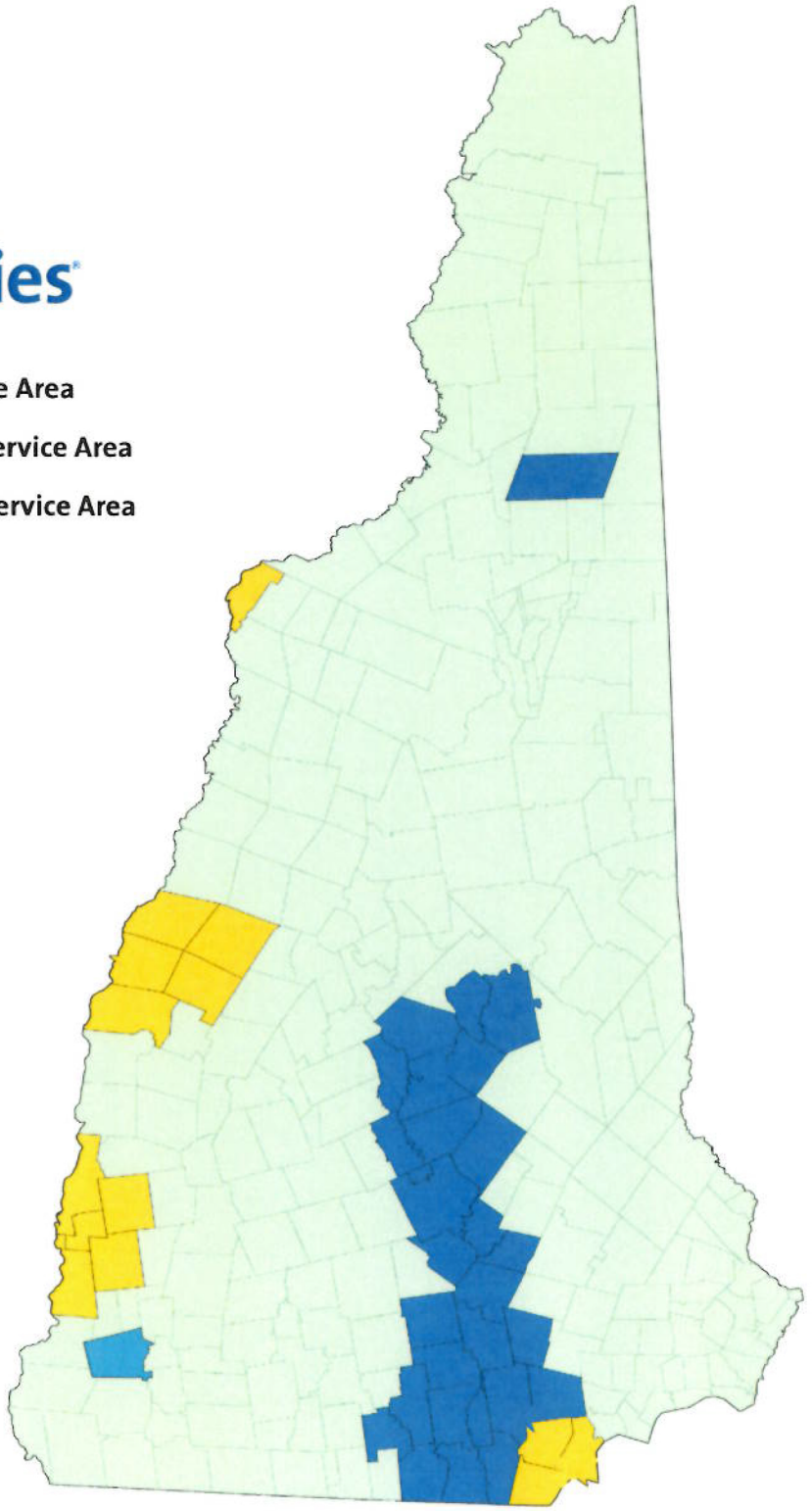
Combined Franchise Area

Liberty Utilities

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



Liberty Utilities[SM]

Pricing, Growth, Opportunity…
The LDC Perspective

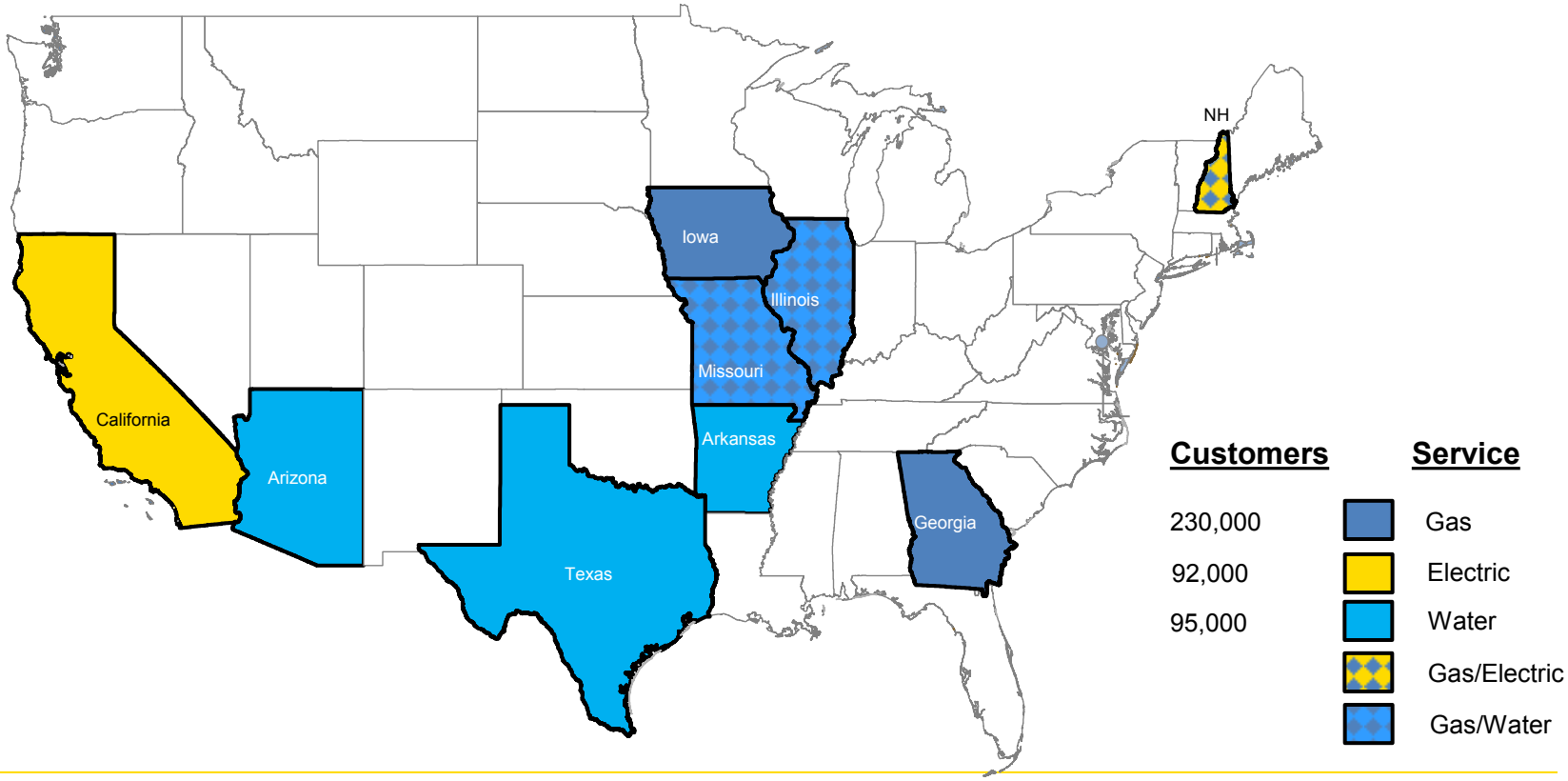
New Hampshire Business & Industry Association
Annual Energy Seminar
December 11, 2013

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

026R

About Liberty Utilities

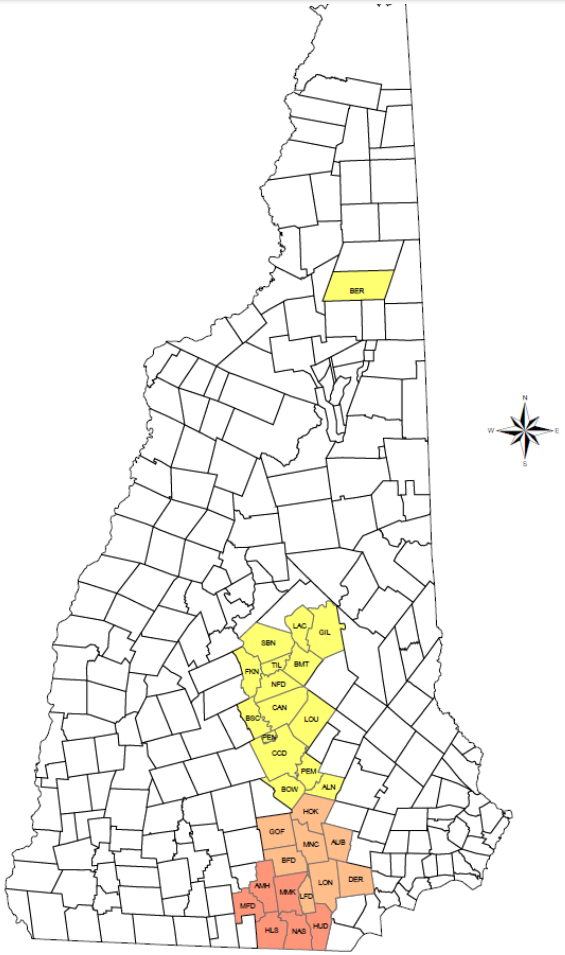
- 29 gas, electric and water utilities across the U.S.
- Serving over 410,000 customers



027R

EnergyNorth Natural Gas, Inc.

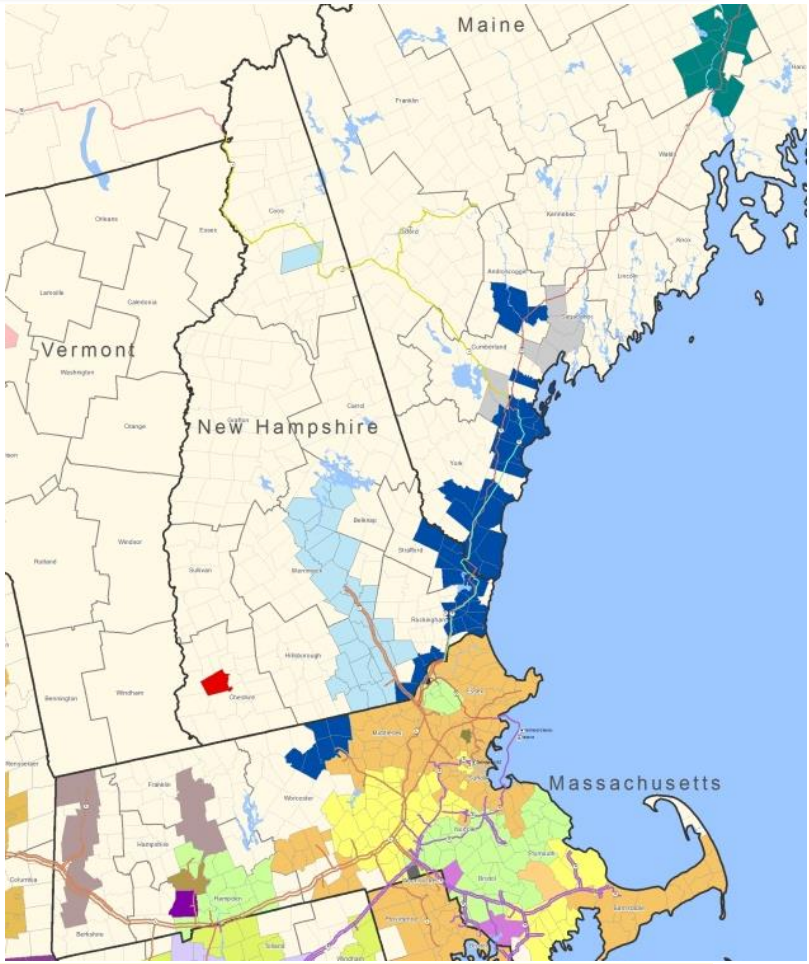
- Largest Liberty Utility
- Almost 90,000 Natural Gas Customers
- Footprint in southern to central NH
- Isolated system in Berlin
- Largest concentration of customers in Nashua and Manchester



028R

Pipeline Resources

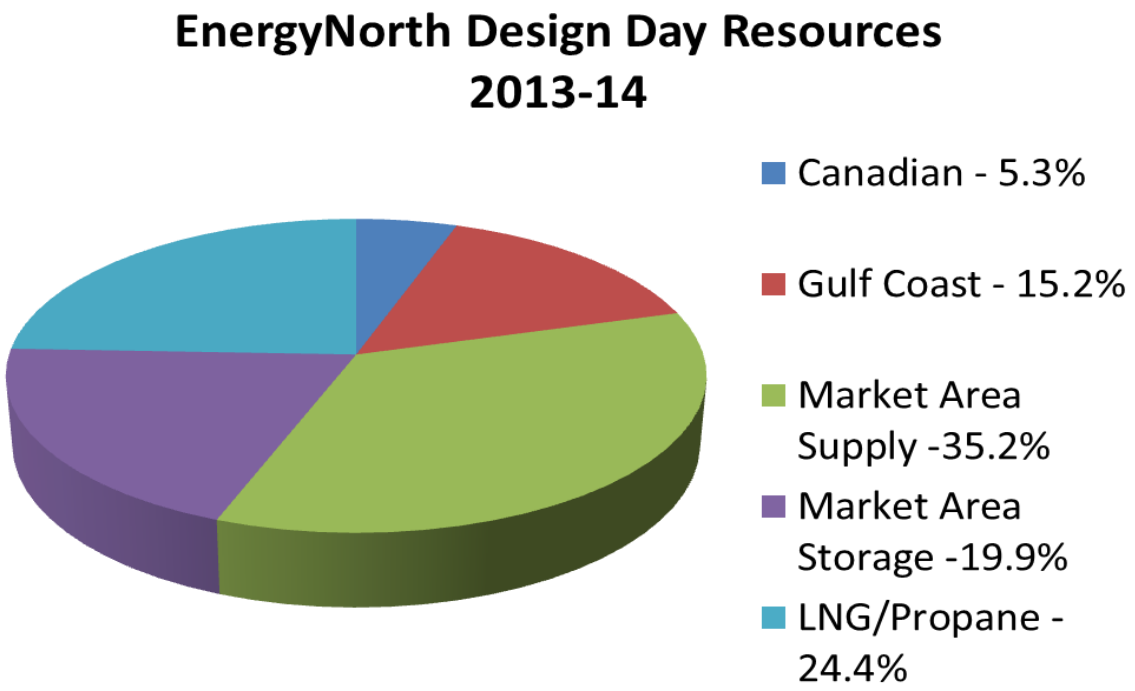
- Capacity on 7 interstate pipelines and 4 underground storage facilities
- 7 direct interconnects with Tennessee Gas Pipeline
- Single interconnect with PNGTS in Berlin
- Supplement pipeline gas with on-system LNG (3) and propane (3)



029R

Portfolio Diversity

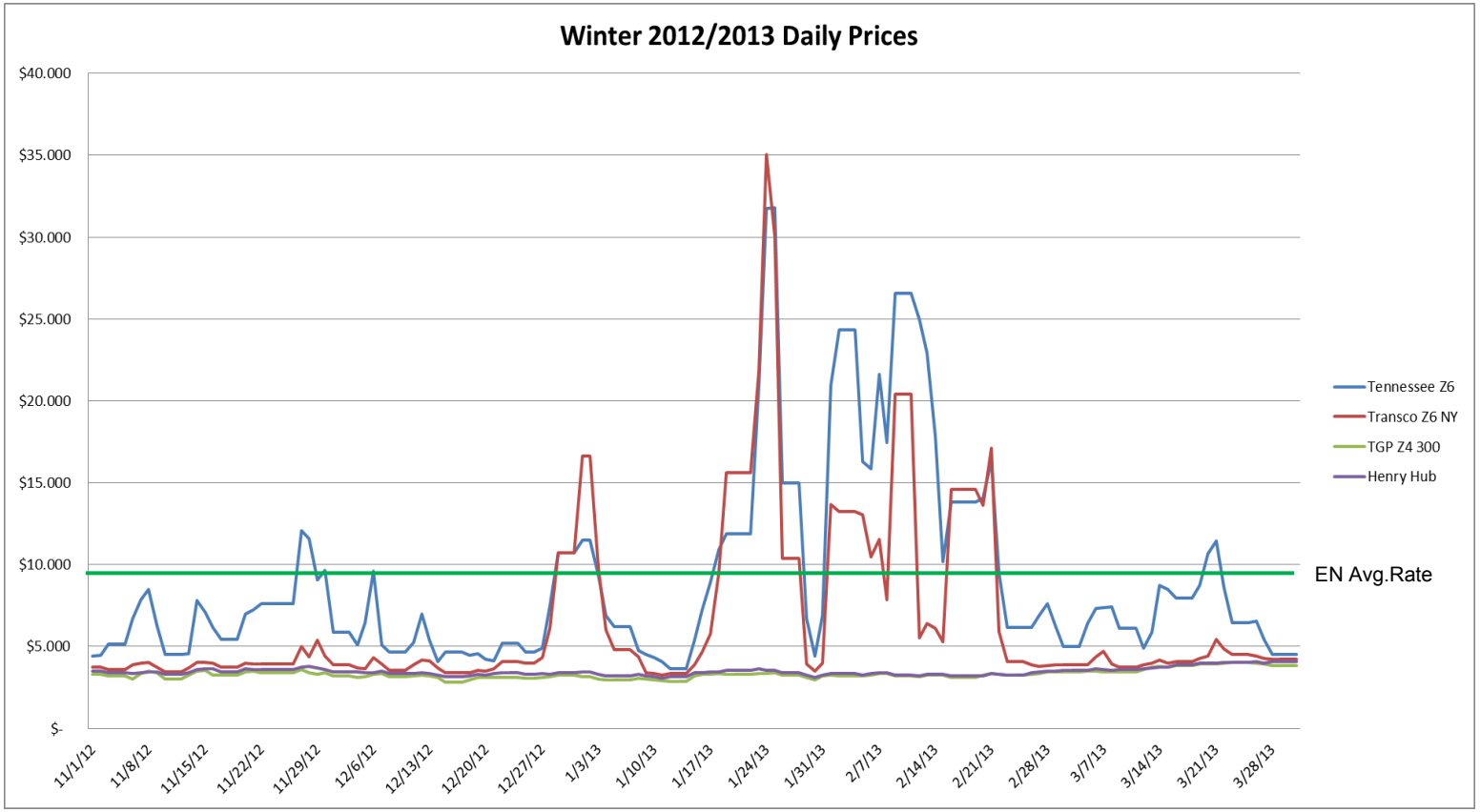
- Combination of pipeline, underground storage and on-system peaking resources
- Gulf, Marcellus, Canadian and Market Area purchase points



