup Truck for the Operations Supervisor = $ 50,000
- 1- 1 ton Utility Body Truck for Technicians = $ 70,000
- 1- ¾ ton Cargo Van for Technicians = $ 50,000
- 1- Backhoe = $ 80,000
- Miscellaneous tools and equipment = $ 25,000
- Total equipment cost = $275,000

The Company will have the necessary resources reporting out of the Lebanon Operations facility to meet the current emergency response requirements outlined in Puc 504.07:

> (a) For any utility that serves a single municipality or serves fewer than 2,500 customers, emergency response times shall be limited to within 30 minutes.
>
> (b) Reports on emergency response times shall be submitted as follows:

(1) For any response time in excess of 30 minutes, the utility shall report the amount of time it took to arrive at the location of the report of gas odor, the location of the report of gas odor, and a detailed explanation for its failure to respond to the location within 30 minutes and preventive measures taken to limit potential future exceedances.

(2) On a monthly basis the utility shall report the number of gas odors responded to, leaks and other unplanned releases of gas responded to, and any other emergency responses. The report should include the date, time and location of emergency response and reason for emergency response.

The monitoring of the gas system reliability and dispatching of emergency job orders will be supported by the Emergency Dispatch and Gas Control Center located at Liberty's corporate office in Londonderry. The LNG/CNG facility will be designed with the latest, proven equipment and technology available. The Company will also automate most control and safety functions. Existing staffing levels are capable of handling day-to-day facility tasks such as off-loading of LNG transports, connecting CNG trailers, performing maintenance and monitoring functions. Liberty Utilities' Production and Instrumentation/Regulation team will manage the fuel storage facility along with the distribution system while assuring all reliability and compliance mandates are achieved. The Gas Control team in Londonderry will monitor the facility with the current SCADA system deployed today at other Liberty Utilities production facilities. The addition of these functions to the existing responsibilities of internal resources will not have an adverse effect on existing customers or employees. Gas dispatching and emergency response contact will be handled from the Company's Londonderry headquarters. Operational and customer related functions will be managed locally in Hanover/Lebanon. This staffing structure is similar to how Liberty Utilities manages its Keene Division. The Company successfully transitioned the Keene Division into its operations without adverse effect on existing Liberty Utilities customers and expects to similarly transition the new franchise area.

6. Summary

Liberty Utilities has demonstrated that it has the managerial and technical ability to operate the proposed Hanover and Lebanon franchise area, much as it operates the Keene Division. The Keene Division is served by a centrally located propane air system which receives trucked deliveries of propane to meet 100% of our customer's needs. Therefore, managing and operating a system that is not physically connected to a pipeline is a function that Liberty has been doing successfully since it acquired the Keene Division on January 2, 2015.

Liberty Utilities also has in place a capable and experienced senior management team that is well suited for this type of business expansion. Many members of the management team were previously employees of National Grid who transferred to the

Company when it was acquired from National Grid. Other members of the senior management team were hired externally from other companies or organizations, bringing with them a wealth of knowledge of the business. This team has many years of experience operating a distribution utility in addition to decades of experience in operating LNG facilities.

Since transitioning from the predecessor company, Liberty Utilities has implemented many process improvements which have enhanced the Company's performance. Those improvements have occurred in virtually every area of the Company with positive results. For example, since September 2014, the Company has:

- Made all of its regulatory filings on time (40 – 50 filings per month);
- Improved its collections activity to reduce Liberty Utilities' 60-day uncollectible balance by more than 37%;
- Terminated all remaining Transition Service Agreements with National Grid;
- Improved its call answering service levels consistently achieving over 90%;
- Increased its sales activity to achieve an annual customer growth rate of approximately 1,900.