030R

Pricing Diversity

Diversity of supply helps to minimize price spikes but…



031R

…new pipeline infrastructure is long-term solution

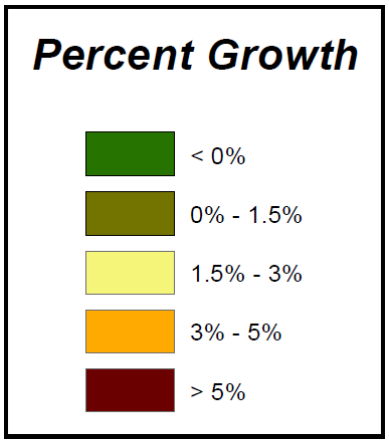
Current Growth…Future Opportunity

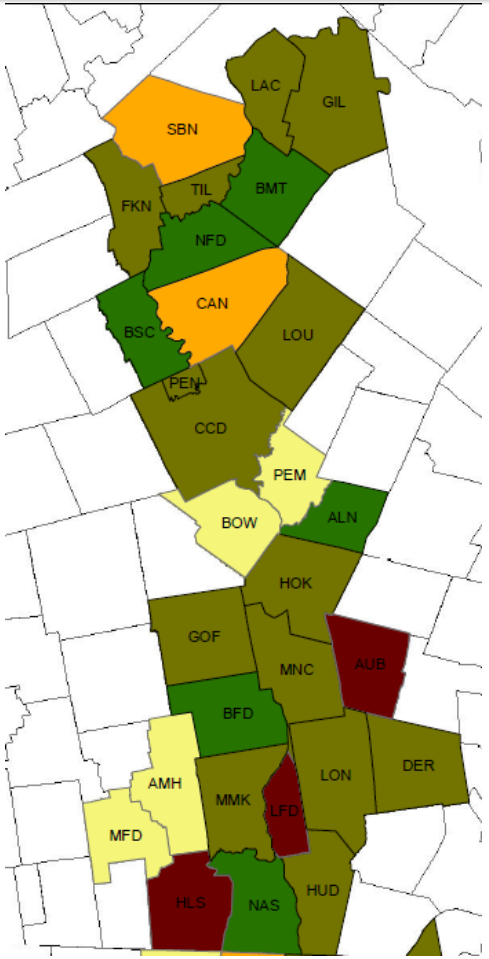
Opportunities

- 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*

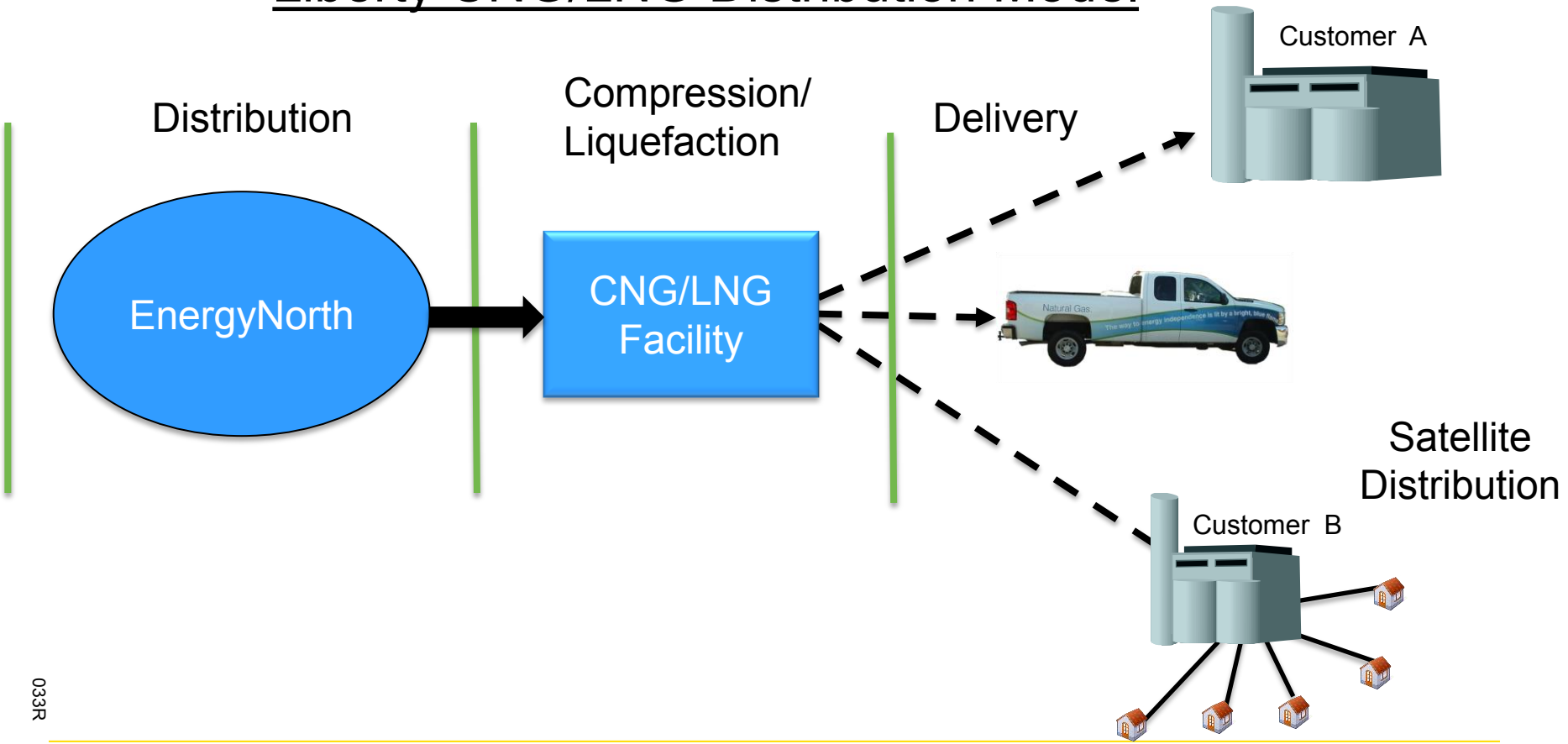




032R

Overcoming The Challenge

Liberty CNG/LNG Distribution Model



033R

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

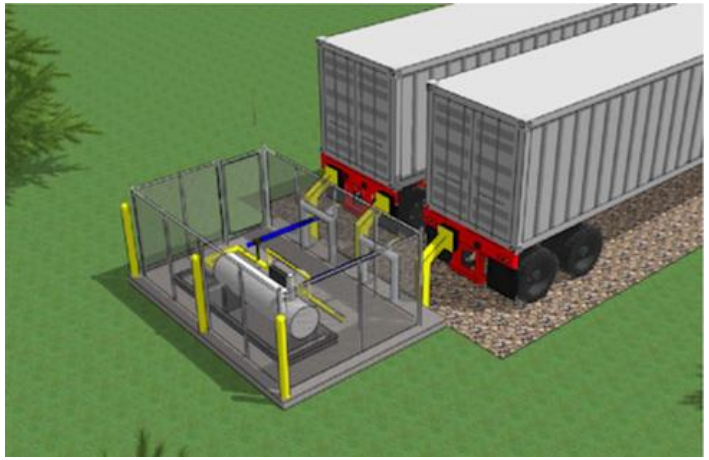


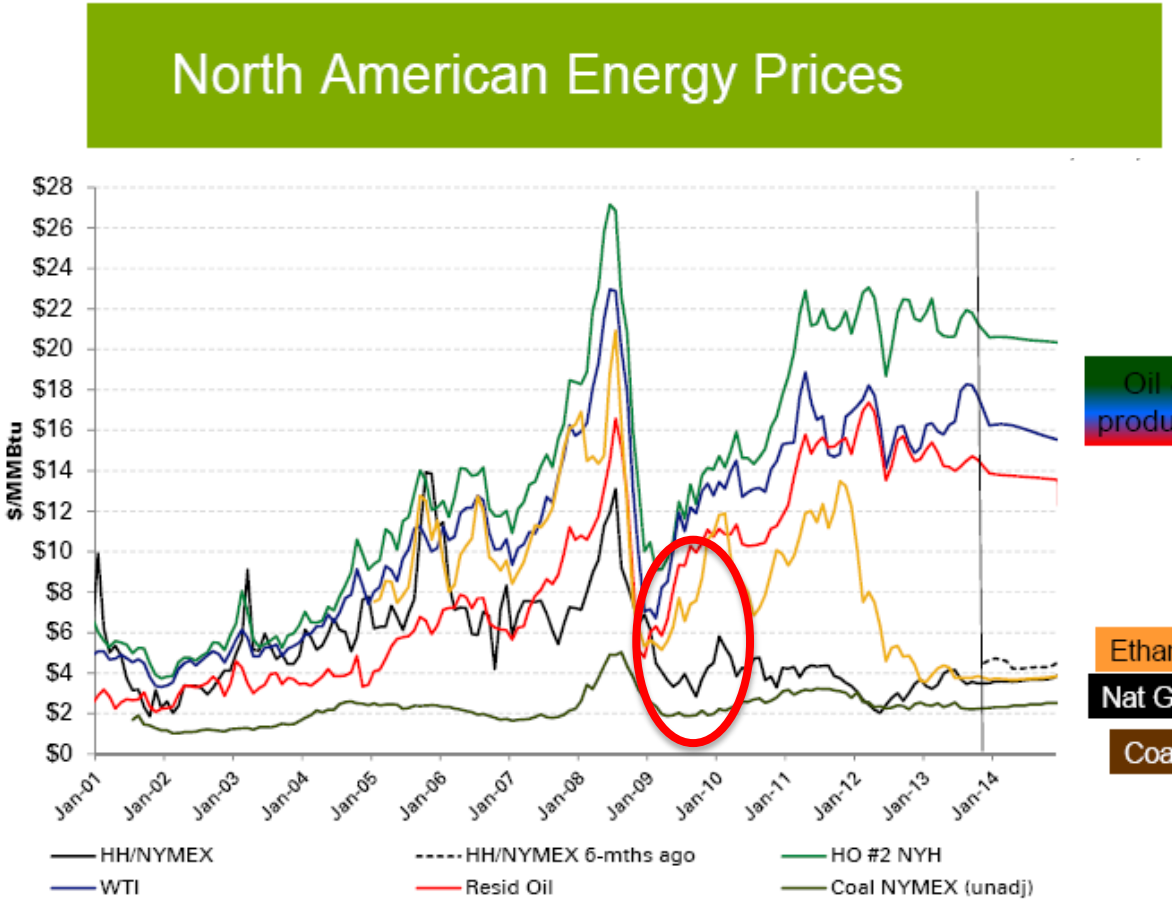
Illustration: NG Advantage

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

034R

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

035R

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

036R

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!

037R

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

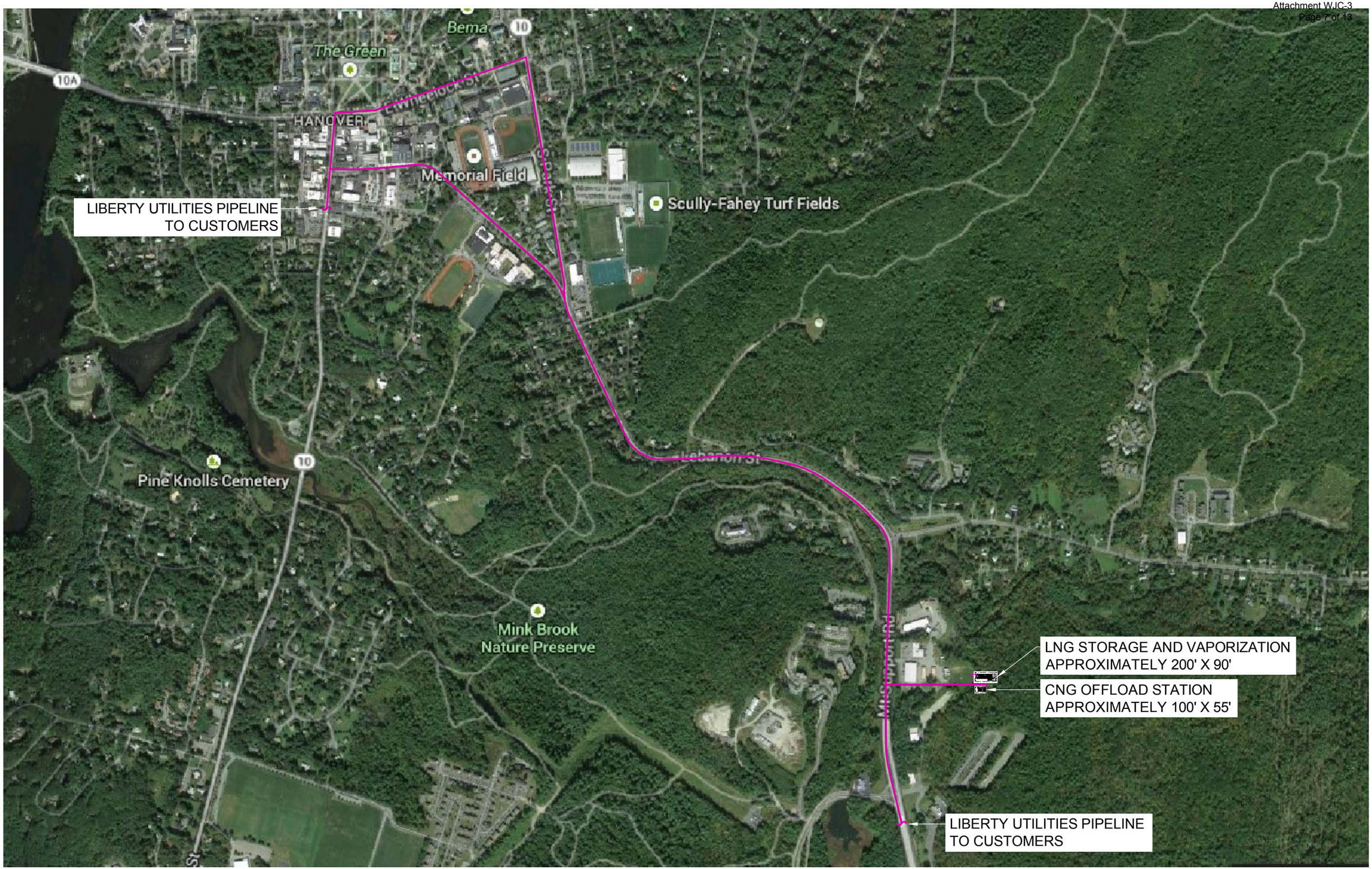
Please refer to Section A above.

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 HAMPSHIRE

PROJECT NUMBER: 3672.00

ATTACHMENT A - LNG/CNG/PIPELINE CONCEPTUAL LAYOUT

SHEET NUMBER: 1 OF 1

044R

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 HAMPSHIRE

ATTACHMENT B - LNG/CNG/PIPELINE CONCEPTUAL EQUIPMENT LAYOUT

PROJECT NUMBER: 3672.00

SHEET NUMBER: 1 OF 1

046R

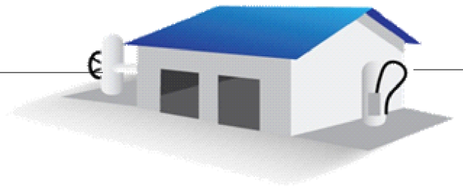
ATTACHMENT C

CONCEPTUAL LNG/CNG/PIPELINE SCHEMATIC

PROVIDED BY CNG SUPPLIER

PIPELINE

CNG MOTHER STATION



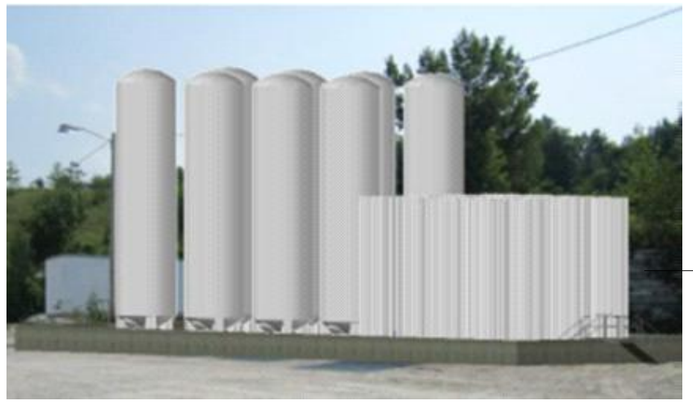
CNG TRAILERS

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 HAMPSHIRE

ATTACHMENT C - CONCEPTUAL LNG/CNG/PIPELINE SCHEMATIC

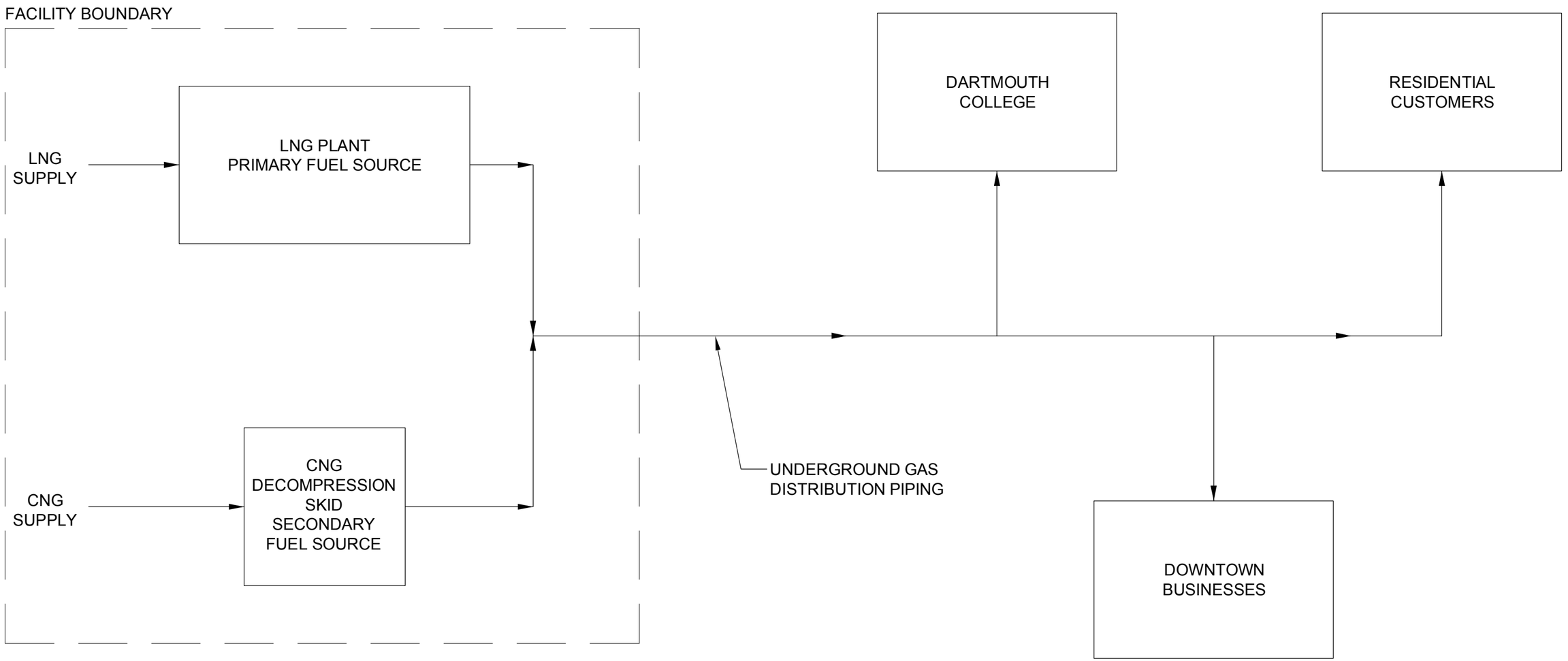
PROJECT NUMBER: 3672.00

SHEET NUMBER: 1 OF 1

048R

ATTACHMENT D

SIMPLIFIED LNG/CNG/PIPELINE SCHEMATIC



Liberty Utilities℠

NO.	DATE	DESCRIPTION	BY

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

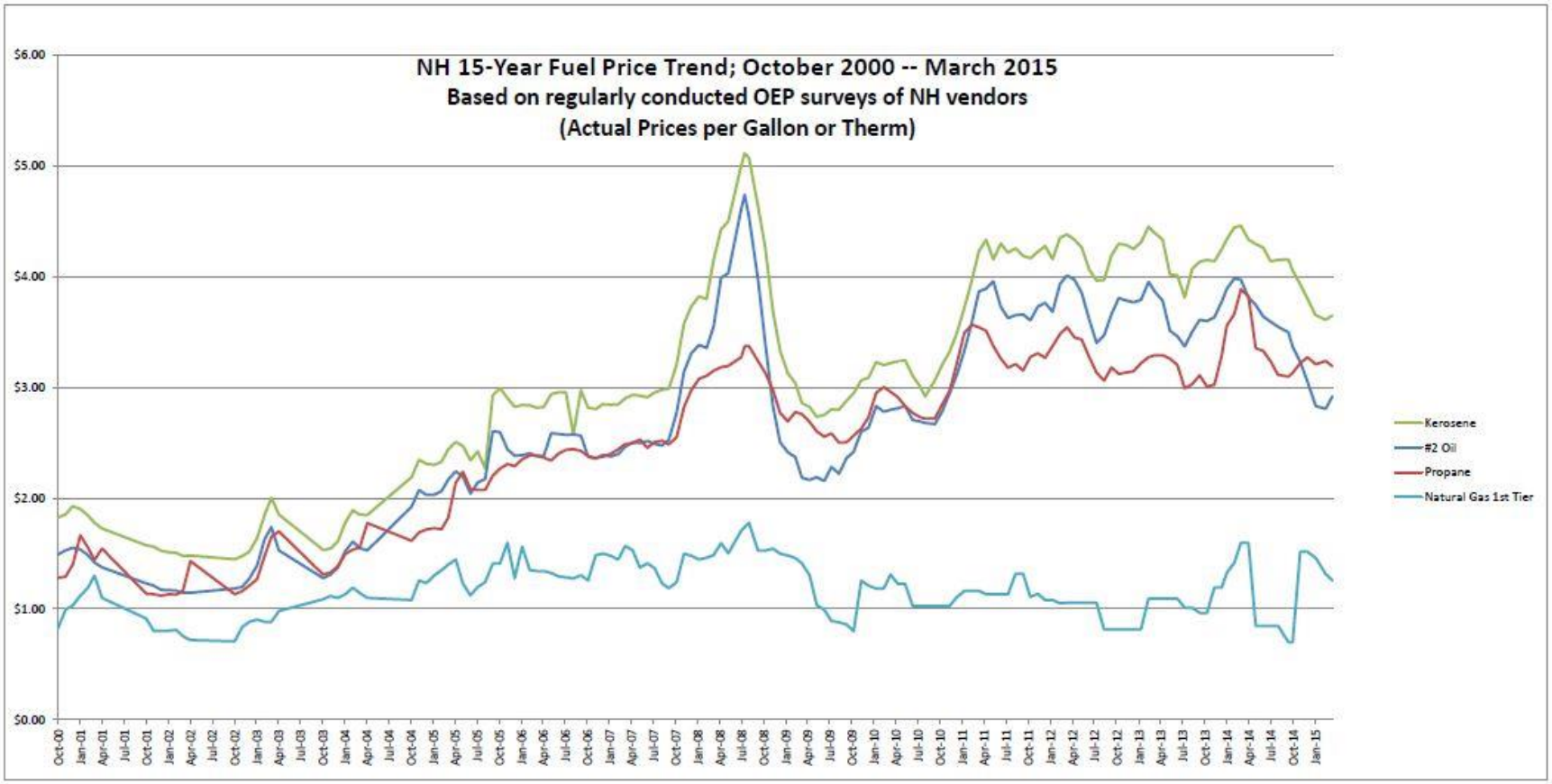
REQUEST FOR INDICATIVE BIDS
DARTMOUTH COLLEGE
HANOVER, NEW HAMPSHIRE

ATTACHMENT D - SIMPLIFIED
LNG/CNG SUPPLY SCHEMATIC

PROJECT NUMBER: 3672.00

SHEET NUMBER: 1 OF 1

050R


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**	2,338	63	69	1,935,864
	Commercial	634	357	1,182	8,992,656
Lebanon	**Residential**	3,398	63	69	2,813,544
	Commercial	916	357	1,182	12,992,544
West Lebanon	**Residential**	1,490	63	69	1,233,720
	Commercial	449	357	1,182	6,368,616
	Total	9,225	1,260	3,753	34,336,944
	ADTH				3,433,694

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

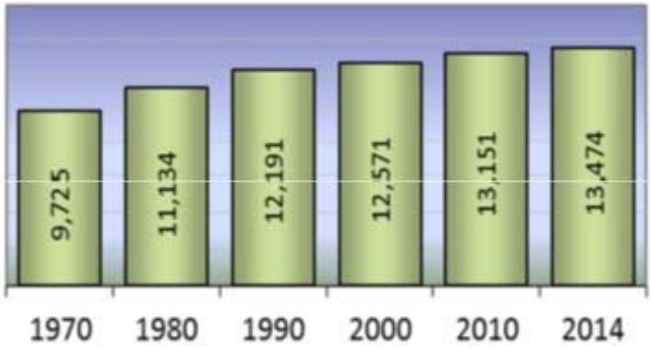
The communities of Hanover and Lebanon are located in the Upper Valley adjacent to the Connecticut River and bordering Vermont. Liberty Utilities is the local electric distribution company for these communities and has an operations center located at 407 Miracle Mile, Lebanon. Having an established presence 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.

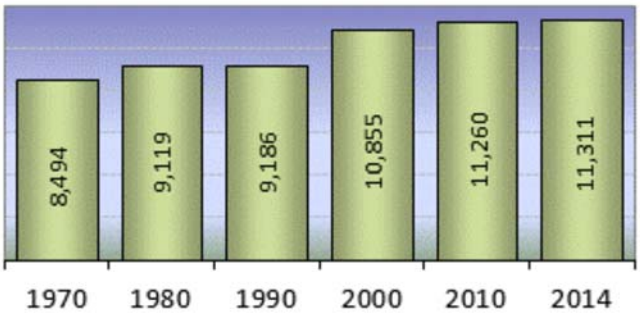
Population trends are also on the rise in these communities, which bodes well for future expansion into the region. Population trends for the communities are as follows:

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	SPC**	ongoing discussions
DHMC	[redacted]	[redacted]	8 miles	SPC	ongoing discussions
Kleen Laundry	[redacted]	[redacted]	5 miles	SPC	ongoing discussions
Pike Industries	[redacted]	[redacted]	1700'	G-53	Direct Mail/Sales visit
Alice Peck Hospital	[redacted]	[redacted]	4.6 miles	G-43	Direct Mail/Sales visit
Hypertherm	[redacted]	[redacted]	6.1 miles	G-53	Direct Mail/Sales visit
Timken	[redacted]	[redacted]	3.5 miles	G-53	Direct Mail/Sales visit
Upper Valley Plaza	[redacted]	[redacted]	1.2 miles	G-42	Direct Mail/Sales visit
Valley Square Shopping	[redacted]	[redacted]	4500'	G-42	Direct Mail/Sales visit
Centerra Business Park	[redacted]	[redacted]	7.9 miles	G-42	Direct Mail/Sales visit
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	200 gpm (maximum)	80 psig (nominal) 100 psig (maximum)	-260 °F	(2) 100% capacity pumps, off-loading stations. Pumps to increase pressure from 20-40 psig in transports to 80 psig nominal pressure in tanks.
LNG Tanks	LNG	--	80 psig (nominal) 100 psig (maximum allowable)	-260 °F	(4) LNG Storage Tanks, nominal 60,000 gallons capacity each. 4 days of storage for uninterruptible users @ 90% nominal capacity. (6482 MSCF peak daily rate - 2/3rds of users uninteruptible.)
Vaporized LNG	Natural Gas	358 MSCFH (maximum) 45 MSCFH (minimum)	70 psig	50 °F	Maximum hourly flow rate based on peak demand estimate from Liberty Utilities (does not include Dartmouth College). Minimum flow rate assumes an 8:1 turndown.
NG Sendout	Natural Gas	358 MSCFH (maximum) 45 MSCFH (minimum)	60 psig	50 °F	Pressure based on distribution system MAOP.
LNG Vaporizer	TBD	--	--	--	6.5 MMBtu/hr - required heat output.
Boil Off Gas	Natural Gas	0.74 MSCFH	80 psig	-240 °F	Assumes a boil off rate of 0.1 % per day of the 90% full tank volume.
Boil Off Gas (after ambient heat exchanger)	Natural Gas	0.74 MSCFH	70 psig	Ambient Temperature less 20 °F	Downstream of ambient heat exchanger.

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

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 $12 million. 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:

- Pike Industries as a G54 account in Year 1 with ADTH of [redacted]
- Kleen Laundry - special contract at G53 rate in Year 2 with ADTH of [redacted]
- DHMC – special contract at G43 rate in Year 3 with ADTH of [redacted]
- Hypertherm as a G53 rate in Year 3 with ADTH of [redacted]
- Dartmouth College – special contract for ½ load with ADTH of [redacted]

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

Year 1		
Annual		
Distribution Revenues		
R-3	[redacted]	
G41		
G42		
Pike		based on G54 rate
Total	**$ 976,281.00**	

Year 2		
Annual		
Distribution Revenues		
R-3	[redacted]	
G41		
G42		
Kleen		based on G53 rate
Total	**$ 1,058,576.00**	

Year 3		
Annual		
Distribution Revenues		
R-3	[redacted]	
G41		
G42		
Hypertherm		
DHMC		Based on estimated special contract to remain dual fuel
Total	**$ 690,071.00**	

Year 4		
Annual		
Distribution Revenues		
R-3	[redacted]	
G41		
G42		
College		Based on estimated special contract to remain dual fuel and take or pay
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

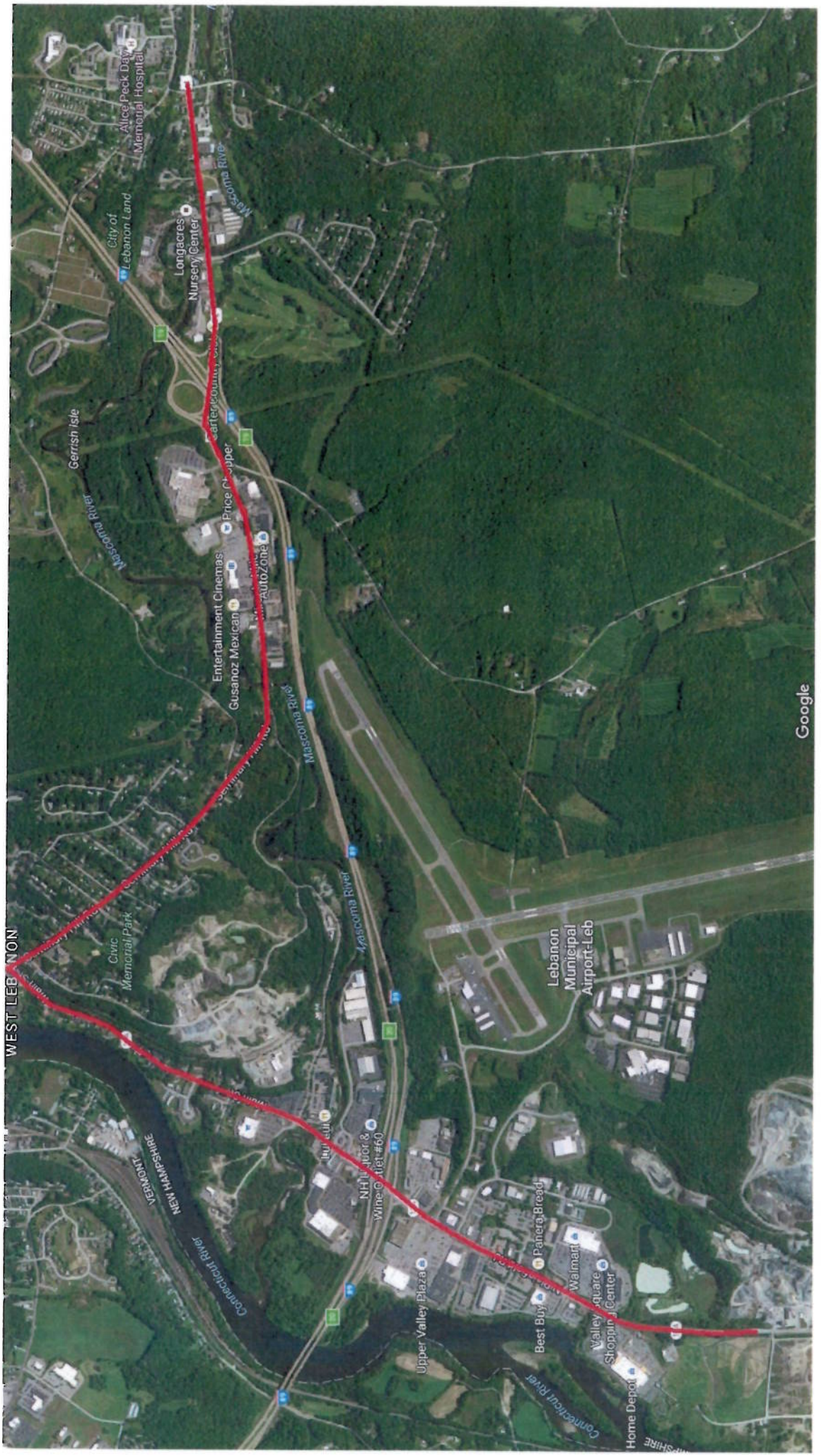
Liberty Utilities' first priority behind the safety of its customers and employees is to keep residents within Hanover and Lebanon informed as major events unfold. Secondly, it is vital to the Company's success that town officials, business owners, and key decision makers understand the economic and 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

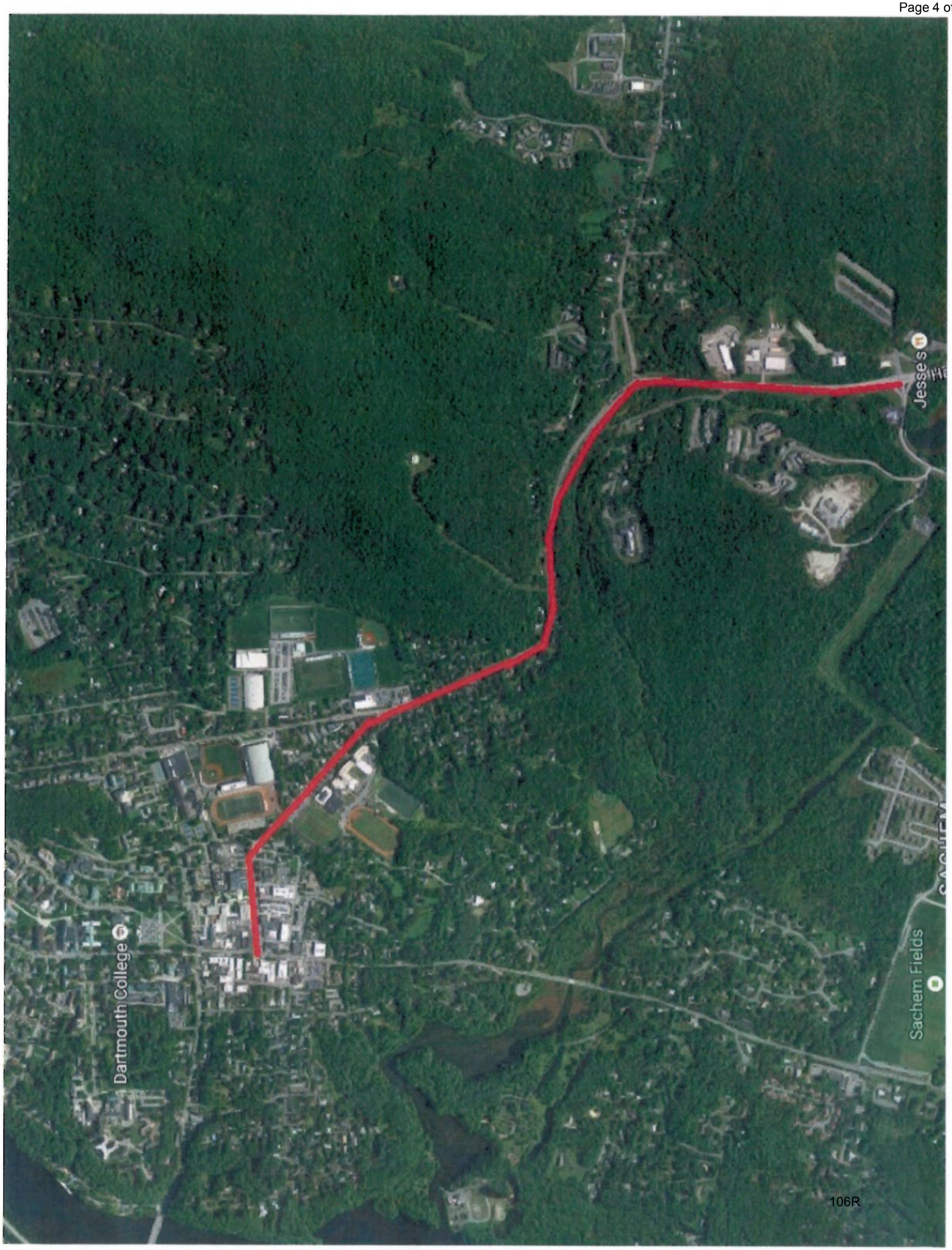
E. Summary

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.


WEST LEBANON
Alice Peck Day Memorial Hospital
City of Lebanon Land
Longacres Nursery Center
Mascoma River
Gerrish Isle
Entertainment Cinemas
Gusanoz Mexican
AutoZone
Civic Memorial Park
Lebanon Municipal Airport-Leb
VERMONT
NEW HAMPSHIRE
Connecticut River
Upper Valley Plaza
Best Buy
Panera Bread
Walmart
Home Depot
Google


Natural Area
Dartmouth Coach
Lebanon High School
Great Hollow
The Fort
Exit 18 - Mascoma River Land
Starr Hill
Dunkin' Donuts
Three Tomatoes Trattoria
Lebanon, NH
Lebanon
Bank St
Alice Peck Day Memorial Hospital
104R


Creare
Hypertherm
Great Hollow Forest
Rix Ledges
Dartmouth Coach
Zeev Darer Memorial Natural Area
Centerra
Residence Inn Hanover Lebanon
Co-Op Food Store
Courtyard Hanover Lebanon
Element Hanover - Lebanon
Jesse's


Jesse's
Dartmouth College
Sachem Fields
106R

Liberty Utilities
WATER GAS ELECTRIC

February 5th, 2016

[redacted]
Lebanon, NH 03766

Dear [redacted]

This letter of intent ("**Letter of Intent**") sets forth the material terms and conditions under which Liberty Utilities (EnergyNorth Natural Gas) Corp d/b/a Liberty Utilities ("**Liberty**" or the "**Company**") will provide long term natural gas distribution services to [redacted] Liberty and [redacted] for the purposes of this Letter of Intent are, collectively, the "**Parties**."

Liberty is a regulated natural gas utility serving approximately 90,000 customers in New Hampshire, including Keene where the Company provides propane distribution services to 1,250 customers. Liberty is proposing a multistage project which would bring natural gas service to residential, commercial, and industrial customers in Hanover and Lebanon including [redacted]. Liberty intends to design, develop, permit, construct, own, and operate a regulated natural gas distribution system with the primary supply of natural gas to the system in the form of LNG, CNG, or a combination of LNG and CNG which would serve [redacted] (the "**Project**"). The Parties acknowledge that significant time and financial resources will be incurred by Liberty to develop the Project and by executing this Letter of Intent [redacted] is expressing its commitment to use natural gas supplied from the Project as a fuel source.

This non-binding Letter of Intent is not binding on any Party and shall not create any obligation or commitment of any kind (except for Section 6 and 7(iv)), including to enter into definitive documentation or to give any rights or claims in the event that for any reason any party terminates negotiations with respect thereto. The material terms and conditions set forth in this non-binding Letter of Intent are intended to be the subject of further discussions and then incorporated into legally binding definitive agreements (the "**Definitive Agreements**"), which Definitive Agreements will contain additional terms and conditions yet to be agreed upon.

1. **Description of the [redacted] Facilities.**

   (i) The Parties acknowledge that the intent of the Project is to locate all or substantially all of the fuel delivery equipment at a site owned by Liberty with the only equipment located on [redacted] property being the natural gas service riser, regulator(s) and gas meter.

(ii) The Parties acknowledge that certain modifications to the [redacted] meter manifold location may be necessary to allow [redacted] to use natural gas from the Project as its primary source of fuel. The Parties shall work together to determine the supply and design requirements. The Parties agree that the transition point between Liberty owned equipment and [redacted] owned equipment shall be the outlet flange of the gas meter.

2. Description of Liberty Facilities.

Liberty has completed preliminary scoping of the Project based on its understanding of the peak and average volumes of customer demand. Liberty will own suitable acreage of industrial zoned property that it intends to use for the primary delivery, storage, vaporization, and distribution equipment. Liberty anticipates that the Project will consist of the following primary equipment.

(i) **Distribution:** Liberty will construct, own and operate certain fuel delivery and supply equipment and utility distribution piping within the City of Lebanon and Town of Hanover which will vaporize, odorize and distribute sufficient quantities, in supply and pressure, of natural gas to the [redacted] facility. Liberty will maintain all material and equipment required to deliver natural gas to the [redacted] facility as part of the distribution services pricing contract.

(ii) **Storage Services:** Liberty will construct, own and operate certain fuel storage equipment to provide for twenty four (24) hours of peak day capacity to the [redacted] facility as part of the distribution services pricing contract. If [redacted] wishes to contract for more than 24 hours of peak day capacity, Liberty will offer such service at a mutually agreed upon incremental price.

(iii) Pricing of gas distribution service provided by Liberty to [redacted] shall be based on Liberty's investment in the equipment necessary to serve [redacted] as described above, and shall be sufficient to yield a reasonable return to Liberty, taking into account anticipated delivery sales and minimum quantities of gas delivery services.

3. Liberty – [redacted] Special Contract

(i) Liberty has entered into contracts with large commercial customers and/or customers that will require substantial utility system modifications to establish gas supply services. These special contracts ("**Special Contracts**") are negotiated and executed between the utility and customer and approved by the New Hampshire Public Utilities Commission and are the definitive document providing the details of service and pricing.

(ii) The Special Contract will include mutually agreeable terms that are typical for agreements for the delivery and sale of gas services to customers of similar size and operating characteristics. These terms will include, but are not be limited to, the following:

(a) [redacted] will purchase all gas delivery services from Liberty.

(b) The Parties will agree on minimum and maximum quantities of gas delivery services.

(c) The Parties will agree on contract length, renewal, and exit options.

(iii) The Parties recognize and agree that finalization of the Special Contract is dependent upon the Parties agreeing upon mutually acceptable terms (including, without limitation, agreement to acceptable payment terms and to comply with all applicable laws and regulations), and upon receipt of all necessary internal approvals, up to and including approvals of the management of both Parties. The Parties hereunder shall only be obligated to negotiate in good faith to attempt to agree upon the terms of a Special Contract, and nothing contained herein shall require any party to enter into any Special Contract or any other definitive agreement unless the terms thereof are satisfactory to such Party in its sole discretion.

(iv) The Parties agree and understand that any Special Contract is subject to the approval of the New Hampshire Public Utilities Commission.

5. Fuel Commodity Purchase

The Parties agree to negotiate in good faith the terms and conditions for the purchase and delivery of LNG and or CNG as needed to support the fuel requirements of [redacted]

6. Exclusivity

Until mutually agreed upon by the Parties, Liberty shall maintain the exclusive right to negotiate with [redacted] for the delivery, storage, vaporization, ordorization, and distribution of natural gas services to [redacted] This exclusive right will be for a period of one year and will continue on a month to month basis thereafter unless terminated with thirty (30) days written notice.

7. General Provisions.

(i) **Representations Regarding this Letter of Intent**. By their execution of this non-binding Letter of Intent, the Parties represent and warrant that they are authorized to enter into this Letter of Intent, that it does not conflict with any contract, lease, instrument, or other obligation to which either is a party or by which either is bound, and that, to the extent specifically so described in the preamble hereto, it represents their valid and binding obligation, enforceable in accordance with its terms.

(ii) **Notices**. Any notices to be given hereunder by either Party to the other shall be in writing and shall be sent by fax with confirmation sent via regular mail, addressed

to the other Party at the address set forth below, or at such other address as such Party may specify in writing as provided below:

[redacted]
Lebanon, NH 03766
Attention: [redacted]
Email: [redacted]

To Liberty
15 Buttrick Road
Londonderry, NH 03053
Attention: William Clark
Email: william.clark@LibertyUtilities.com

Notices shall be effective upon receipt.