These improvements demonstrate that the management team of the Company is focused on exceptional performance. The addition of Hanover and Lebanon to the Liberty Utilities franchise area will be done in a manner that is seamless to other customers, and that will provide long-term benefits to existing and future customers**.**

C. Fuel Procurement Strategy

1. Introduction

Fuel procurement, in the form of LNG and CNG, will be the responsibility of the Energy Procurement group within Liberty Utilities, which is located at the Londonderry, New Hampshire headquarters. This group is comprised of 14 highly capable and experienced personnel with an average of over 15 years of energy industry experience. The Energy Procurement group is responsible for demand forecasting, scheduling, purchasing, retail choice and overall portfolio planning and logistics, including the solicitation and scheduling of LNG and propane supplies to its three LNG and four propane facilities. An example which demonstrates the ability of this talented group as it relates to economies of scale and an RFP process for a similar project appeared in the Keene Division. After its acquisition of the Keene Division, Liberty Utilities' Energy Procurement group took over the propane procurement process. Using its comprehensive RFP process, relationships with other propane suppliers, as well as combining Liberty Utilities' propane needs with those of the Keene Division, the Company saved approximately $0.45 per Dth or approximately 11% for its Keene customers. The Company's Keene

Division has similar fuel procurement logistics to what would be encountered if it served the "off pipeline" distribution system of Hanover and Lebanon. That is, the Keene Division is an "off pipeline" system served only via propane throughout the year. While the Hanover and Lebanon fuel supplies would be more diverse through the use of both LNG and CNG, the systems each require a constant supply of fuel year round that must be managed via trucking and reliable inventory management. With its experience in providing a reliable and least-cost supply service to the Keene Division, the Company is well positioned to provide that same quality of service to future customers in Hanover and Lebanon.

2. Fuel Storage Requirements

As stated previously, Chapter 500 of the Public Utilities Commission's administrative rules govern onsite fuel storage and require that the local distribution company (LDC), in this instance Liberty Utilities, have sufficient storage capacity to satisfy a seven day cold snap. The Company anticipates reaching an annual throughput of approximately 400,000 Dth of firm, non-interruptible demand after the first few years of buildout, with an estimated peak day of approximately 3,241 MSCF. In accordance with Puc 509.16, Liberty Utilities would be required to maintain sufficient on-site and movable storage to satisfy the needs of its customers based on the coldest historical consecutive 7-day period which currently is January 9-15, 2004. Based on these assumptions, the Company anticipates a 7-day peak storage requirement of 19,469 MSCF as shown in the following table:

	Hanover/Lebanon Division			
	Forecast of 7 Day Demand			
		Projected Demand	Peak Day	3,241
	HDD	(in Dth)	Ratio	
1/9/2004	68	3,110	96%	
1/10/2004	66	3,023	93%	
1/11/2004	59	2,718	84%	
1/12/2004	42	1,980	61%	
1/13/2004	47	2,198	68%	
1/14/2004	71	3,241	100%	
1/15/2004	70	3,198	99%	
	423	**19,469**		

The 7-day storage rule allows for the inclusion of 70% of trucking volumes for five days during the 7-day cold snap as part of the available storage inventory. If Liberty Utilities were to contract for 5 CNG trailers per day, it could include 70% of the 25 trucks (5

days) at 355 MCF per truck or 6213 MCF. That would result in a fixed storage requirement of 13,256 MSCF. That would equate to approximately 37 trailers be on site at all times during the winter period which would be economically and logistically impracticable. If Liberty Utilities were to purchase these trailers to satisfy storage requirements the cost would be approximately [redacted]. If the Company were to contract for these trailers from an external CNG provider, those costs would be rolled into the overall delivered product pricing. In contrast, this would equate to approximately 160,000 gallons of LNG storage which would be less costly and logistically more palatable. Therefore, the Company believes LNG to be better suited to meet on-site storage requirements of a mature distribution system. However, Liberty Utilities has been evaluating options to utilize CNG during the initial years of service with the potential of smaller, portable LNG storage to meet winter storage requirements when needed.