(iii) **No Consequential Damages.** No Party shall be responsible to any other Party for any consequential damages of any kind arising hereunder and directly related to this Letter of Intent.

(iv) **Confidentiality**. The Parties agree that during the term of this Letter of Intent, a Party may obtain access to certain confidential and proprietary business and commercial information of another Party or of third parties, and agree to maintain the confidentiality of such information. Upon termination of this Letter of Intent, any confidential or proprietary information in the possession of either Party shall be returned to the other Party and/or destroyed with notification and proof of destruction to the appropriate Party.

(v) **Waiver**. The waiver by either Party of a breach of any term or provision of this Letter of Intent shall not operate or be construed as a waiver of any subsequent breach of the same provision or of the breach of any other term or provision of this Letter of Intent.

(vi) **Counterparts**. This Letter of Intent may be executed in two or more counterparts, each of which shall be deemed an original, and which together shall constitute one and the same agreement.

(vii) **Governing Law**. This Letter of Intent shall be governed by and construed in accordance with the laws of the New Hampshire.

If the foregoing is acceptable to you, please countersign this Letter of Intent where indicated below and return a copy to me.

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP.

By: _____

Name: William J Clark

Title: Business Development Manager

[redacted]

[redacted]

Name [redacted]

Title: [redacted]

This Statement of Work (the "SOW") is entered into on **March 15, 2016** (the "SOW Effective Date") is an attachment to the Master Services Agreement (the "Agreement") dated **March 15, 2016**, between **ICF INCORPORATED, LLC** ("ICF"), and **Liberty Utilities** (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (the "Client") (each a "Party" and collectively, the "Parties") under and in accordance with the terms and conditions of the Master Services Agreement.

In addition to the work and services to be performed by ICF pursuant to the Agreement and any other SOWs now or hereafter existing under the Agreement, ICF shall perform the services specified herein (the "Services") in accordance with the terms and conditions of the Agreement.

Except as specifically stated herein, each capitalized term used in this SOW shall have the same meaning as is assigned to it in the Agreement. In the event of any conflict between this SOW and the Agreement, the terms of the Agreement shall govern.

PROJECT DEVELOPMENT - SCOPE AND APPROACH

1. Scope Overview

The Client has contracted with ICF to provide the Client with the necessary tools and services to improve the performance of its gas conversion program and assess opportunities to expand its gas infrastructure. ICF will use its Gas Analytics Module that leverages ICF's proprietary Strategic Intelligence Management System (SIMS) and accompanying staff expertise to:

- Acquire relevant demographic, firmographic, and property data for the Client's New Hampshire service territory and franchise towns.
- Identify the attributes of potential customer segments that are optimal targets for natural gas conversion that are on-main (within 100 feet of the main) and off-main (beyond 100 feet of the main) and map the location of top targets for location-based outreach within the Client's service territory (including the franchise towns).
- Use consumption data loaded into SIMS for New Hampshire on current residential and commercial customers to estimate the potential load for non-customer premises. As part of the standard setup, it is anticipated that up to four residential consumption clusters will be generated based on demographic and property attributes and that up to eight commercial customer consumption clusters will be generated based on entities with similar firmographic characteristics.
- Each non-customer target premise will be assigned the following data:
    - SIMS targeting score based on propensity to convert to natural gas
    - Estimated distance from main. Note that all distances will have a level of uncertainty to be calculated and communicated to the Client after data is received and sample data is tested.
- Provide the Client with results from above via the SIMS online mapping user interface.
- Franchise towns include:
    - Pelham
    - Keene
    - Windham
    - Hanover
    - Lebanon

The SIMS User Interface is the dashboard that visualizes the data to highlight potential customer targets and track marketing campaigns. The dashboard has drill down capabilities based on hierarchies pre-defined in consultation with the Client. The Client will have the ability to drill down using the maps, filters, and selection tools to pull their data extracts from the user interface. ICF will provide the Client

with the Gas Analytics via an analytics-as-a-service retainer model that includes both professional consulting services and deployment of software-as-a-service solutions to support the professional consulting services. As part of this SOW, ICF will deploy its SIMS in support of its Analytics Services. Use of the SIMS is governed by the Software Access and License Agreement executed separately as part of the Agreement.

In addition to standard SIMS Gas Conversion setup and analytics described above, the client may request additional time and materials support for business development assessments such as the high level screening of potential liquefied natural gas distribution locations based on the prospective customer population surrounding the locations or market assessments for alternative pipeline build out scenarios. Time and materials support beyond the included analytics support hours can be addressed through additional SOWs.

This SOW describes the deliverables for ICF & Client for deployment of the SIMS Gas Analytics, the purchase of 3rd party data, and the Analytics Retainer that covers included professional services from ICF staff to manage the project, define analytical questions, and deliver actionable results.

2. Project Approach

The Client requires ICF Services for the duration of the Project. The ICF Consultant(s) assigned to this Project will assist in the implementation of the ICF's Gas Analytics and assist the Client in gaining a better understanding of this module.

The scope of the Project is described below and also includes certain responsibilities and assumptions and associated delivery dates that are the responsibility of the Client. In addition to the tasks specified in the SOW hereto, the Client agrees to provide appropriate Project resources, including but not limited to data, information, and appropriate and cooperative personnel, to facilitate the performance of the Services. The Client shall designate a Program Manager to work with the ICF Consultant(s) to facilitate the provision of the Services. It is mutually understood that business requirements, resources and dates may change.

The Project is estimated to start on March 15, 2016 and has a projected completion date of June 30, 2018. The Consultants will work on the Project during this time, and provide support as specified by the scope of work.

3. SIMS Use Case Specifications

As a result of the implementation of the project, the Client will have the ability to login to and interact with the SIMS user interface. SIMS will be utilized to transform raw data into insights and present the insights back to the Client as highly actionable intelligence. The standard SIMS software and associated analytical services will provide the following capabilities:

- Profile generation
- Geospatial visualizations
- Filtering functionality
- List generation capabilities to managers through the SIMS user interface or provided by ICF staff

4. Project Data Requirements

Multiple utility and non-utility datasets will be stitched together in the SIMS to enable deployment of the Gas Analytics. Available data along with formats and mechanisms for transfer will be defined during project initiation. The following sections are designed to set expectations about the type of data that will be included in the analysis for this project (if available). Acquisition of required third party datasets will be facilitated by ICF. Third party demographic, firmographic, and property data can be acquired for both Client customers and non-customers who live within Client's service territory and franchise towns and may serve as targets for new customer acquisition based on attributes and locations.

4.1. Client Data

Client is responsible for providing the following data during Project Initiation. To meet the proposed timelines for project initiation, the following data (along with any lookup tables required to interpret the data) must be provided by Client in full in an agreed upon format no later than April 15, 2016.

- Locations of Client's existing natural gas infrastructure/GIS mappings
- Service territory and new franchise town boundaries
- Customer geospatial locations if available (latitude/longitude preferred)
- Customer names
- Customer service addresses
- At minimum twelve months of historical billing data (monthly data)
- Additional relevant customer information system data such as customer type
- Past program participation if available (energy efficiency and/or fuel conversion)
- Known restrictions for where pipe can be put in
- Capacity constraints (optional)

4.2. Third Party Data

The following third party data sets are expected to be acquired and integrated into the SIMS by ICF in support of the Gas Analytics.

- Demographic data for residential customers and non-customers within the service territory and franchise towns may include:
  - Age
  - Household composition
  - Length of residence
  - Income
  - Home ownership status
  - Education level
  - Dwelling type

- Behavior/Lifestyle predictors

- Firmographic data for commercial customers and non-customers within the service territory may include:
  - NAICS code
  - Revenue range
  - Number of employees
  - Years in business
  - Contact name / phone

- Property attribute data for residential and commercial structures may include:
  - Building owner
  - Building owner contact info
  - Property value
  - Year built
  - Square footage
  - Heating system type

- Weather data from NOAA weather stations to disaggregate natural gas consumption data into baseloads and seasonal loads

5. Project Phases

The Gas Analytics project and costing structure is broken into the following phases including: Project Initiation, Third Party Data Purchasing, Analytics Retainer, and Time and Materials Support. These sections are designed to provide the Client with an understanding of the major work conducted in each task and the deliverables and timelines associated with those tasks.

5.1 Project Initiation

Project initiation covers the startup phase of the project that requires gathering project requirements, understanding available data, identifying data gaps, working with the Client staff to formulate key initial analytical questions and business use cases and to prototype, presenting proposed initial analysis parameters for approval, and provisioning access to the SIMS online interface for receiving gas analyses results. This phase runs concurrently with Data Acquisition. Major activities are expected to include:

- Conducting a virtual kickoff meeting with the Client Project Manager, Client Data Lead, and other client team members as appropriate
- Setting up of the SIMS for processing Client and third party data
- Working with the Client Data Lead to define data transfer formats, receive the data files, and process the Client customer and natural gas main data in SIMS.
- Establish formats for sharing gas conversion marketing outreach and program conversion data.
- Obtaining and processing weather data from NOAA weather stations as appropriate to run weather normalization and load disaggregation on Client billing data.
- Receiving and processing third party data acquired during the Data Acquisition task

- Configuring the gas analytics to align with Client's specific business rules
- Generating the first round of results including:
    - Calculating SIMS targeting score, distance from main estimate, and estimated load for all non-customer premises in the service territory and franchise town boundaries
    - Displaying the gas analytics results on the user interface that will include basic, geo-spatial data visualization and analysis capabilities
    - Provisioning access to the SIMS user interface.

It is anticipated that the project initiation phase will last approximately three months from the project start date assuming timely access to Client data and participation from the Client staff in defining the priority business use cases (estimated dates March 15, 2016 – June 30, 2016). The delivery of the first round of targeting results and SIMS login provisioning will occur within three months of ICF receiving Client customer data, past gas conversion participation data and any non-customer premise data (in Client service territory or franchise towns) that will be provided by Client. The formal deliverables anticipated during the Project Initiation Phase are:

1) *Data Request Template:* ICF to provide Client with a data request template that will specify to Client's data lead the requested data fields in advance of the kickoff meeting.
2) *Analysis Request Template:* Provisioning by ICF to Client of an analysis request template. The analysis request template will be used by Client staff in coordination with the ICF Project Manager and ICF Lead Gas Analytics Representative to specify the parameters of analyses, timelines, and requested delivery formats (e.g. Excel spreadsheet with specific included fields or map-based visualizations) during both project initiation and throughout the analytics retainer period.
3) *Kickoff Meeting:* ICF facilitation of the virtual kickoff meeting. Kickoff activities will include resolving any questions regarding data to be provisioned and working with Client staff to define initial analyses using the analysis request template.
4) *Business Requirements Documentation:* ICF provides documentation of the business requirements and analytical questions that will guide the remainder of the work.
5) *Data Load Report:* Generation of a SIMS data load report that will summarize the Client and Third Party data loaded to SIMS and the data that has been excluded. For excluded data, the report will include reasons for exclusions. This report will also include data acquired and integrated by franchise town.
6) *First Round of Targeting Results* Generating and delivering the first round of targeting results specified in the analysis request template.
7) *SIMS Login Provisioning:* Provisioning authorized Client staff with logins to the SIMS user interface

5.2. Data Acquisition

The Data Acquisition task involves acquiring the third party datasets for customers and non-customers required to be integrated in SIMS to support the Gas Analytics deployment. It is assumed that third party datasets will be updated annually to account for changes in service area population.

Data can be appended to the Client's customer records or can be acquired for non-Client customers by purchasing records that lie within the Client's service territory and suppressing the Client's customers from appearing on that list.

5.3. Analytics Retainer

In deploying Gas Analytics, ICF uses the concept of an Analytics Retainer in lieu of separate software licensing, hosting, and time and materials project support costs for base services. The goal of the Analytics Retainer is to include all of the technical system hosting, data updating, analytics calculations, requirements definition, staff expertise availability, and project management in one consistent monthly charge that allows the Client to leverage ICF's analytical expertise as an extension of its staff without being charged for every incremental contact. The following ICF activities are included in the Analytics Retainer:

- Hosting and maintenance of the SIMS used to support Gas Analytics deployment by housing and staging for analysis both Client customer and non-customer datasets.
- Integration of the annually updated third party data including the franchise data.
- Integration of biannually (twice per year) updated Client customer data
- Integration of marketing outreach and program participation data in an agreed upon format at up to weekly intervals as appropriate to the business needs of the program
- Biannual updating of the Gas Analytics results based on incremental program results and incremental data loads
- Delivery of results via SIMS user interface. The Gas Analytics interface will be provided to an unlimited number of authorized users as selected by the Client. Authorized users will have access to analytics results with the ability to view and work with the results through maps and intuitive visual displays.
- ICF Gas Analytics representative(s) serving as an extension of the Client's analytics staff to manage the project, define analytical questions, and deliver actionable results. Up to 50 hours per year of analytics support for ad hoc inquiries beyond the standard SIMS gas analytics and data updating services described above are included in the annual retainer.

The Analytics Retainer will begin after Project Initiation is complete and run monthly for the duration of the contract (estimated time period June 15, 2016 – June 15, 2018). During the analytics retainer period, the ICF Project Manager and the Client Program Manager will mutually determine deliverables for formal acceptance review using the analytics request template provided during project initiation.

6. Time and Materials Support

Time and materials support from the ICF team in excess of the standard SIMS setup and analytics retainer services may be procured at any time during the project period at the rates listed in the Master Services Agreement.

7. Value-Add – Gas Conversion Service Availability Tool

As a value-add, ICF can provide our Gas Conversion Service Availability Tool for the Client. One of the key aspects of this service is to provide the Client's customers with a quick and easy

mechanism to determine if their property is eligible to partake in the gas conversion program. ICF is proposing to embed a Program Availability tool within Client's website. The tool will allow a customer to enter in their address, validate the address is correct via a map, and then will be returned their program eligibly results. See figure 1.

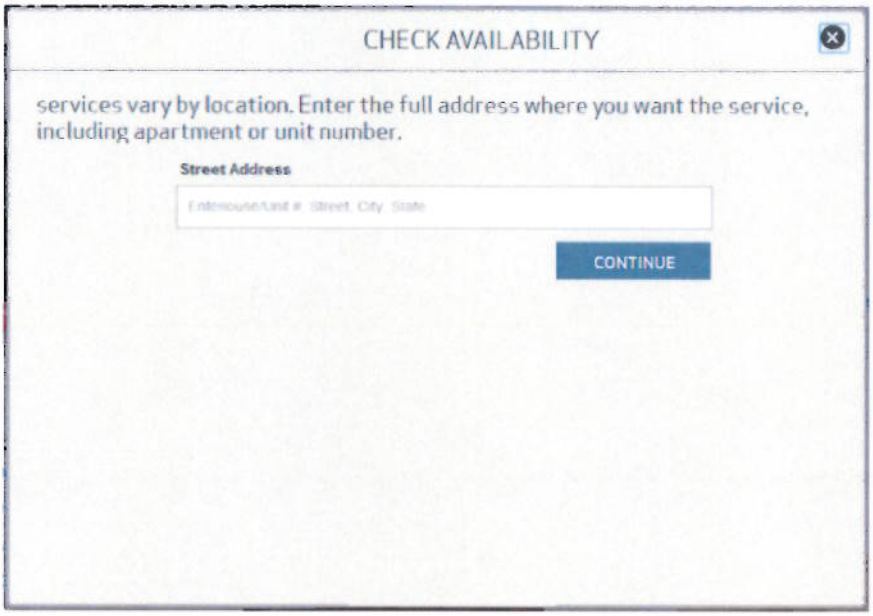


Figure 1

Upon entering in their desired address and selecting continue the user will be able to validate their entered address on a map and either restart their search or choose to continue. See figure 2.

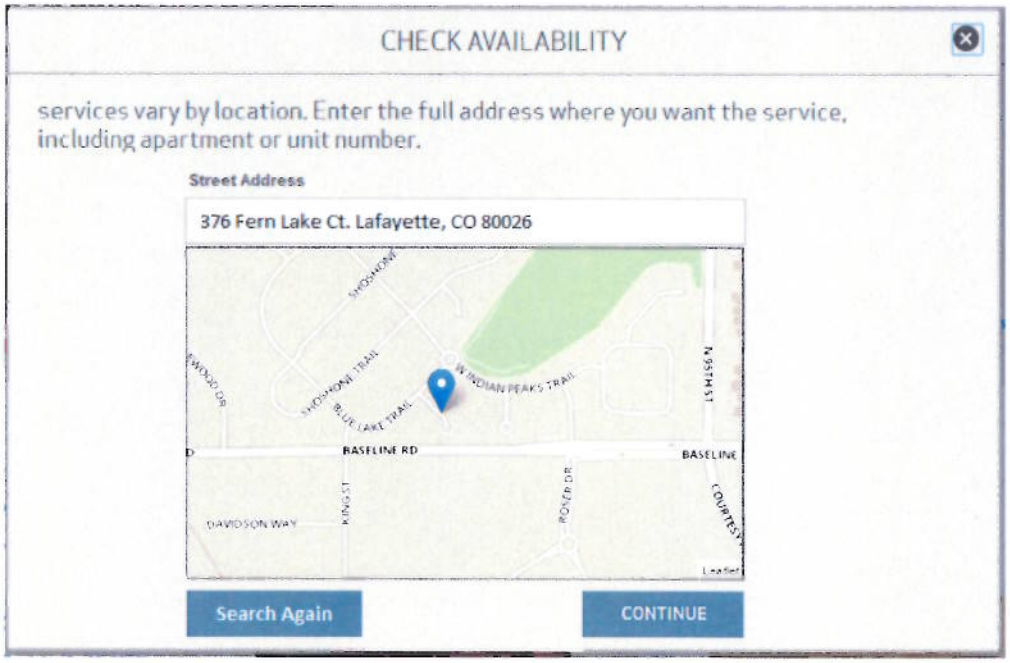


Figure 2

If the system cannot match the address or there are multiple potential matching results the user will be prompted to select the correct matching address. See figure 3.

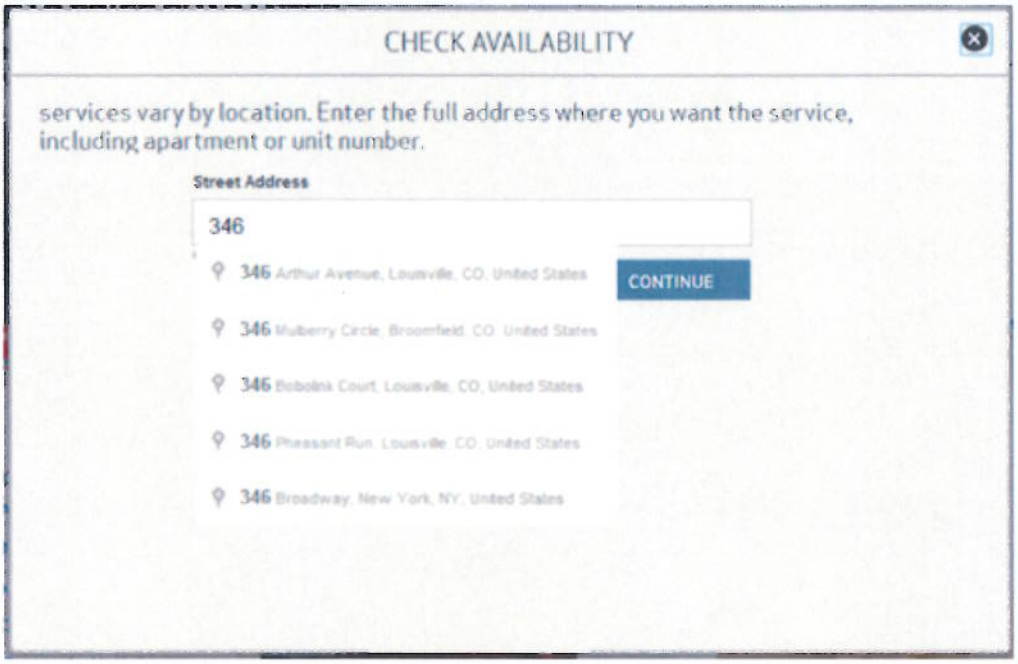


Figure 3

Once a user selects the correct address from the options they will be able to validate the location on the map as in Figure 3. After the user validates their address the tool will query the ICF spatial database and determine if the customer address is located in a geographic area being supported by the gas conversion program. If the customer falls inside of the program footprint they will be informed to continue on and submit a program application. If the customers address falls outside of the geographic area being supported by the program, they will be presented with a message informing them that the service is not currently available in their area. Geographic areas being supported by the program will be updated quarterly based on actual or projected pipeline builds as provided by the client.

Other Functionality

In addition to the public facing portion of the tool, ICF will be actively compiling information on the key usage metrics of the tool. These metrics will include the standard metrics captured by Google Analytics in addition to the number of unique visitors, all addresses searched (addresses that were not located by the tool will be flagged separately) and whether the addresses were within the program footprint or not. This data and a summary report will be provided back to the Client on a monthly basis.

8. Project Organization

Successful development and deployment of a custom Gas Analytics for the Client involves many interrelated project activities. The sections below are designed to aid the Client in understanding major components of a successful Gas Analytics project including the key project roles to be staffed, the Client and third party datasets expected to be acquired, integrated, and analyzed, and the major project tasks with timelines.

Client agrees to provide appropriate Project resources including but not limited to, data, information, and appropriate and cooperative personnel, all as necessary to facilitate ICF's performance of the Services.