3. LNG and CNG

Relying on both LNG and CNG allows for fuel diversity, which results in a more competitive market when contracting for services. Ultimately, this will lead to a lower cost product for our customers which will produce more conversions to natural gas and result in higher returns for the company. Currently, there are two LNG import facilities in New England: the Canaport LNG terminal owned and operated by Repsol in New Brunswick, Canada, and the Distrigas terminal owned and operated by GDF-Suez in Everett, Massachusetts. However, only the Distrigas terminal offers trucked LNG. Others currently offering trucked LNG include Gaz Metro in Montreal, Canada, and UGI Corp of Reading, Pennsylvania. In addition to these facilities, there are multiple proposals for new facilities in various stages of development in the Northeast and New England. There are also nine CNG facilities that will be in operation by winter of 2017 in the northeast. These facilities are connected to various transmission pipelines in New Hampshire, Maine, Massachusetts, Vermont and New York. These varied options certainly constitute a diverse supply chain option that Liberty Utilities could tap through the competitive RFP bidding process. In addition, having both LNG and CNG supplies allows the Company to better manage trucking logistics to optimize delivery and price. That is, with a secondary fuel supply, the Company can expand its list of suppliers to include those from a greater distance, which in the case of LNG in particular, could be more cost-effective given that some LNG is priced off low cost Marcellus gas supply. Knowing that the Company can rely on one fuel source, while awaiting truck delivery from the other fuel source, provides optionality, which leads to lower cost and enhanced reliability.

4. RFP Process and Indicative Pricing

To satisfy its current LNG needs, Liberty Utilities conducts a comprehensive RFP process on a semi-annual basis for winter and summer supply and refill. The RFP process is necessary to determine the "best-cost" supply that takes into consideration both price and non-price factors such as reliability, flexibility and viability. The RFP is issued to all potential LNG providers in order to get the best possible pricing. In addition, the Company also issues a trucking RFP to determine the best available service for transporting the LNG commodity from LNG suppliers who do not offer a delivered service. There could also be a beneficial impact by combining the LNG requirements of the existing Liberty Utilities needs with that of the needs of the Hanover and Lebanon franchise area. Combining the requirements of both Liberty Utilities and satellite distributions systems would lead to greater economies of scale and a streamlined request for proposal (RFP) process. Liberty Utilities already has well-established relationships with LNG suppliers. Adding more volume in a combined RFP would provide negotiating leverage and allow for the potential awarding of volumes to multiple LNG providers, which would enhance supplier diversity. In addition, trucking logistics would be enhanced as trucks could be diverted from one LNG facility to another based on need.

In addition to the experience demonstrated when contracting for LNG supply service, Liberty Utilities has gained considerable experience working with CNG suppliers over the last few years while developing plans for the Hanover and Lebanon expansion, the conversion of the Keene facility and the potential of adding CNG into the portfolio of the entire Liberty Utilities footprint. The Company recently issued an RFP for a turn-key delivery service of CNG and/or LNG in Keene with a three-year term which would convert the higher pressure customers located on the "high-line" distribution system to natural gas. This portion of the distribution system is a dedicated network which utilizes a blower system to maintain pressure for these mostly commercial customers. By converting these customers to natural gas the Company will be able to retire the older, less reliable blower system which would also reduce operating and maintenance costs. A copy of that RFP is attached as Confidential Appendix II-21. Liberty received a robust response from the CNG and LNG markets, which demonstrates the health and diversity of those markets. The RFP garnered responses from nine different service suppliers. Those bids were evaluated based on pricing of varying services which were broken up as follows:

Bid Analysis			
Bidder	**LNG Price**	**CNG Price**	**Notes**
[redacted]			

Ultimately, that contract was awarded to Xpress Natural Gas (XNG) of Boston, MA based on pricing, reliability and engineering capabilities. A copy of the contract is attached as Confidential Appendix II-22. XNG has an extensive background in both CNG and LNG services. Included in their portfolio are compression facilities on multiple pipelines in the northeast which provides commodity pricing and delivery optionality. In addition, XNG has a long history of demonstrated, successful projects with both natural gas utilities and private companies. For a copy of a presentation made to Liberty Utilities by the leadership team of XNG please refer to Confidential Appendix II-23.

5. Portfolio Considerations

Another aspect of supply service for the Hanover and Lebanon communities is how that supply can fit within the existing Liberty Utilities portfolio of commodity assets. As stated earlier, Liberty Utilities has gained a wealth of experience throughout the Hanover/Lebanon expansion and the Keene conversion. As a result, the Company is evaluating how increased LNG volumes within the entire Liberty Utilities portfolio can

have a beneficial bill impact to existing customers. In addition, the Company is exploring the role CNG can play within the existing Liberty Utilities system which is currently connected to the interstate pipeline system. XNG has been able to put together an attractive offer for large volume deliveries of CNG for winter deliveries to various points on the Liberty Utilities distribution system. In many cases, the prices are lower than what is currently available for delivery on the Tennessee Gas Pipeline Concord Lateral. The pricing is certainly lower than past spot market pricing or LNG deliveries. XNG is able to provide this competitive pricing due to the contracted volumes and the ability to access multiple pipelines in the northeast. Examples of indicative pricing for various volumes and delivery points please see the table below:

Daily Volume in Dth (Nov - March)				
Delivered to:	1,000	2,000	3,000	4,000
Concord	[redacted]			
Manchester				
Tilton				
Algonquin Index				

For a complete presentation of this indicative price proposal please refer to Confidential Appendix II-24. As shown within the indicative pricing matrix, the delivered "all in" pricing is extremely attractive. Liberty Utilities is evaluating how the addition of CNG can fit into, not only the commodity profile of the company's satellite locations, but the existing pipeline facilities and how that may have a beneficial impact on existing customers.

Another potential addition to the commodity mix could be the utilization of renewable natural gas sourced from supplies located here in the northeast. The Company is in the process of meeting with a potential vendor that proposes to deliver large quantities of renewable natural gas to various points on the Liberty Utilities distribution system. If the quantity, pricing and quality are attractive, the Company will evaluate what tariff changes or enhancements are necessary to incorporate this energy choice into the fuel mix of Liberty Utilities. The Company has learned there are customers in both the residential and commercial markets that would be interested in such an option. If enough customers in aggregate sign up to receive service it could have beneficial impacts not only for our customers but the region as well.

6. Summary

Liberty Utilities has demonstrated over many years that its employees have a unique skillset when it comes to energy procurement strategies and execution. In particular, the existing Liberty Utilities commodity portfolio is diverse and unique. Currently, Liberty Utilities' franchise areas which receive gas via pipeline are connected to a single interstate pipeline. Due to capacity restraints in certain areas as well as supply availability at other times, the Company utilizes both LNG and propane for peak shaving needs. These facilities are decades old and storage capacities are low without the ability

to expand due to newer local and federal codes. Therefore, these supplies have to be managed logistically on a daily basis in the winter. The Keene Division is an existing satellite system which utilizes propane as its only fuel option. The Energy Procurement group has provided reliable and economic service to our customers and will utilize these skills to provide the same type of exemplary service to our future customers in the communities of Hanover and Lebanon.

D. Financial Plan and Analysis

1. Introduction

This section of the Expansion Plan contains growth assumption based on ICF data contained within the SIMS module as well as a five year installation of the distribution system backbone which will extend from the fuel storage facility to downtown Hanover. It also details the scalability of the fuel storage facility which allows for the addition of storage vessels as required during the five-year growth period. The scalability allows for the optimization of capital investment which allows for the most competitive pricing compared to competing fuels which ultimately leads to higher saturation rates along the new mains.

2. Methodology and Projections

The Company made certain assumptions based on past performance of initial saturation rates along new mains installed within the existing Liberty Utilities franchise areas utilizing pipeline gas as the commodity along with LNG and propane for peak shaving needs. The Company expects to achieve 60% saturation rates during the initial construction while some recent projects, such as the Bedford Expansion, achieved over 80% saturation rates during the first year.

However, due to the slightly higher delivered cost of CNG and LNG to a satellite location and a customer base that may not be as familiar with natural gas as an energy choice, the Company reduced those saturation estimates to 30% for residential customers and 40% for commercial accounts. Liberty Utilities based a higher saturation rate on commercial accounts due to a large number of propane conversions which are much less capital intensive for the customer as well as potential commercial customers being more aware of natural gas from other locations that currently have access to the fuel. The Company also assumed conversion of certain anchor customers as follows:

Annual distribution revenues associated with each year's buildout are as follows:

Year 1	
Annual Distribution Revenues	
R-3	[redacted]
G41	
G42	
Pike	
Total	**$ 976,281.00**

Year 2	
Annual Distribution Revenues	
R-3	[redacted]
G41	
G42	
Kleen	
Total	**$ 1,058,576.00**

Year 3	
Annual Distribution Revenues	
R-3	[redacted]
G41	
G42	
Hyperthern	
DHMC	
Total	**$ 690,071.00**