Client will allocate personnel to the Project with the appropriate knowledge of the indicated area and the skills to perform the Client tasks, and any additional personnel that may be necessary for Client to perform its obligations under the implementation work plan.

8.1. Project Roles

For the successful implementation of this project, ICF and Client must assign staff with the appropriate qualifications and authority to the following roles. As the period of performance for this contract spans multiple years, the staff assigned to these roles may change with the proper notification and approval of both parties so long as the replacement staff are properly qualified.

8.2. Key ICF Project Roles

ICF Gas Analytics Representatives: ICF will designate a Project Manager and Lead Gas Analytics Representative for the Client Gas Analytics Project. The Project Manager will have authority to make project commitments on behalf of ICF. The Project Manager and Lead Gas Analytics Representative will serve as liaisons between Client and the ICF analytics team to gather project requirements, understand available data, identify data gaps, work with Client staff to formulate key initial and ongoing analytical questions and business use cases, present proposed analysis parameters for approval, facilitate updating of analyses over time to drive continuous value and maximize received value, and train Client staff in how to access and use the actionable intelligence delivered.

8.3. Key Client Project Roles

Client will allocate the following described personnel to the Project appropriate knowledge of the indicated area and the skills to perform the Client tasks, and any additional personnel that may be necessary for the Client to perform its obligations under the implementation work plan.

8.3.1. Client Program Manager: The Client Program Manager will serve as the primary point of contact for the ICF Gas Analytics Representatives. The Client Program Manager will aid in the coordination of project initiation meetings and tasks and work to define the analytical questions that will drive program success for the Client. The Client Program Manager will approve the proposed analysis parameters, designate the Client Data Lead, and control Client access to authorized SIMS logins. The initial Client Program Manager is Linda Melitz.

8.3.2. Client Data Lead: The Client Data Lead will work with designated ICF staff to obtain and securely transfer required Client datasets in an agreed upon format. The Client Data Lead is responsible for providing required Client Data in agreed upon formats in a timely manner to avoid delays in project timelines.

9. Project Governance

The Project will have sponsorship from ICF's and Client's senior management, who will be available on a timely and regular basis to monitor the Project progress and to act as a decision maker for policy decisions.

10. Deliverables Acceptance Procedure

This project will include numerous formal and informal deliverables over the period of performance. Some deliverables (e.g. provisioning of the user interface) are more substantial while other deliverables (e.g. delivery of an individual targeting output) will be smaller in scope. The acceptance procedure for all formal Deliverables outlined in this SOW will be as follows. Please note that the client may elect to follow step D for any deliverable to indicate approval without further action

A. ICF will work with Client personnel to gather input and review draft Deliverables

B. When complete, final Deliverables will be reviewed and signed off by Client utilizing a mutually agreed Acceptance Form.

C. The Acceptance Form should be physically signed (or electronically signed) indicating approval or disapproval within five (5) business days.

D. If a Deliverable is neither approved nor rejected or a reasonable request to extend is not made and accepted within five (5) business days, the Deliverable will be deemed to have been approved without change or comment.

E. If Client is not able to approve a Deliverable, Client will provide ICF with a description of why the Deliverable cannot be approved. If required, the parties will meet to discuss the deficiency of the Deliverable in detail.

PROJECT TIMELINE AND PAYMENT SCHEDULE

ICF will work aggressively to meet the timeline described below (the "Project Timeline"). The following is a list of tasks within each phase of the project based on the Parties' understanding of the scope of the project at the time of this SOW. Specific analytical deliverable timelines after project initiation will be agreed upon by ICF and Client as scope is defined and will be delivered under the analytics retainer. ICF has prepared this submission on a Firm Fixed Price basis for the setup and deployment of the Gas Analytics ,the ongoing Analytics Retainer, and the integration of Third Party Data.

Project Timeline and Fees Schedule

Phase	Description	Timeline	Billing
Project Initiation	▪ Project kickoff meeting ▪ Gathering of data requirements ▪ Loading of Client and third party data to SIMS ▪ Application of Gas Analytics to raw data based on business rules of the Client's program and generation of results ▪ Delivery of first Gas Analytics results to authorized Client users via SIMS User Interface	March 15, 2016 – June 30, 2016 (3 months)	▪ $30,000 billed at project start (March 15, 2016) ▪ ▪ $30,000 billed upon delivering 1st round of results
SIMS Analytics Retainer	▪ Hosting and maintenance of the SIMS to support Gas Analytics and integration of the annually updated third party data ▪ Integration of biannually (twice per year) updated Client customer and outreach data ▪ Biannual updating of the Client results based on incremental program results and incremental data loads ▪ Delivery of results via SIMS User Interface ▪ ICF Gas Analytics representative(s) serving as an extension of the Client's analytics staff to manage the project, define analytical questions, and deliver actionable results. ▪ Up to 50 ad hoc analytics support hours per year.	Starts after setup is complete and until end of contract period.	▪ $5,000/month for SIMS billed first week of each month
Third Party Data Purchasing	Costs to be invoiced based on actual data records matched. ▪ Known Customer (residential & commercial) or Non-Customer properties where Liberty Utilities has secured the premise address and occupant identity information and provided it to ICF in an electronic, machine readable format - $35 per 1,000 matched records ▪ Unknown Non-Customers (data not provided by Liberty Utilities): $70 per 1,000 matched records Invoiced based on cost as data is purchased. Cost based on actual data match rates. Data anticipated to be purchased during project initiation with annual incremental updates thereafter.	$35/1,000 current Liberty Utility customers and known non-customers matched $70/1,000 non-customers where premise address and occupant identity information is not provided	Billed at cost. Note, ICF will provide estimate of data purchase to Liberty Utilities prior to purchasing the data. Liberty Utilities will need to approve estimate prior to ICF purchasing the data.

Project Timeline and Fees Schedule

Phase	Description	Timeline	Billing
Gas Conversion Service Availability Tool Setup	▪ Set up of the standard Gas Conversion Service Availability Tool	Upon completion of SIMS Initiation Phase (3 Months)	▪ $6,000 billed as start of Gas Conversion Service Availability Tool Setup ▪ $6,000 billed upon user acceptance of the Gas Conversion Service Availability Tool delivery.
Gas Conversion Service Availability Tool Maintenance	▪ Quarterly update of gas service availability ▪ Hosting and maintenance of the SIMS to support Gas Analytics and the Gas Conversion Service Availability Tool deployment	Starts after setup is complete and until end of contract period.	▪ $700/month hosting and maintenance fee for Gas Conversion Availability Tool

^ Required client data must be provided in full by April 15, 2016 to meet this timeline. Delay in data delivery will result in a corresponding delay in delivery data for the SIMS User Interface.

As outlined above, this project is estimated to require a minimum of three months to complete. Term may be extended at for up to three additional one year periods with monthly analytics and lookup tool hosting fees increasing by up to 5% per year for extension years. Renewal and termination of this SOW shall follow the terms of the Master Services Agreement.

In addition to the firm fixed and cost recovery phases outlined above, the Client may wish to engage with ICF on additional scope on a Time and Materials (T&M) basis. T&M scope would be defined and approved via the Change Order process outlined in Appendix A to the SOW. For T&M work, in addition to consulting fees, Client will reimburse ICF for reasonable and customary expenses including without limitation, expenses incurred for travel, such as local transportation, lodging, meals, telephone, shipping, and duplicating. These expenses will be billed to Client at actual cost and will include an administrative fee of 13%.

All invoices shall be paid in accordance with the terms of the Master Services Agreement.
ICF will invoice the Client in December 2016 for all 2016 SIMS Analytics Retainer fees and 6 months of 2017 fees. ICF will invoice Client in 2017 on a monthly basis for the remaining maintenance SIMS Analytics Retainer fees at $2500/month. The Gas Conversion Service Availability Tool Maintenance will be invoiced monthly at $700/month once set up is complete.

PROJECT ASSUMPTIONS AND EXCLUSIONS

This section lists known assumptions and constraints that may impact the scope of the Services, the fees, and Project Timeline. Should any of the assumptions listed below change during the term of this SOW, Client recognizes that the Project Timeline and fees may be affected.

General Assumptions

1. Client will provide one (1) authorized point of contact for project management, approvals, and communications on the Client side.
2. ICF will source a team for production once the SOW is fully executed.
3. Staff may be added or removed based on project requirements. ICF cannot guarantee availability of resources or a firm deliverable date until a signed SOW is received from the Client.
4. ICF will create, develop, and produce the specified application according to this SOW based upon the Project Timeline and estimated fees. Any changes to the Services, Project Timeline, or fees will be documented and implemented following execution of an agreed upon modification to this SOW.
5. Lengthy delays in Client review and approval time may result in extended delivery dates and additional cost.
6. Client will provide ICF with access to all applicable systems, applications, and data. Client subject matter experts will be available for meetings within a reasonable time upon request.
7. Client will work with ICF to schedule multiple meetings on single days improving efficiency and reducing the travel and expenses for the engagement.
8. ICF travel costs for the kickoff meeting are included in the setup fee. ICF will only seek reimbursement for travel to address material scope beyond the standard SIMS deployment or if Client requests additional onsite visits after the kickoff.
9. Client will ensure that appropriate expertise is available to answer questions about the source and quality of the Client's datasets.
10. The Client will assign appropriately qualified and authorized staff to key project roles.

11. Deliverables and project schedule depend on timely review and input from various stakeholders. ICF and the Client will jointly define review dates as part of the work plan and will work to mitigate potential schedule risk that could arise from delays in review and comments.
12. It is mutually understood that business requirements, resources and dates may change subject to the applicable terms of this SOW and that any such material change requested by the Client or as a result of the Client's inability to provide agreed upon resources and to perform its other responsibilities set forth herein or the result of Client errors or omissions may result in a Change Order in accordance with the Change Order Procedure defined in accordance with Appendix A to the SOW.
13. ICF is purchasing the third party data on behalf of Client. The Client will retain and own its copy of the data for its direct business uses only. The Client will not be permitted to resell that data to third parties. Ownership of the original third party datasets remains with the vendor that provides it.
14. For data updates to occur in the SIMS, Client must provide their Client Data clean in the previously agreed upon format. Any changes in the specified data formats or ICF reloading of data due to errors found in the Client Data may result in additional charges to the Client.

In-Scope Assumptions

1. Datasets and tasks considered in-scope are outlined explicitly in this SOW.
2. The data analytics license includes the standard project administrative and management support hours required to define and deliver gas conversion analytics to Client staff plus up to 50 ad hoc analytics support hours per year.
3. Each data update pushed to the SIMS interface will completely refresh the available data to present the Client with the most currently available information. While a copy of the previous dataset may be archived upon request, past data will not be readily available online. However, information on who has received past outreach initiatives can be included in the published results if provided to the SIMS team by the Client.
4. Gas Conversion Service Availability Tool
    a. Client will provide ICF with the raw dimensions (pixels) available for our tool
    b. The tool will be deployed in a fixed width/height iframe
    c. Client will provide ICF with a Style Guide
    d. ICF will share with Client monthly usage metrics
    e. The application will be supported for the following desktop browsers: Chrome, Firefox, Safari 5+, Opera 12+ and IE 7–11.

    f. The application will be supported for the following mobile browsers: Safari for iOS 3–7+, Android browser 2.2+, 3.1+, 4+, Chrome for Android 4+ and iOS, Firefox for Android, Other WebKit browsers (webOS, Blackberry 7+, etc.), and IE10/11 for Win8 devices.
5. At Client's request, ICF can provide targeting results as geospatial layers that can be imported into Client systems. ICF and Client will work to agree on a mutually acceptable format for export.

ICF AND CLIENT CONTACTS

Client and ICF agree that the individuals listed below have full authority to direct and provide feedback relating to the Services described in this SOW.

	ICF Project Manager	**Liberty Utilities Project Manager**
Name:	Michael Whitaker	Linda Melitz
Title:	Vice President	Program Manager
Phone:	303-579-4198	603-216-3542
E-mail:	Michael.whitaker@icfi.com	Linda.melitz@libertyutilities.com

IN WITNESS WHEREOF, the Parties hereto, each acting under due and proper authority, have executed this SOW as of the SOW Effective Date.

By:	**ICF INCORPORATED, LLC**	**Liberty Utilities**
Name:	Joseph S. McGrath	
Title:	Director, Contracts	President NH.
Date:		2/26/16

Appendix A – Change Requests

For the duration of the SOW, ICF or Client may request a change to the scope or nature of the services described in the SOW (the "Change Request"). ICF shall have no obligation to commence work, nor shall Client have any obligation to pay ICF, in connection with any change until the fee and or schedule impact of the change is agreed upon, in writing, and executed by both ICF and Client.

If Client requests a change, ICF shall submit a Change Request, which will describe, in sufficient detail the impact the requested changes will have on schedule and fees as well as on the Services and Deliverables. If ICF initiates the Change Request the rationale for the change will also be included in the description.

No change shall be effective unless it is in writing and signed by Client and ICF.

Change Request Process

If a Change Request becomes necessary, the steps involved are:

- The ICF Program Account Manager or Program Executive provides Client management with a change request document that will serve as the basis for an amendment to the SOW.
- If the change is approved, Client and ICF shall execute the SOW amendment, which will authorize the work and indicate any additional fees associated with implementation.
- If the Parties do not agree upon a Change Request, the content of any such Change Request shall not become a part of the Services or Deliverables delivered by ICF.
- If the Parties do agree upon the Change Request, the Project work plan will be updated in accordance with the approved Change Request.
- Pricing for services provided for in the Change Request will be defined at the time of the Change Request and mutually agreed to by ICF and Client.

Change Request Execution

All Change Requests will require written or electronic execution by the following parties:

For ICF: Contracts

For Client: Project Sponsor or Program Manager

Select Profile:
Prospects - New Franchise Towns - Res

Select Hierarchy: Census

0 Score Range 100

Targets / non targets: *196 / 0*

Download List of Targets | Search | Save Map

Filter list...

Show Only Selected | Hide Selected | Reset

Sort List By Score

Dean Sorenson — Score: 1
97 WELLINGTON CIR
LEBANON, NH 03766
Segment:
C11: Aging of Aquarius
Distance: 20000 feet

Ellsworth Gibbs — Score: 1
96 BUCKINGHAM PL
LEBANON, NH 03766
Segment:
C13: Silver Sophisticates
Distance: 20000 feet

Robert Ceplikas — Score: 1
94 WELLINGTON CIR
LEBANON, NH 03766
Segment:
C11: Aging of Aquarius
Distance: 20000 feet

Jennifer Randall — Score: 1
94 MASCOMA ST APT 4
LEBANON, NH 03766
Segment:
G24: Status Seeking Singles
Distance: 20000 feet

Liberty Utilities

SIMS

Account Detail Report

Account Information

Meter Number NonCust-18611
Premise Number NonCust-18611
Premise Address [redacted], LEBANON NH 03766

Report Parameters

Account Number	NonCust-18611

Account Information

Account Number	NonCust-18611
Account Holder Name	[redacted]
Account Start Date	n/a
Account End Date	7/6/2016
Provider Name	LibertyUtilities

Account Demographics

Demographic Name	Demographic Value
Age	Unspecified
Education	Unspecified
Marital Status	Unspecified
Occupation	Unspecified
Person Type	Unspecified
Income	15000-24999
Home Ownership	Homeowner
Length Of Residence	1-5 Years
Family Type	Unknown
Mosaic Group	Middle-class Melting Pot
People in Household	1 Persons
Building Construction	Frame
Square Footage	3200

Account Demographics Continued

Demographic Name	Demographic Value
Home Value	$200,000 - $300,000
Home Stories	2
Air Conditioning	Unknown
Bedrooms	4 Bedrooms
Exterior Wall Type	Siding-Wood
Fireplaces	2 fireplaces
Heat Type	Hot water
Home Pool	Unknown
Property Indicator	Residential
Dwelling Type	Multi-Family & Condominiums
Dwelling Units	Duplex
Year Built	1970 - 1979
Total Rooms	11 - 15

Powered by ICF

Sort	Id	CustomerN	AccountNu	AccountHo	MeterNam	MeterNum	Address	Score	Segment	Sector	Distance
All | 33009	88697	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	88728	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	Q62: Reaping Rewards		20000
All | 33009	88909	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	O51: Digital Dependen		20000
All | 33009	88923	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	88950	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	H27: Birkenstocks and		20000
All | 33009	88987	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	A04: Picture Perfect Fa		20000
All | 33009	88998	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	U00: Unknown		20000
All | 33009	89023	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	H27: Birkenstocks and		20000
All | 33009	89025	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	B07: Generational Sou		20000
All | 33009	89045	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	89148	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	A04: Picture Perfect Fa		20000
All | 33009	89154	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	U00: Unknown		20000
All | 33009	89155	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	A04: Picture Perfect Fa		20000
All | 33009	89255	NonCust-1(	NonCust	[redacted]		NonCust-	[redacted]	1	U00: Unknown		20000
All | 33009	89302	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	E19: Full Pockets, Emp		20000
All | 33009	89334	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	89399	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	H27: Birkenstocks and		20000
All | 33009	89400	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	89449	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	A04: Picture Perfect Fa		20000
All | 33009	89646	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	A02: Platinum Prosper		20000
All | 33009	90264	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	90390	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	K37: Wired for Success		20000
All | 33009	90508	NonCust-1'	NonCust	[redacted]		NonCust-	[redacted]	1	B08: Babies and Bliss		20000
All | 33009	90548	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	U00: Unknown		20000
All | 33009	90665	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	C14: Boomers and Boo		20000
All | 33009	90900	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	90959	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	H27: Birkenstocks and		20000
All | 33009	90973	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	U00: Unknown		20000
All | 33009	91154	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	91177	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	C11: Aging of Aquarius		20000
All | 33009	91188	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	A04: Picture Perfect Fa		20000
All | 33009	91412	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	Unspecified: Unspecifi		20000
All | 33009	91422	NonCust-1{	NonCust	[redacted]		NonCust-	[redacted]	1	H27: Birkenstocks and		20000

All | 33009	91437	NonCust-1	NonCust		NonCust-		1	Unspecified: Unspecifi	20000
All | 33009	91442	NonCust-1	NonCust		NonCust-		1	A05: Couples with Clou	20000
All | 33009	91463	NonCust-1	NonCust		NonCust-		1	J34: Aging in Place	20000
All | 33009	91568	NonCust-1	NonCust		NonCust-		1	Q62: Reaping Rewards	20000
All | 33009	91599	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	91699	NonCust-1	NonCust		NonCust-		1	B08: Babies and Bliss	20000
All | 33009	91807	NonCust-1	NonCust		NonCust-		1	D16: Settled in Suburb	20000
All | 33009	91810	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	91865	NonCust-1	NonCust		NonCust-		1	F22: Fast Track Couple	20000
All | 33009	91875	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	91925	NonCust-1	NonCust		NonCust-		1	F22: Fast Track Couple	20000
All | 33009	91940	NonCust-1	NonCust		NonCust-		1	B08: Babies and Bliss	20000
All | 33009	91953	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	91978	NonCust-1	NonCust	dew	NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92043	NonCust-1	NonCust		NonCust-		1	C13: Silver Sophisticate	20000
All | 33009	92054	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92109	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92111	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	92127	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92148	NonCust-1	NonCust		NonCust-		1	F22: Fast Track Couple	20000
All | 33009	92158	NonCust-1	NonCust		NonCust-		1	H27: Birkenstocks and	20000
All | 33009	92229	NonCust-1	NonCust		NonCust-		1	J34: Aging in Place	20000
All | 33009	92321	NonCust-1	NonCust		NonCust-		1	Unspecified: Unspecifi	20000
All | 33009	92362	NonCust-1	NonCust		NonCust-			H27: Birkenstocks and	20000
All | 33009	92406	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92408	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	92417	NonCust-1	NonCust		NonCust-		1	C11: Aging of Aquarius	20000
All | 33009	92495	NonCust-2	NonCust		NonCust-		1	A02: Platinum Prosper	20000
All | 33009	92519	NonCust-1	NonCust		NonCust-		1	A02: Platinum Prosper	20000
All | 33009	92567	NonCust-1	NonCust		NonCust-		1	F22: Fast Track Couple	20000
All | 33009	92591	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	92603	NonCust-1	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	92632	NonCust-2	NonCust		NonCust-		1	A04: Picture Perfect Fa	20000
All | 33009	92633	NonCust-2	NonCust		NonCust-		1	C13: Silver Sophisticate	20000

All | 33009	92639	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A04: Picture Perfect Fa	20000
All | 33009	92655	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	H27: Birkenstocks and	20000
All | 33009	92666	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A04: Picture Perfect Fa	20000
All | 33009	92688	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A04: Picture Perfect Fa	20000
All | 33009	92760	NonCust-2(	NonCust	[redacted]ll	NonCust-	[redacted]	1	C11: Aging of Aquarius	20000
All | 33009	92817	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C14: Boomers and Boo	20000
All | 33009	92839	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A04: Picture Perfect Fa	20000
All | 33009	92848	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A05: Couples with Clou	20000
All | 33009	92860	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	A04: Picture Perfect Fa	20000
All | 33009	92870	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C11: Aging of Aquarius	20000
All | 33009	92945	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C13: Silver Sophisticate	20000
All | 33009	92988	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C11: Aging of Aquarius	20000
All | 33009	93018	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C11: Aging of Aquarius	20000
All | 33009	93022	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C13: Silver Sophisticate	20000
All | 33009	93045	NonCust-2(	NonCust	[redacted]	NonCust-	[redacted]	1	C11: Aging of Aquarius	20000

Gain Peace of Mind.

STOP:

1. Prepaying for fuel to heat your home.
2. Scheduling fuel deliveries.
3. Running out of heating fuel.
4. Wasting space used for fuel storage.

Use Natural Gas.

CHOOSE LIBERTY. CHOOSE NATURAL GAS

Liberty Utilities®

135R

www.libertyutilities.com

Liberty Utilities®

130 Elm Street
Manchester NH 03101

1 A free natural gas connection requires an inspection by Liberty Utilities because certain conditions may require additional fees, such as ledge, services over 100 feet, bridge and railroad crossings, permit restrictions, and unusual landscaping. The customer will be responsible for the entire cost of the service if it is not in active use within 9 months installation. The natural gas service must be used as the primary heating source. Liberty Utiilities is not responsible for oil tank removal and/or disposal. This offer is only valid for residential customers within Liberty Utilities' existing NH service areas, and does not apply to future construction, commercial, or industrial accounts. Some conditions apply, including terms of Liberty Utilities' tariff.

2 Eligibility for energy efficiency rebates will be determined separately and consistent with the requirements for Liberty Utilities' approved energy efficiency programs. Participation in this limited time offer does not guarantee that a customer will be eligible for or receive an energy efficiency rebate.

3 Liberty Utilities is not responsible for estimates provided to customers from preferred contractors. Estimates may vary between contractors.

4 Interest rates vary with type of equipment purchased. Participation in this limited time offer does not guarantee that a customer will be eligible for or receive reduced rate financing. Reduced rate financing can not be used in conjunction with Gas Networks Rebates.

5 Springer, Shira. "Will Green Improvements Boost Your Home's Value?" The Boston Globe. 24 July 2015.

Heating Season is Right Around the Corner!

The kids are back in school, summer vacations are over, and now it is time to start gearing up for the winter. Whether you are looking to reduce utility bills, add ambiance, or gain convenience, natural gas is the right fuel choice for you!

- Natural gas is always there when you need it.
- No more shoveling around oil fills or propane tanks to receive fuel deliveries.
- Keep your home as warm as you want without worrying about running out of fuel or paying high utility bills. Go ahead, Crank up the heat and ***GET COZY***!

☑ DID YOU KNOW...?

On average, the resale value of a home heated with natural gas is **$11 higher** per square foot than a home heated with oil.[5]

Natural Gas is the Natural Choice

- ☑ A **$4,200** natural gas service line installation **FREE OF CHARGE!** [1]
- ☑ **REBATES** for energy efficient equipment up **$2,300** while funds last.[2]
- ☑ **FREE**, no obligation, in home estimate by one of our preferred contractors.[3]
- ☑ **REDUCED RATE** financing available.[4]

Contact your Liberty Utilities Account Manager **TODAY** to learn more about an exclusive offer that is only available until **DECEMBER 31, 2016**

CALL: 800-833-4200 (opt 5)

EMAIL: nhsalesmarketing@libertyutilities.com

VISIT: www.libertyutilities.com 136R

Smart Business Decisions Start with Natural Gas

137R

Clean, safe, and affordable natural gas is the smart choice when it comes to operating your business.

- By switching to natural gas, companies can realize significant savings per year on fuel.
- Natural gas is piped directly into your building, eliminating the need to monitor fuel levels and schedule deliveries.
- Burning natural gas in the place of other fossil fuels emits fewer harmful chemicals into the atmosphere.
- With most production occurring domestically, the natural gas industry helps to produce new US jobs.

Liberty Utilities®

Liberty Utilities®

130 Elm St
Manchester, NH 03101

HERE FOR YOU. HERE FOR YOUR BUSINESS.

Recognizing that no two businesses are alike, we provide commercial and industrial customers with an experienced account manager to help meet the distinct needs of each company. From switching over to natural gas, to maximizing equipment efficiency, your account manager is there to help.

OTHER SERVICES OFFERED

- On site construction meetings
- Personalized fuel consumption analysis
- Competitive price options
- Excellent customer service

138R

Did You Know?

44% of the natural gas used in the United States is consumed by the commercial and industrial markets.†

† naturalgas.org

CONTACT US TODAY

to find out how natural gas can improve your bottom line.

CALL: 1.800.833.4200 (option 5)

EMAIL: nhsalesmarketing@libertyutilities.com

VISIT: www.libertyutilities.com

«Date»

«Owner_First_Name_» «Owner_Last_Name_»
«House_» «Street_Name_» «Street_Suffix» «Unit_Type» «Unit_Number_»
«City_Town», «State_» «Zip_Code»

Dear «Owner_First_Name_»,

I am a «Liberty_Employee_Title_» with Liberty Utilities, and I am writing to inquire if you would be interested in taking advantage of natural gas if it was available to you? As a growing company, we are always looking for opportunities to extend our natural gas distribution system, and I believe your neighborhood is a prime candidate. While I cannot guarantee your neighborhood will be selected, high participation rates can increase your chances.

I have included some information on natural gas, as well as my contact information. Should you be interested, please contact me as soon as possible. I'd welcome the opportunity to walk you through the process, and help you determine if natural gas is the right choice for you.

Sincerely,

«Liberty_Employee_Name_», «Liberty_Employee_Title_»
«Liberty_Employee_Phone_Number_»
«Liberty_Employee_Email»

«Date»

«Owner_First_Name_» «Owner_Last_Name_»
«Number» «Street_Name_» «Suffix_» «Unit_Type» «Unit_Number»
«Town_», «State» «Zip_Code_»

Dear «Owner_First_Name_»,

I am a «Liberty_Employee_Title_» with Liberty Utilities, and I am writing to inquire if you would be interested in taking advantage of natural gas if it was available to you? I am currently working in conjunction with the town of <<Town_Name>> to extend our natural gas distribution system down <<Street_Name>> and am trying to gauge the interest level of surrounding businesses. While I cannot guarantee your neighborhood will be selected, high participation rates can increase your chances.

I have included a printout with some information on natural gas and current pricing of different fuel types. Should you be interested in bringing natural gas to<<Business_Name>>, please contact me as soon as possible. I'd welcome the opportunity to walk you through the process, and help you determine if natural gas is the right choice for your business.

Sincerely,

«Liberty_Employee_Name_», «Liberty_Employee_Title_»
«Liberty_Employee_Phone_Number_»
«Liberty_Employee_Email»

What Will You Use Natural Gas For?

Natural gas can be used in a variety of ways.

INSIDE

- Heating
- Cooling
- Cooking
- Clothes Drying
- Indoor Fireplaces

OUTSIDE

- Pool Heaters
- Grills
- Backup Generators
- Outdoor Fireplaces

Did You Know...?

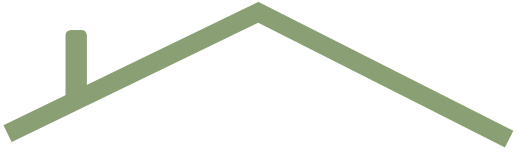
Over half of the homes in the United States use natural gas for heating, cooling, and cooking.†

Liberty Utilities®

Bring Comfort Home

Liberty Utilities®

New Hampshire Regional Sales
130 Elm Street
Manchester, NH 03101



- **FREE** natural gas connection to your home.*
- **LOW** interest financing available to qualifying homeowners.**

CONTACT US TODAY!
1.800.833.4200
OPTION 5

142R

www.libertyutilities.com

† "Natural Gas and Its Uses." American Petroleum Institute. Web. June 2015.
http://www.api.org/oil-and-natural-gas-overview/exploration-and-production/natural-gas/natural-gas-uses

* Liberty Utilities must inspect the site prior to confirming the customer's eligibility for a free natural gas connection. Road and/or site conditions, including but not limited to new streets, excessive ledge, services over 100 feet, bridge and railroad crossings, permit restrictions and unusual landscaping may require additional fees. Customer warrants that if the natural gas service is not in active use within 9 months of the date of installation, Customer will be responsible for entire cost of the service. Customer warrants that this natural gas service is intended to be used as the primary heating source. Liberty Utilities will not be responsible for the cost of oil tank removal and/or disposal. Offer is only valid for residential customers within Liberty Utilities' existing service areas in New Hampshire, and does not apply to future construction, commercial accounts, or industrial accounts. Certain conditions apply, including any and all terms of the Liberty Utilities' tariff.

** Special low interest financing may be available to homeowners who chose to install energy efficient heating equipment. Liberty Utilities does not guarantee that a customer will be eligible for or receive special low interest financing.

Thank you for your interest in natural gas. View this email in your browser

Be One of the First 200 Customers to Sign Up for a Natural Gas Service Line & Receive a $200 Prepaid Visa Gift Card!

Regarding Property: **<<Street Number>> <<Street Name>> <<Street Extension>>**

<<First Name>>,
Did you get the mailer we sent you?
Switching to natural gas for home heating means you can:

STOP

- Prepaying for fuel before you use it
- Having to schedule deliveries
- Worrying about running out of fuel

Gain peace of mind. CLICK HERE to contact us for more information.

The first 200 homeowners who sign up for a new natural gas service line starting March 9, 2015 are eligible to receive a $200 prepaid Visa gift card!

Please download the promotional brochure for all rules and regulations.

CLICK HERE

unsubscribe from this list
update subscription preferences

MailChimp

Liberty Utilities

Bring Comfort Home

1-800-833-4200
Opt.#5

Liberty Utilities

«Date»

«Owner_First_Name_» «Owner_Last_Name_»
«House_» «Street_Name_» «Street_Suffix» «Unit_Type» «Unit_»
«City_Town», «State_» «Zip_Code»

Dear «Owner_First_Name_»,

I am a «Liberty_Employee_Title_» with Liberty Utilities, and I am writing to inform you that we will be on your street in the near future to install a new gas service line for one of your neighbors.

If you are not currently a natural gas customer, now is the ideal time to consider it.

- We already plan to have a work crew on your street in the near future.
- Barring any unforeseen circumstances (ledge removal, steep grades, etc.), we can install a natural gas service line to your home for free (first 100 feet).

I'd welcome the opportunity to walk you through the process, and help you determine if it makes sense for you to convert to clean and affordable natural gas.

Sincerely,

«Liberty_Employee_Name_», «Liberty_Employee_Title_»
«Liberty_Employee_Phone_Number_»
«Liberty_Employee_Email»

Kindly reference: "Neighbor Letter" when you contact me.

Liberty Utilities®

Docket No. DG 16-XXX
Appendix II-11

Improve Your Bottom Line *NATURALLY.*

Liberty Utilities is the largest regulated natural gas distribution company in NH. With a local approach to management and support, we deliver dependable services to meet the needs of our customers. We provide a superior customer experience to our 89,000 residential and business customers through walk-in customer centers, energy efficiency initiatives, and programs for businesses and residential customers.

Here For You.
Here For Your Business.

Recognizing that no two businesses are alike, we provide commercial and industrial customers with an experienced account manager to help meet the distinct needs of each company. From switching over to natural gas to maximizing its efficiency, your account manager is there to help.

Other Services Offered

- On site construction meetings
- Personalized fuel consumption analysis
- Competitive price options

Why Natural Gas?

- Cost Effective
- Convenient
- Economical Input
- Versatile
- Environmentally Friendly

Contact us today to find out how **natural gas** can improve your bottom line!

1-800-833-4200 (OPT 5)

nhsalesmarketing@libertyutilities.com

www.libertyutilities.com

145R

Liberty Utilities®

Choose Liberty Choose Natural Gas

Looking for a safe, efficient, and cost effective way to fuel your home? Look no further than right outside your front door! Choose the convenience of natural gas, then sit back, relax, and enjoy.

RELIABLE :

Piped directly to your home, natural gas is always there when you need it. Enjoy the freedom of never worrying about fuel deliveries.

CLEAN :

Natural gas is the cleanest burning fossil fuel, making it the responsible choice for your family and the environment.

ECONOMICAL :

Natural gas is the most economical fuel source available.

Current Heating Fuel Values - Updated October 18, 2016

Fuel Type	Price/Unit	Heat Content Per BTU	Price Per Million BTU
Fuel Oil (#2)	$2.06/gallon	138,690	$14.82
Propane	$2.94/gallon	91,333	$32.15
Electricity	$0.16/kwh	3,412	$47.76
Natural Gas (1st Tier)	$0.87/therm	100,000	$8.71
Natural Gas (2nd Tier)	$0.81/therm	100,000	$8.11

Office of Energy and Planning. October 24, 2016.

VERSATILE :

Natural gas can be used for heating, water heating, cooking, and a host of other uses.

DOMESTIC :

Domestic production of natural gas means new jobs, a positive economical impact, and energy independence.

Easy as 1,2,3.

We want to make the process of bringing natural gas to your home as simple as possible. From marking underground utilities to installing your gas meter, we make the process easy. All you need to do is follow these three steps ;

1. Complete an application for service with your Sales Representative.
2. Contact a licensed contractor for a free, no obligation conversion cost estimate.
3. Sit back and relax! We will call you with a service installation date.

CONTACT US TODAY TO GET STARTED!

Liberty Utilities

CALL: 800-833-4200 (opt 5)

EMAIL: nhsalesmarketing@libertyutilities.com

VISIT: www.libertyutilities.com

Did You Know...?

Converting your home to natural gas can increase its value. In a study done by the Boston Globe, it was found that natural-gas homes command $11 more per square foot than homes that heat with oil.

Whats In It For You?

- A **$4,200** service line installation **FREE OF CHARGE***
- Rebates for energy efficient equipment up to **$2,300** while funds last*
- **2% FINANCING** for natural gas energy efficiency improvements*

* Conditions Apply. Call to speak with an Account Manager for more details.

CLEAN, SAFE, AND AFFORDABLE NATURAL GAS IS AVAILABLE TO YOU

Our records indicate that this property is not currently served by natural gas. For more information, or to speak to your account manager about converting to natural gas, please contact us.

1.800.833.4200 (OPTION 5)

nhsalesmarketing@libertyutilities.com

www.libertyutilities.com

Liberty Utilities®

WHY NATURAL GAS?

LOW COST :

Historically, natural gas has been more economical than propane and oil.

CONVENIENCE :

Natural gas is piped directly to your home or business, eliminating the need for deliveries and on site storage.

ENVIRONMENT :

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ECONOMY :

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VERSATILITY :

Natural gas can be used for heating, water heating, cooking, manufacturing, and a host of other uses.

July 27, 2015

Dear Property Owner,

Liberty Utilities is pleased to announce that it has filed to request permission from the New Hampshire Public Utilities Commission to provide natural gas to your community in the near future. Liberty Utilities distributes natural gas to 89,000 residential and business customers throughout the state.* By gauging the interest level of residents in the town of **<<TOWN>>**, we will be able to determine the best options for providing your community with natural gas, as well as its benefits to you.

One of the best decisions you can make for your home is to switch to natural gas from your local energy supplier. Liberty Utilities' natural gas delivery offers the most convenience available, as it is piped directly to your home eliminating the need to prepay for fuel or schedule deliveries. Natural gas is also extremely economical in comparison to oil and propane, and has helped many homeowners realize significant savings.

Liberty Utilities' commitment to being a local, caring, and responsible utility has enabled us to provide first class customer service through customer walk-in centers, energy efficiency initiatives, and other community focused programs. We measure our performance in terms of service reliability, and an enjoyable customer experience, and we look forward to being your natural gas provider.

For more information, or to relay your interest, please call us at **603-782-2335** or **603-782-2329.**

Sincerely,
Liberty Utilities

* In addition to natural gas, Liberty Utilities is also the electric provider of 44,000 residential and commercial customers throughout New Hampshire, including the towns of Lebanon and Hanover.

Liberty Utilities℠

July 27, 2015

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Liberty Utilities®

WORKING TO BRING COMFORT TO YOUR COMMUNITY

Liberty Utilities is pleased to announce we have filed a request with the New Hampshire Public Utilities Commission seeking permission to provide the Town of Hanover and the City of Lebanon with natural gas.

Our employees' proven success in operating New Hampshire's largest natural gas utility over the past 40 years demonstrates our financial, managerial and technical ability to deliver quality utility service to customers in the Hanover/Lebanon area.

To relay your interest, or for additional information, please contact us at : **603-782-2329** OR **603-782-2335**.

JOIN US

Liberty Utilities will be holding an informational session on our proposal to serve Hanover and Lebanon with natural gas.

WHO: Anyone interested in learning about the project

WHEN: September 29 from 6:00 PM to 8:00 PM

WHERE: The Lebanon Opera House

WE LOOK FORWARD TO SEEING YOU

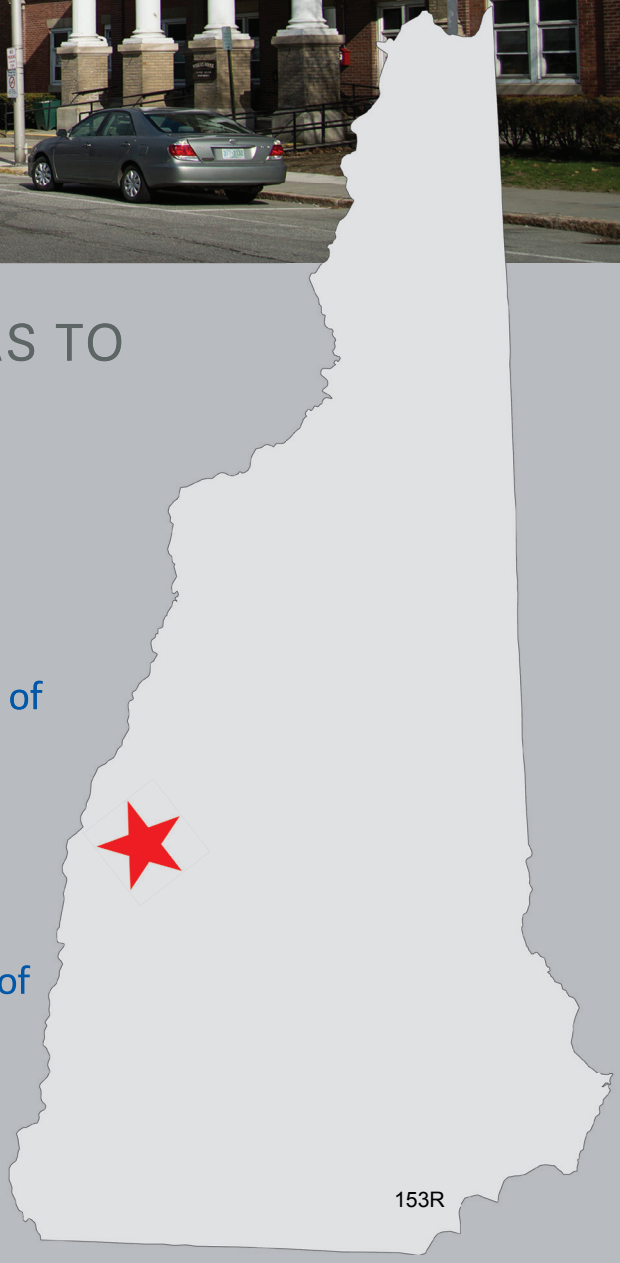
www.libertyutilities.com

Liberty Utilities®

WORKING TO BRING NATURAL GAS TO **HANOVER** AND **LEBANON**

Liberty Utilities is pleased to announce we have filed a request with the New Hampshire Public Utilities Commission seeking permission to provide the Town of Hanover and the City of Lebanon with natural gas.

Our goal is to provide safe, reliable and cost effective energy services to meet the current and future needs of your communities.

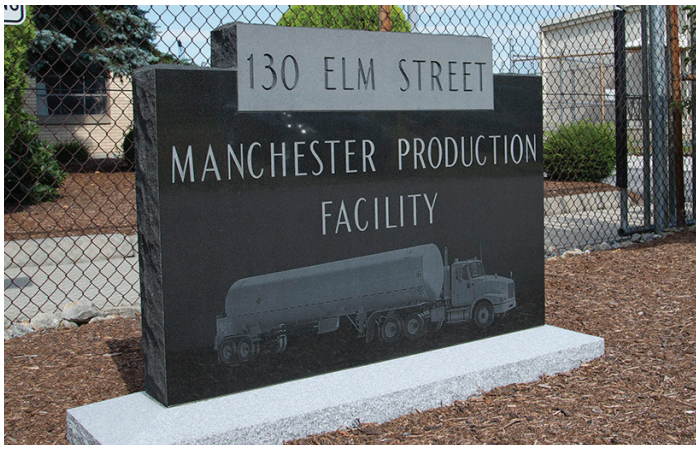


WHO WE ARE

Liberty Utilities is a regulated water, natural gas and electric distribution utility located in 10 states throughout the United States. We deliver responsive and reliable services to nearly 500,000 residential and commercial customers, 133,000 of which are located right here in New Hampshire. Our experienced, local employees are committed to our customers and increasing the availability of natural gas.

A PROVEN TRACK RECORD

Liberty Utilities currently has three Liquefied Natural Gas (LNG) facilities located in Tilton, Manchester, and Concord that have been operating successfully for decades. The employees running these facilities have an average of over 15 years of experience. If Liberty is permitted to bring natural gas into Hanover and Lebanon, a similar system will be constructed and run by the same experienced group of individuals.



Our employees' proven success in operating New Hampshire's largest natural gas utility over the past 40 years demonstrates our financial, managerial and technical ability to deliver quality utility service to customers in the Hanover/Lebanon area.

LEBANON/HANOVER EXPANSION

A key component of Liberty's growth strategy is focused on getting natural gas to areas that currently have no access to existing pipelines. To achieve that goal, we intend to engineer, procure and construct LNG (liquefied natural gas) and CNG (compressed natural gas) storage facilities in an appropriate location. By procuring and delivering LNG and/or CNG to the facility, Liberty will be able to serve residential and commercial customers of both communities with natural gas.