Year 4	
Annual Distribution Revenues	
R-3	[redacted]
G41	
G42	
College	
Total	**$ 858,649.00**

Year 5	
Annual	
Distribution Revenues	
R-3	[redacted]
G41	
G42	
Total	**$ 544,606.00**

Associated annual consumption in dekatherms (ADTH) for each phase is as follows:

Phase 1 = 367,323 ADTH

Phase 2 = 377,685 ADTH

Phase 3 = 379,393 ADTH

Phase 4 = 360,015 ADTH

Phase 5 = 161,755 ADTH

Construction estimates were developed for each phase of construction taking into account required horizontal directional drilling that would be required for pipe installation under rivers, interstate highway overpasses and state highway crossings. Also factored into these estimates were existing construction contracts with the Company's outside contractors. The Company believes savings could be achieved by following an RFP process and awarding the build to lowest cost, most reliable option. Construction estimates for the first five phases of construction are attached as Confidential Appendix II-25[1].

Upon awarding of the franchise, the Company would execute the Option Agreement for the parcels adjacent to the West Lebanon landfill and begin the permitting/design process. The fuel storage facility will have the ability to incorporate storage vessels which can be added as demand warrants. The ultimate facility will have the ability to accommodate four, 60,000 gallon storage tanks. However, during the first phase of the buildout the Company is anticipating utilization of CNG as the baseload fuel which will be awarded as a turn-key solution from after an RFP process. The Company will not be purchasing the equipment required to offer CNG but rather have such equipment be provided by the vendor in order to offer the most competitively priced option available. After receiving the required amount of committed load, the Company would begin construction of the distribution system. By utilizing all of the relevant information, the Company performed a Discounted Cash Flow (DCF) analysis over ten years for the

[1] Since Hanover and Lebanon are not currently within the franchise territory they are not listed in the City dropdown box shown in the Appendix. Allenstown is reflected within this estimate as it is the first town alphabetically. This does not affect pricing estimates.

Hanover and Lebanon Expansion Project. The result was a positive NPV of approximately $11.3 million. For a complete analysis please refer to Confidential Appendix II-26.

3. Conclusion

In summary, the Hanover and Lebanon Expansion Project is an economic success for the Company as well as existing Liberty Utilities customers. The Company based saturation rates very conservatively compared with recent natural gas expansion projects. In addition, the Company employed existing contractor pricing for distribution mains and services without projecting potential savings which could be achieved through an RFP process when awarding such a large scale contract. Even with these conservative projections, the project results in a favorable 10-year NPV of approximately $11.3 million. Total capital required to complete the distribution system construction for the initial five years is estimated at approximately $9.7 million which is in line with original expectations. Estimated annual consumption results utilizing ICF data available through the SIMS portal along with known consumption of the previously stated anchor customers was approximately 1.6 Bcf which is also in line with original expectations.

III. Public and Community Relations Plan

A. Introduction

Liberty Utilities possesses an impressive and skillful staff of government and community relations professionals. This team is led by our Director of Government and Community Relations, Michael Licata. Michael has an extensive background in public policy and community relations.

Also represented on this team will be our Program Manager for Communications and Media Relations, John Shore. John has over 20 years of experience in marketing and communications. He is an expert with customer communications and the development of press releases using multiple channels, including print, web and social media.

In addition to these two high performing individuals the Public and Community Relations Team will consist of:

- William Clark, Director, Business Development
- Rich McDonald, Director, Gas Operations
- Lisa DeGregory, Sales Manager
- Emily Paquette, Marketing Analyst
- Andrew Morgan, Commercial Account Manager

B. Community Background

The communities of Hanover and Lebanon are located in the Upper Valley region of New Hampshire. The communities border the state of Vermont along the Connecticut River and are accessible by Interstate Highway 89. Both communities offer residents an excellent quality of life as demonstrated by an increasing population. The area is home to world renowned colleges, universities, hospitals and manufacturers. The communities have some of the lowest unemployment rates in the region along with job growth projections that exceed the national averages. Both communities have strong environmental convictions that the Company believes will make natural gas an attractive alternative to competing fuels currently available in the region. For a complete demographic profile of these communities please refer to Appendix III-1 and Appendix III-2.

C. Outreach and Community Contacts

Liberty Utilities began the community outreach process by meeting with City and Town officials to brief them of our plans to serve the communities, the location of the planned fuel storage facility, the impact to their communities during the construction, the benefits of natural gas and the Company's desire to work with them throughout the process. This outreach began in August of 2015. An initial meeting with the City of Lebanon took place on August 26, 2015 and included public safety officials, the Planning Department as well as the City Manager. Liberty Utilities followed up the initial meetings with a public presentation for members of both communities and public officials. The event was held on September 29th at the Lebanon Opera House. Speakers for Liberty Utilities included:

- **David Swain -** President Liberty Utilities – NH
- **Michael Licata -** Director, Government and Community Relations
- **William Clark –** Director, Business Development
- **Ian Crabtree -** Senior Engineer
- **Lisa DeGregory -** Manager, Sales and Marketing

The presentation focused on who Liberty Utilities is as a company along with our corporate parent, Algonquin Power and Utilities Corporation, the benefits of natural gas, the storage site selection process, how and where the distribution system will be installed, safety, energy efficiency and the sales process. For a complete copy of the Power Point presentation please refer to Appendix III-3. There were approximately 55 attendees present and the Company received many questions from the audience. Questions ranged

from system costs, timelines for construction, emergency response and system monitoring. A large number of questions related to the environmental properties of natural gas compared to other fossil fuels and other types of alternative energy sources.

Although a sign-in sheet was not circulated the following public officials were present for the presentation:

- Lebanon Fire Chief
- City Manager for Lebanon
- Town Manager for Hanover
- Municipal Officials from the Lebanon Landfill
- State Representatives
- Members of the Lebanon City Council

Liberty Utilities has been an active member in the communities and has participated or sponsored various events such as:

- Wings and Wheels sponsor
- Hanover Chamber of Commerce Networking Event
- CHaD Hero Event Sponsor
- Hanover Chamber of Commerce Business Leadership Awards Sponsor

Liberty Utilities will continue to be an active member of the communities of the Upper Valley and will continue to support local businesses, chambers, non-profits and charitable organizations. The Company strives to develop strong relationships in the communities we serve and will also work closely with all local officials throughout the permitting and construction process. In addition, the Company will continue its excellent relationship with all state officials as we work through permits required at that level.

D. Action Plan

Liberty Utilities' first priority behind the safety of its customers and employees is to keep residents within Hanover and Lebanon informed as major events unfold. Secondly, it is vital to the Company's success that town officials, business owners, and key decision makers understand the economic and environmental benefits of bringing natural gas into their community. More affordable energy bills, combined with the reliability and convenience of natural gas, will be an economic social benefit to customers and the region. Liberty Utilities is preparing future public presentations along with community open houses which will link customers with installation contractors, energy efficiency experts as well presenting financing options. If Liberty Utilities receives regulatory

approval for the franchises of Hanover and Lebanon, an action plan will be initiated which includes:

- The Company will keep all home and business owners informed of the construction activity planned in their area in order to minimize the impact via social media, website postings, email blasts, bill inserts, City/Town websites, newspapers and/or company newsletters.
- Special website pages dedicated to the Hanover/Lebanon Expansion within the Liberty Utilities website. These pages will have the functionality to be able to include both electric and natural gas information.
- All media inquiries will be directed to the specially appointed Liberty Utilities employees in the Marketing/Communications/PR department. This will ensures local reporters will have a dedicated contact which ensures all information distributed is accurate.
- Liberty Utilities will continue to be an active member in the communities of Hanover and Lebanon by continuing to engage in community events, volunteering opportunities and sponsorships

E. Summary

Liberty Utilities has an experienced and dedicated team that will lead a positive and successful community outreach program. Members of this team are adept at public presentations to various audiences, from subject matter experts to industry novices. Our media relations manager has numerous contacts within the industry and will provide timely, informative and correct information from all inquiries. Our Commercial Account Manager has extensive experience explaining complex issues to existing and potential customers. The Company will build on its existing strong relationships within the community to respond quickly and accurately to questions that municipal leaders and the general public may have regarding the system construction or sales process. Liberty Utilities is uniquely qualified to implement and follow through on a rigorous community action plan upon awarding of the Hanover and Lebanon franchises.