Q: How will natural gas reach my home/business without access to a pipeline?

If granted permission by the NHPUC, Liberty Utilities will construct a natural gas storage facility and an underground local distribution network that will deliver natural gas right to your home or business.

Q: Who is paying for this?

This expansion project would be **100% funded** by Liberty Utilities. Business and home owners would not see an increase in their taxes or their electric bills as a result of us suppling these areas with natural gas.

Q: When will natural gas become available to me?

Our goal is to serve residential, commercial and industrial customers in both communities. The initial phase of the project will reach large commercial customers and any residential neighborhoods nearby. Natural gas could become available to these customers as early as the Fall of 2016. The second phase will focus on branching out the distribution network to more residential neighborhoods. Select homes may be able to connect to natural gas as early as 2017.

Q: What will the rates be?

Rates, charges, and terms of service for the Hanover/Lebanon division will be similar to rates currently in place for Liberty Customers in New Hampshire. The only difference will be in the "Cost of Gas" portion of the bill, which will include the cost to procure and deliver LNG/CNG to our storage facility.

Q: Is natural gas safe?

Yes. There are over 2.1 million miles of pipelines in the US safely and reliably delivering natural gas. The industry spends over $6 billion annually on maintenance, replacement, upgrades, inspections and training.

WHY NATURAL GAS?

LOW COST :
Historically, natural gas has been more economical than propane and oil.

CONVENIENCE :
Natural gas is piped directly to your home or business, eliminating the need for deliveries and on-site storage.

ENVIRONMENT :
Utilizing natural gas results in lower emissions when compared to other fossil fuels.

ECONOMY :
Domestic production of natural gas means new jobs and a positive economical impact.

VERSATILITY :
Natural gas can be used for heating, water heating, cooking, manufacturing, and a host of other uses.

WHY LIBERTY UTILITIES?

LOCAL

RESPONSIVE

WE CARE

Electric Customer Service : **1-800-375-7413**

Natural Gas Sales Department : **603-782-2329** OR **603-782-2335**

www.libertyutilities.com

Sanborn, Head & Associates, Inc.
1 Technology Park Drive
Westford, MA 01886
978-392-0900

SANBORN HEAD

LETTER OF TRANSMITTAL

To: Bill Clark
William.Clark@libertyutilities.com

Number: 3672.00-002
Date: August 31, 2015
Job #: 3672.00

Via: ☐ Overnight
☐ Regular Mail
☐ Hand Delivery
☐ FAX (# of Pages)
☒ Electronically
☐ Other:

Telephone No.:
Fax No.:

WE ARE SENDING YOU: ☒ **Attached** ☐ **Under Separate Cover**

☐ Copy of Report ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of Letter ☐ Change Order ☒ See below

COPIES	DOCUMENT NUMBER	DATE	REVISION	DESCRIPTION
1	–	8/31/15	–	Lebanon Site Fatal Flaw Siting Analysis Memo
1	–	8/12/15	–	Preliminary Design Basis
1	3672.00, G-1	8/31/15	0	Location Plan
1	3672.00, G-2	8/31/15	0	Site Plan
1	3672.00, G-3	8/31/15	0	Site Plan – Flood Plains
1	3672.00, G-4	8/31/15	0	Equipment General Arrangement
1	–	8/31/15	–	LNGFire3 Modeling Output

THESE ARE TRANSMITTED (As Checked Below):

☐ For Approval ☐ Approved as Submitted ☐ Resubmit _____ Copies for Approval
☒ For Your Use ☐ Approved as Noted ☐ Submit _____ Copies for Distribution
☐ As Requested ☐ Returned for Corrections ☐ Return _____ Corrected Prints
☐ For Review & Comment ☐ PRINTS RETURNED AFTER LOAN TO US
☐ FOR BIDS DUE _____ ☐ _____

Remarks:

cc: JMF
MAN
CJF
file

SANBORN, HEAD & ASSOCIATES, INC.

Tom Sudol
Project Manager

(IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US IMMEDIATELY)

SANBORN HEAD
Building Trust. Engineering Success.

MEMORANDUM

To: Bill Clark | Liberty Utilities

From: Joan Fontaine and Mike Nicoloro

File: 3672.00

Date: August 31, 2015

Re: LNG Facility Fatal Flaw Siting Analysis for West Lebanon, NH Parcel – Initial Phase

cc: Tom Sudol, Maxwell Quinn | Sanborn Head

Project Overview

Liberty Utilities is evaluating a parcel of land in West Lebanon, NH for the potential siting of an LNG storage and vaporization facility. Liberty Utilities requested Sanborn Head to perform an analysis to assess if there are any fatal flaws with respect to siting an LNG facility. The proposed LNG facility is anticipated to have four 60,000 gallon capacity (nominal) horizontal bullet tanks, vaporization, LNG transport offloading, and associated natural gas sendout piping. It is also anticipated that CNG tube trailers will deliver CNG to the facility for use in up to six decompression skids.

Tasks Performed As Part of Initial Phase of Analysis

1. Preliminary Design Basis

   We prepared a preliminary design basis that addresses LNG flow rates and natural gas send out flow rates (peak hourly) and associated fluid temperatures and pressures, as well as number of days of on-site storage. A summary table is provided as an attachment to this memo. Key points of the design basis are:

   a. The maximum hourly sendout from the proposed LNG facility is 358 MSCFH which is based on a peak demand estimate from Liberty Utilities. This does not include Dartmouth College.

   b. The on-site LNG storage provides an estimated four days of storage for uninterruptible users.

   c. It is assumed that the MAOP of the distribution system will be 60 psig and upstream pressure requirements were estimated based on this MAOP.

2. Data Review – Publicly Available and Phase 1 Environmental Site Assessment Report (ESA)

   We reviewed publicly available information to assess the proximity of the property to an airport and flood plains. Liberty Utilities also provided a Phase 1 ESA performed for the property for another entity. The findings from this data review

are outlined below. Additionally, Sanborn Head has extensive knowledge of the property to the north of the parcel being evaluated – the Lebanon Landfill. Our knowledge of this property as it may relate to the parcel south of it is provided below as well.

a. The Lebanon Municipal Airport's runway is located approximately 6,750 feet (1.3 miles) to the east of the property. This distance does not pose any issue for the layout of the proposed LNG facility with respect to runway and approach distances. Reference Drawing G-1, Location Plan, which depicts where the property is with respect to the airport.

b. Review of both the ESA and the Federal Emergency Management Agency's National Flood Insurance Program published mapping indicate that there are not any flood plains on the property. Refer to Drawing G-3, Site Plan – Flood Plains, which depicts where the flood plain is located with respect to the property.

c. Geology – We did hit bedrock unexpectedly during the construction of the last cell. There was an error in the bedrock map provided to us. The mapping we have doesn't include the property to the south, so we cannot comment offered on the depth to bedrock. However, considering the information we have to the north, the change in the river direction, bedrock could have a localized high point almost anywhere. That said, considering that the site is a sand and gravel operations, there should be drilling logs that may provide information about bedrock. Also, if continued excavation is a concern, perhaps the site development could involve engineered backfill areas. In this case the backfilling operations should be monitored to assure that a well-compacted foundation is constructed.

d. Landfill Gas – Prior to the installation and operation of the active LFG extraction system, there were some LFG migration issues detected along the landfill's east property boundary. The active system should be the mitigation for this condition. LFG migration to the south is less likely because of the unlined landfill is quite a distance away from the south boundary and the newest landfill cell is significantly deeper than the bottom of the older cells (lined and unlined). Of note is that there are plans (not yet permitted) to expand the landfill further south. This phase of the landfill is some years off. While it is not impossible for LFG to migrate from the unlined cell, or even the lined cell of the landfill gas conveyance piping, if things are well managed, the potential risk is limited.

e. Wetland areas – Considering the site usage, there may be wetlands on the site that could affect the site development. Such information is not typical of an ESA, and a wetland scientist would need to visit the site to verify the presence or absence of wetlands.

3. Conceptual Equipment General Arrangement

   We prepared a conceptual equipment general arrangement drawing that depicts the major system components for the proposed LNG facility. Set back and equipment separation distances and containment requirements in accordance with NFPA 59A were incorporated into this conceptual equipment general arrangement. Reference Drawing G-4, Equipment General Arrangement, provided as an attachment to this memo.

4. Site Plan Drawing

   Refer to Drawing G-2, Site Plan, which overlays the equipment general arrangement onto the property. At this preliminary phase, we did not include the proposed CNG equipment or truck egress and access routes.

5. Conceptual Level Thermal Radiation Modeling

   We performed conceptual level thermal radiation modeling using LNGFire3 modeling software. Climactic data from the last six years was researched to establish the input parameters to the model (e.g., wind speed, relative humidity, temperature) in accordance with the regulations. Exclusion zone radii are depicted on the site plan developed in Item 4, above. Code requires that the 10,000 BTU/hr-ft^2 zone stay within the property boundaries; this is achievable based on this first round of modeling. The modeling printout is provided as an attachment.

Conclusions

The first phase of this fatal flaw analysis has not identified any fatal flaws in areas studied that would pre-empt Liberty Utilities from proceeding with the next level assessment.

Recommended Next Steps

Performing vapor dispersion modeling will be a critical aspect to more definitively qualify the property being considered. We strongly recommend that the vapor dispersion modeling be performed as soon as possible, since it is our experience that keeping the 50% LEL exclusion zone within the property boundaries is typically more challenging than keeping the 10,000 BTU/hr-ft^2 exclusion zone within the property boundaries. Please note that the recommended vapor dispersion modeling will provide worse case conditions. It may even show that the 50% LEL will travel beyond the property limits. Mitigation measures such as insulated concrete, vapor fences and water spray systems would be studied in the detailed design phase if we conclude that the 50% LEL goes beyond property boundaries.

As part of this next phase of the analysis, we may need to consider reducing the amount of on-site storage, using smaller LNG tanks, and optimizing the size of the subimpoundment within the LNG containment in order to meet exclusion zone requirements. Each of these elements will have an impact on the extent of the modeled vapor dispersion zones.

JMF/MAN: jmf

Encl. Preliminary Design Basis
Drawing G-1, Location Plan

Drawing G-2, Site Plan
Drawing G-3, Site Plan - Flood Plains
Drawing G-4, Equipment General Arrangement
LNGFire3 Modeling Output

P:\3600s\3672.00\Work\Lebanon Site Fatal Flaw Analysis\20150831 Phase 1 of Fatal Flaw Analysis - Memo.docx

SANBORN HEAD

Design Basis Liberty Utilities - Lebanon NH Site Fatal Flaw Analysis					
Equipment/Service	**Fluid**	**Flow Rate**	**Pressure**	**Temperature**	**Comment**
LNG Offloading	LNG	200 gpm (maximum)	80 psig (nominal) 100 psig (maximum)	-260 °F	(2) 100% capacity pumps, off-loading stations. Pumps to increase pressure from 20-40 psig in transports to 80 psig nominal pressure in tanks.
LNG Tanks	LNG	--	80 psig (nominal) 100 psig (maximum allowable)	-260 °F	(4) LNG Storage Tanks, nominal 60,000 gallons capacity each. 4 days of storage for uninterruptible users @ 90% nominal capacity. (6482 MSCF peak daily rate - 2/3rds of users uninteruptible.)
Vaporized LNG	Natural Gas	358 MSCFH (maximum) 45 MSCFH (minimum)	70 psig	50 °F	Maximum hourly flow rate based on peak demand estimate from Liberty Utilities (does not include Dartmouth College). Minimum flow rate assumes an 8:1 turndown.
NG Sendout	Natural Gas	358 MSCFH (maximum) 45 MSCFH (minimum)	60 psig	50 °F	Pressure based on distribution system MAOP.
LNG Vaporizer	TBD	--	--	--	6.5 MMBtu/hr - required heat output.
Boil Off Gas	Natural Gas	0.74 MSCFH	80 psig	-240 °F	Assumes a boil off rate of 0.1 % per day of the 90% full tank volume.
Boil Off Gas (after ambient heat exchanger)	Natural Gas	0.74 MSCFH	70 psig	Ambient Temperature less 20 °F	Downstream of ambient heat exchanger.

NOTES:

1. THE COMPILATION OF THE FOLLOWING DOCUMENTS IS REPRESENTED ON THIS DRAWING:
   A. THE BASE MAP WAS DRAWN FROM A GOOGLE IMAGE, DATED 08/18/15 WITH AN ORIGINAL SCALE OF 1" =1000'.
   B. THE PROPERTY BOUNDARY WAS DRAWN FROM THE LEBANON ONLINE ASSESSING DATABASE FOUND AT HTTP://WWW.QPUBLIC.NET/NH/LEBANON/
2. PER 49 CFR 193.2155(b), AN LNG STORAGE TANK MUST NOT BE LOCATED WITHIN A HORIZONTAL DISTANCE OF ONE MILE (1.6 KM) FROM THE ENDS, OR 1/4 MILE (0.4 KM) FROM THE NEAREST POINT OF A RUNWAY, WHICHEVER IS LONGER

SANBORN HEAD

GRAPHICAL SCALE
500' 250' 0' 500' 1000'

NO.	DATE	DESCRIPTION	BY
0	08/31/15	ISSUED TO CLIENT - PHASE 1 FATAL FLAW	MJQ

DRAWN BY: MJQ
DESIGNED BY: MJQ
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: AUGUST 2015

LEBANON SITE FATAL FLAW ANALYSIS
LIBERTY UTILITIES
LEBANON, NH

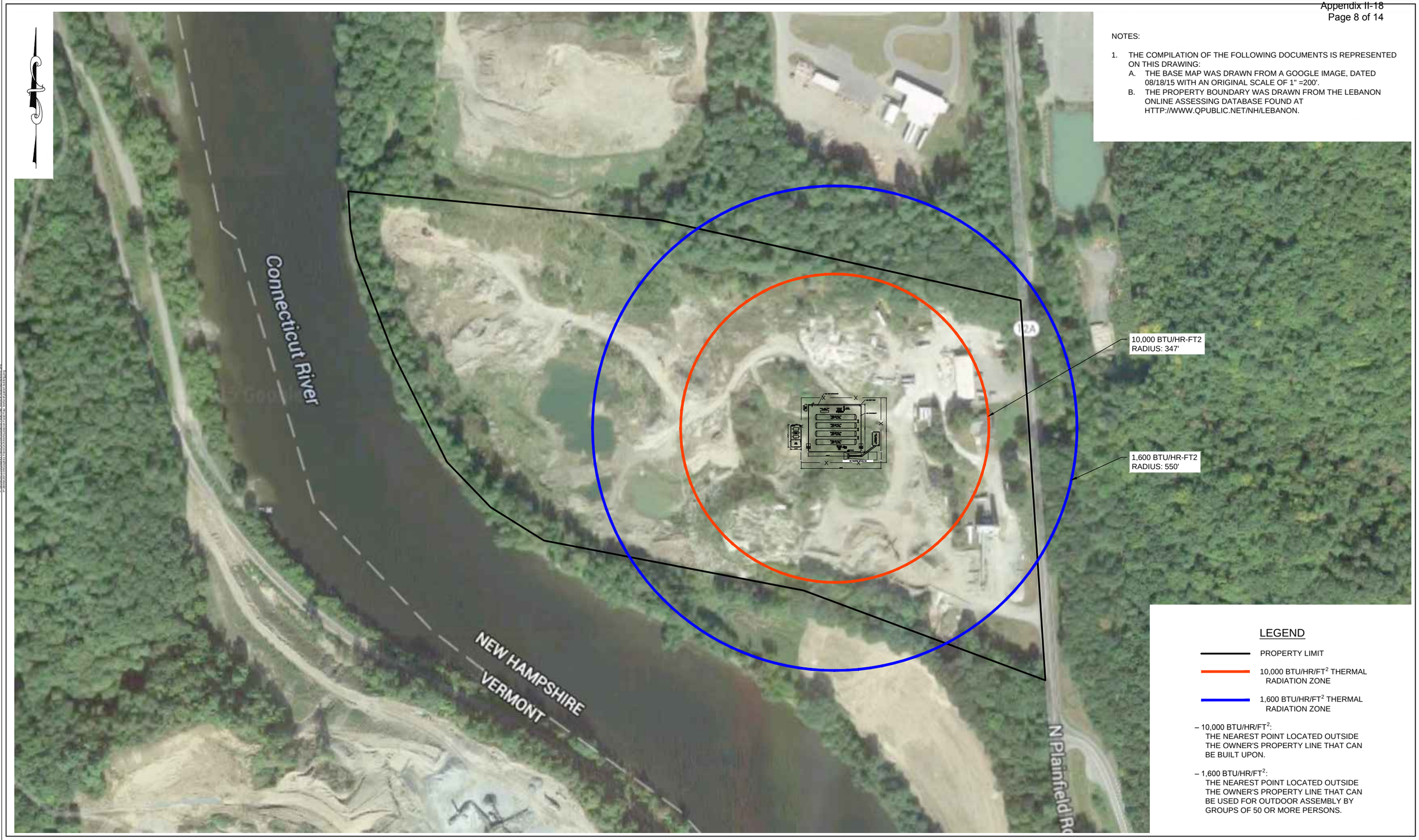
PROJECT NUMBER: 3672.00

LOCATION PLAN

SHEET NUMBER: G-1

NOTES:

1. THE COMPILATION OF THE FOLLOWING DOCUMENTS IS REPRESENTED ON THIS DRAWING:
   A. THE BASE MAP WAS DRAWN FROM A GOOGLE IMAGE, DATED 08/18/15 WITH AN ORIGINAL SCALE OF 1" =200'.
   B. THE PROPERTY BOUNDARY WAS DRAWN FROM THE LEBANON ONLINE ASSESSING DATABASE FOUND AT HTTP://WWW.QPUBLIC.NET/NH/LEBANON.



LEGEND

- PROPERTY LIMIT
- 10,000 BTU/HR/FT^2 THERMAL RADIATION ZONE
- 1,600 BTU/HR/FT^2 THERMAL RADIATION ZONE

– 10,000 BTU/HR/FT^2: THE NEAREST POINT LOCATED OUTSIDE THE OWNER'S PROPERTY LINE THAT CAN BE BUILT UPON.

– 1,600 BTU/HR/FT^2: THE NEAREST POINT LOCATED OUTSIDE THE OWNER'S PROPERTY LINE THAT CAN BE USED FOR OUTDOOR ASSEMBLY BY GROUPS OF 50 OR MORE PERSONS.

SANBORN HEAD

GRAPHICAL SCALE
100' 50' 0' 100' 200'

NO.	DATE	DESCRIPTION	BY
0	08/31/15	ISSUED TO CLIENT - PHASE 1 FATAL FLAW	MJQ

DRAWN BY: MJQ
DESIGNED BY: MJQ
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: AUGUST 2015

LEBANON SITE FATAL FLAW ANALYSIS
LIBERTY UTILITIES
LEBANON, NH

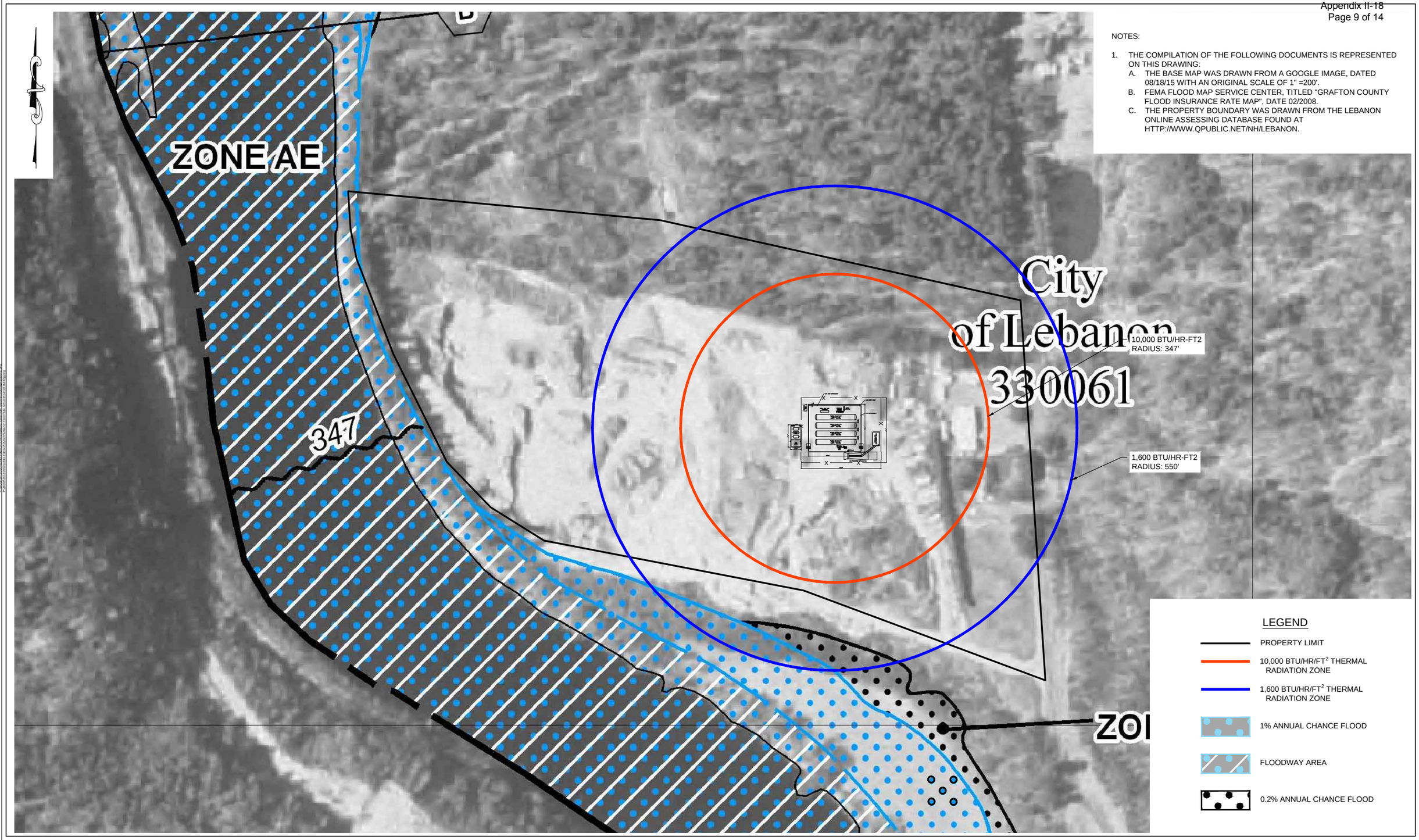
PROJECT NUMBER: 3672.00

SITE PLAN

SHEET NUMBER: G-2

NOTES:

1. THE COMPILATION OF THE FOLLOWING DOCUMENTS IS REPRESENTED ON THIS DRAWING:
   A. THE BASE MAP WAS DRAWN FROM A GOOGLE IMAGE, DATED 08/18/15 WITH AN ORIGINAL SCALE OF 1" =200'.
   B. FEMA FLOOD MAP SERVICE CENTER, TITLED "GRAFTON COUNTY FLOOD INSURANCE RATE MAP", DATE 02/2008.
   C. THE PROPERTY BOUNDARY WAS DRAWN FROM THE LEBANON ONLINE ASSESSING DATABASE FOUND AT HTTP://WWW.QPUBLIC.NET/NH/LEBANON.



SANBORN HEAD

GRAPHICAL SCALE
100' 50' 0' 100' 200'

NO.	DATE	DESCRIPTION	BY
0	08/31/15	ISSUED TO CLIENT - PHASE 1 FATAL FLAW	MJQ

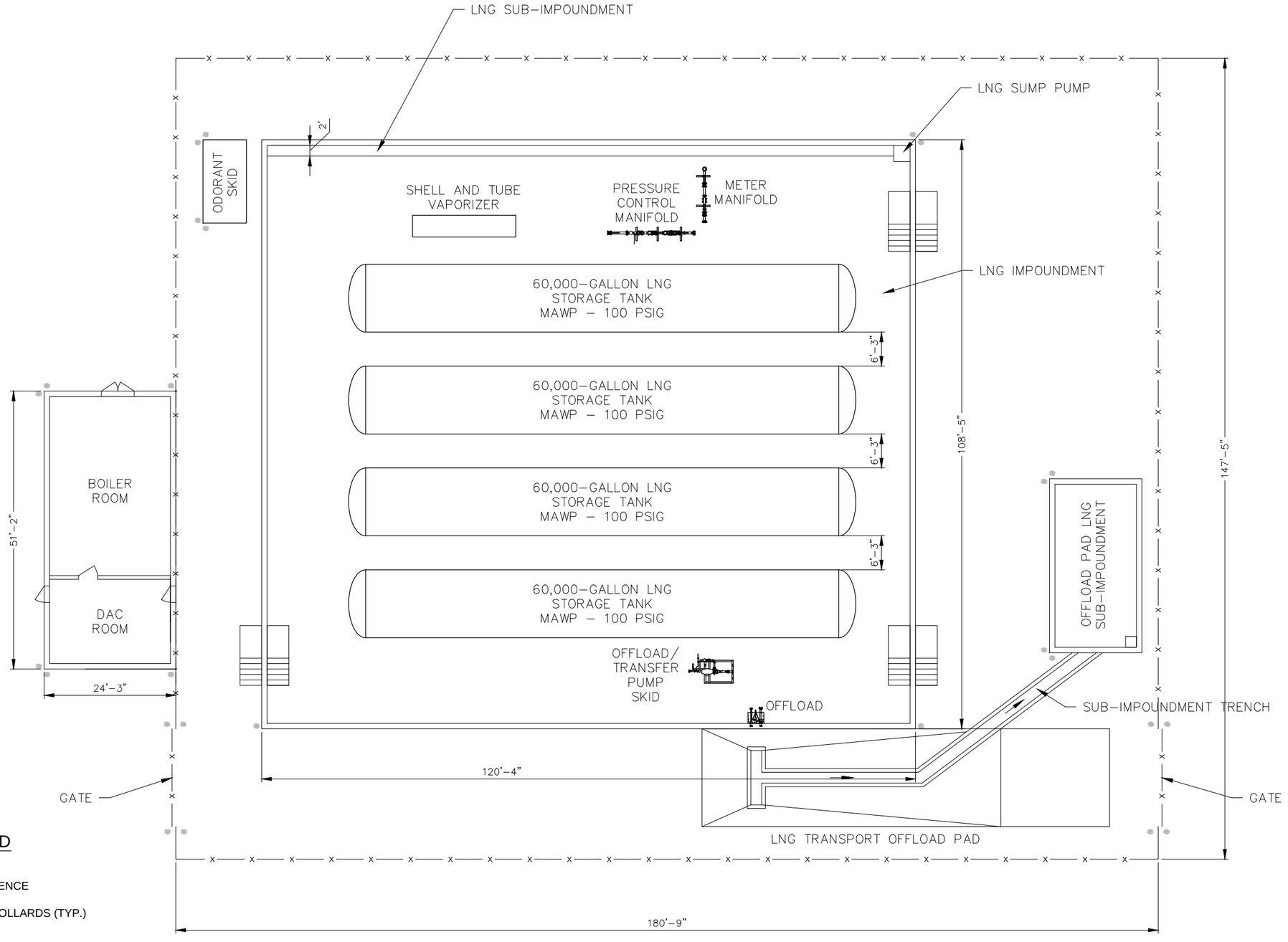
DRAWN BY: MJQ
DESIGNED BY: MJQ
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: AUGUST 2015

LEBANON SITE FATAL FLAW ANALYSIS
LIBERTY UTILITIES
LEBANON, NH

SITE PLAN - FLOOD PLAINS

PROJECT NUMBER: 3672.00

SHEET NUMBER: G-3



SANBORN HEAD

GRAPHICAL SCALE
10' 5' 0' 10' 20'

NO.	DATE	DESCRIPTION	BY
0	08/31/15	ISSUED TO CLIENT - PHASE 1 FATAL FLAW	TFS

DRAWN BY: TFS
DESIGNED BY: TFS
REVIEWED BY: JMF
PROJECT MGR: JMF
PIC: MAN
DATE: AUGUST 2015

LEBANON SITE FATAL FLAW ANALYSIS
LIBERTY UTILITIES
LEBANON, NH

EQUIPMENT GENERAL ARRANGEMENT

PROJECT NUMBER: 3758.00

SHEET NUMBER: G-4

166R

CONFINED POOL FIRE MODEL

RECTANGULAR DIKE FIRE
TRENCH FIRE

FUEL

Name	: LNG LIGHT (METHANE)
Pool temperature	: -258.79 ° F

CONSTANT PROPERTIES

Molecular weight	: 16.04
Boiling point	: -258.79 ° F
Critical temperature	: -116.68 ° F
Critical pressure	: 667.2 psi
Heat of combustion	: 2.15E+04 Btu/lb
Flame temperature	: 1880 ° F

CALCULATED PROPERTIES

Liquid compressibility factor	: 0.004
Liquid density	: 29.69 lb/cu ft

DIMENSIONS

Pool width	: 147.5 ft
Pool length	: 181.0 ft
Pool liquid height	: 4.0 ft
Height of flame base	: 4.0 ft
Height for Radiation Calculations	: 4.0 ft

LOCAL AMBIENT CONDITIONS

Air temperature	: 3.0 ° F
Ambient pressure	: 1.0 atm
Wind speed	: 27.0 mph
Relative humidity	: 24.0%

RESULTS

Mass burning rate	: 0.023 lb/ft² s
Flame length	: 207.57 ft
Flame tilt from vertical (front view)	: 60.14°
Flame tilt from vertical (side view)	: 58.99°
Flame drag ratio (front view)	: 1.52
Flame drag ratio (side view)	: 1.41
Maximum emissive power	: 60,230 Btu/ft² hr
Effective emissive power (front view)	: 60229.68 Btu/ft² hr
Effective emissive power (side view)	: 60229.68 Btu/ft² hr

Front view (view along dike/trench width)

Thermal flux (Btu/ft² hr)	Distance from center of pool (ft)
1000	449.84
4000	563.40
1600	729.22

Side view (view along dike/trench length)

Thermal flux (Btu/ft² hr)	Distance from center of pool (ft)
1000	447.06
4000	553.37
1600	706.63

Maximum emissive power : 190.0 kW/m**2
Front view (view along dike/trench width)

Distance from center of pool (ft)	Thermal flux to horizontal target (Btu/ft² hr)	Thermal flux to vertical target (Btu/ft² hr)	Maximum flux to target (Btu/ft² hr)
110.63	Target in flame	Target in flame	Target in flame
147.50	Target in flame	Target in flame	Target in flame
184.38	50,920	28,482	53,814
221.25	46,751	27,572	50,823
295.00	32,383	23,538	39,309
368.75	13,484	17,814	22,339
442.50	4,203	9,864	10,721
590.00	675.72	3,292	3,360

885.00	83.49	866.18	870.15
1,475	9.80	212.43	212.65

Side view (view along dike/trench length)

Distance from center of pool (ft)	Thermal flux to horizontal target (Btu/ft² hr)	Thermal flux to vertical target (Btu/ft² hr)	Maximum flux to target (Btu/ft² hr)
135.75	Target in flame	Target in flame	Target in flame
181.00	51,700	28,537	54,292
226.25	46,029	27,286	50,136
271.50	37,608	24,214	42,920
362.00	15,879	17,458	23,598
452.50	3,850	8,659	9,475
543.00	1,127	4,172	4,321
724.00	211.57	1,456	1,472
1,086	30.99	418.92	420.03
1,810	4.04	109.05	109.11

RECTANGULAR DIKE FIRE
TRENCH FIRE

FUEL

Name	: LNG LIGHT (METHANE)
Pool temperature	: -258.79 ° F

CONSTANT PROPERTIES

Molecular weight	: 16.04
Boiling point	: -258.79 ° F
Critical temperature	: -116.68 ° F
Critical pressure	: 667.2 psi
Heat of combustion	: 2.15E+04 Btu/lb
Flame temperature	: 1880 ° F

CALCULATED PROPERTIES

Liquid compressibility factor	: 0.004
Liquid density	: 29.69 lb/cu ft

DIMENSIONS

Pool width	: 109.0 ft
Pool length	: 121.0 ft
Pool liquid height	: 4.0 ft
Height of flame base	: 4.0 ft
Height for Radiation Calculations	: 1.64 ft

LOCAL AMBIENT CONDITIONS

Air temperature	: 3.0 ° F
Ambient pressure	: 1.0 atm
Wind speed	: 27.0 mph
Relative humidity	: 24.0%

RESULTS

Mass burning rate	: 0.023 lb/ft² s
Flame length	: 168.21 ft
Flame tilt from vertical (front view)	: 61.75°
Flame tilt from vertical (side view)	: 61.2°
Flame drag ratio (front view)	: 1.57
Flame drag ratio (side view)	: 1.51
Maximum emissive power	: 60,230 Btu/ft² hr
Effective emissive power (front view)	: 60229.67 Btu/ft² hr
Effective emissive power (side view)	: 60229.67 Btu/ft² hr

Front view (view along dike/trench width)

Thermal flux (Btu/ft² hr)	Distance from center of pool (ft)
1000	347.07
4000	430.45
1600	550.98

Side view (view along dike/trench length)

Thermal flux (Btu/ft² hr)	Distance from center of pool (ft)
1000	345.92
4000	426.71
1600	542.61

Maximum emissive power : 190.0 kW/m**2
Front view (view along dike/trench width)

Distance from center of pool (ft)	Thermal flux to horizontal target (Btu/ft² hr)	Thermal flux to vertical target (Btu/ft² hr)	Maximum flux to target (Btu/ft² hr)
81.75	Target in flame	Target in flame	Target in flame
109.00	Target in flame	Target in flame	Target in flame
136.25	51,564	25,283	53,266
163.50	47,767	26,254	50,890
218.00	35,543	22,694	40,739
272.50	18,413	18,323	25,975
327.00	6,272	11,362	12,977
436.00	916.51	3,688	3,800

654.00	101.00	907.39	912.93
1,090	11.14	214.03	214.31

Side view (view along dike/trench length)

Distance from center of pool (ft)	Thermal flux to horizontal target (Btu/ft² hr)	Thermal flux to vertical target (Btu/ft² hr)	Maximum flux to target (Btu/ft² hr)
90.75	Target in flame	Target in flame	Target in flame
121.00	Target in flame	Target in flame	Target in flame
151.25	49,806	26,027	52,254
181.50	44,097	25,187	47,797
242.00	28,203	19,986	34,005
302.50	10,763	14,175	17,798
363.00	3,142	7,419	8,057
484.00	485.64	2,380	2,429
726.00	59.60	618.58	621.43
1,210	7.02	151.49	151.65

Lang McLaughry Commercial

LMSRE.COM

MEMORANDUM

TO: Bill Clark
Liberty Utilities

FROM: Bruce M. Waters, CCIM
Lang McLaughry Commercial

DATE: August 12, 2015

RE: Preliminary Valuation Review of 384-386 Plainfield Road, West Lebanon, NH

Bill:

Per your request, I am pleased to provide my preliminary review of market value for the noted subject properties.

The subject property comprises two (2) parcels. Parcel #1 is the so-called, undeveloped sand and gravel property, comprising approximately23.3 acres, of which 8.7+/- acres are encumbered by a "Compensary Flood Storage" easement and is known as "The Conservation Easement". The use of the 8.7+/- acres is limited in scope and is provided in a Quitclaim Deed, attached herein.

It is reported that there is approximately 1.0m yards of sand and gravel on the site. Parcel #1 also contains an unknown quantity of cement rubble that was supposed to be crushed and used for aggregate by the former owner. I am not sure the material is an asset or a liability for a new purchaser.

CCIM
Individual Member

P.O. Box 5419, 93 South Main Street ✦ West Lebanon, New Hampshire 03784-5419
603.298.8904, 800.730.4988, 603.298.7546 (Fax) ✦ Email: Bruce.Waters@LMSRE.com

Parcel #2 is a small 1.5+/- acre parcel with a heated high bay garage and a former residential structure that has been converted to office use. Both have a limited market but are rentable.

This preliminary valuation report will consider the income approach to value for those structures.

Both parcels are zoned Heavy Industrial and have limited uses, thus the market is rather thin as to uses that can apply to the property. (See Zoning Ordinance attached.)

The liabilities on the property that may have an effect on value would be the following:

- Conservation Easement as it relates to maintenance long term.
- No public water.
- Obligations related to the closure of the sand and gravel operation.

Although I am not qualified to assess the quantity or value of the remaining aggregate on the property, a review of documents available to the public indicates a potential raw value of approximately $.69 - $1.25/yard.

Based on these assumptions and review of documents supplied by the current owner, the preliminary value of the collective properties are as follows:

Parcel #2 – 386 Plainfield Road – 23.3+/- acres

	Value
8.7+/- acres 14.6+/- useable acres x [redacted] /acre Aggregate – [redacted] s/y x [redacted]	[redacted]
TOTAL SUB VALUE – PARCEL #2	[redacted]

Parcel #1 – 384 Plainfield Road – 1.5+/- acres with two (2) buildings

Warehouse (4,000+/- SF)	Net Rent
2,400 - [redacted] 1,600 x [redacted]	[redacted]
TOTAL NET RENT	[redacted]

Value of Warehouse

Net Income		"Cap Rate"		Value
[redacted]	÷	[redacted]	=	[redacted]

Office – Upper Office – Lower	[redacted]
TOTAL NET RENT	[redacted]

Value of Office

Net Income		"Cap Rate"		Value
[redacted]	÷	[redacted]	=	[redacted]

Remaining Value of Unused Acreage:

.5+/- acres x [redacted] /acre	=	[redacted]

*Higher value per acre for frontage.

TOTAL VALUE OF PARCEL #2	[redacted]

SUMMARY OF VALUE:

Parcel #1 Real Estate Assumed Aggregate Value Parcel #2 Real Estate	[redacted]
TOTAL PACKAGE VALUE	[redacted]

Respectfully submitted,

Bruce M. Waters, CCIM
Senior Broker
NH Real Estate Broker's License #8754

304.1 Purpose.

The purpose of the IND-H District is to limit the location of industrial uses which have operational characteristics that are usually incompatible with other land uses to the area west of the Lebanon Regional Airport, which is now dominated by such uses.

304.2 Table of Uses.

IND-H DISTRICT

PERMITTED USES

1. Sanitary landfill
2. Recycling facility
3. Essential service
4. Sawmill per Section 304.5
5. Contractor's yard
6. Accessory use to a permitted use

SPECIAL EXCEPTION

1. Junkyards per section 605
2. Removal of natural materials
3. Stone crushing plant
4. Bituminous paving plant
5. Concrete mixing plant
6. Bulk storage of petroleum products
7. Accessory use to a use permitted by special exception

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

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New Hampshire Real Estate License: 008754

340 Acre Industrial Land / Quarry

Route 27, Raymond, NH 03077

Listing ID:	28805824
Status:	Active
Property Type:	Vacant Land For Sale
Possible Uses:	Industrial
Gross Land Area:	343 Acres
Sale Price:	$4,000,000
Unit Price:	$11,661 Per Acre
Sale Terms:	Cash to Seller
Nearest MSA:	Boston-Cambridge-Newton
County:	Rockingham
Zoning:	INDUSTRIAL
Road Type:	Paved
Property Visibility:	Fair
Highway Access:	Access onto Route 107 to 101

Property Overview

Subject parcel had been historically used as an operational gravel pit. Total land area is in excess of 340 acres Zoned Industrial (Zone D) accessing off of NH 27 in Raymond, NH.

Owner has prepared plans and specifications to expand the prior operation to include a pond dredging area estimated to yield approximately ¾ million cy of sands and gravels, and a quarry area estimated to yield approximately 40 million cy of rock.

State permits have been issued for dredging and quarrying. Negotiations on local use permits are ongoing at this time.

Contact Michael Dibitetto @ dibitetto@msn.com 603.836.6639

Property Contacts

Dan Silva
KW Commercial Bedford-Manchester
770-310-3253 [M]
603-836-2746 [O]
DanSilva@KWCommercial.com

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

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New Hampshire Real Estate License: 008754

Vacant Land For Sale

22 Route 28, Ossipee, NH 03864

Listing ID:	29621033
Status:	Active
Property Type:	Vacant Land For Sale
Possible Uses:	See Agent
Gross Land Area:	13.10 Acres
Sale Price:	$550,000
Unit Price:	$41,984 Per Acre
Sale Terms:	Cash to Seller, Other
Nearest MSA:	MSA unknown
County:	Carroll
Zoning:	COMMERCIAL NODE

Property Overview

Fully permitted and operational sand and gravel pit on 5.8 acres, with plenty of reserve opportunity on adjoining 7.3 acres. Located near major routes,16 and 28.

Property Contacts

Tom Nardozzi
KW Commercial Bedford-Manchester
603-793-9623 [M]
603-836-2700 [O]
tjnardozzi@kw.com

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

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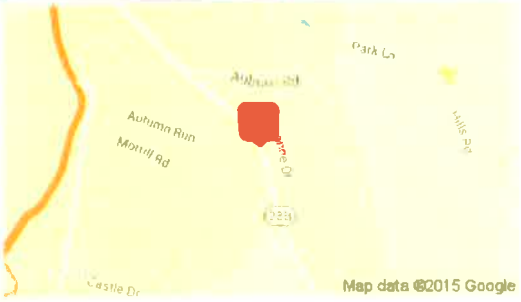
New Hampshire Real Estate License: 008754

Vacant Land For Sale

172 Londonderry Turnpike, Hooksett, NH 03106

Listing ID:	28414650
Status:	Active
Property Type:	Vacant Land For Sale
Possible Uses:	Industrial
Gross Land Area:	11.50 Acres
Sale Price:	$650,000
Unit Price:	$56,521 Per Acre
Sale Terms:	Cash to Seller, Other
Nearest MSA:	Concord
County:	Merrimack
Zoning:	COMMERCIAL



Property Overview

11.5 Acres in Hooksett NH on Rte 28 inside the Commercial Zone. Just off Exit 1 Rte 101 + Rte 93 along the growth corridor between Manchester and OW Highway. Property consists of 11.5 acres that is subject to subdivision with conceptual available for review. Land is topography is wooded and easy to walk. Permitted Zoning uses include: Business offices, Restaurants Shops, retail establishments, Garages, parking lots, motor fuel dispensing stations, excluding motor vehicle body shops, Private schools, library, day nursery, kindergarten, day care centers, trade or professional school, Theaters, halls, clubs, amusement centers, and private recreational facilities, Greenhouses, florist shops, Convalescent homes, assisted living facilities or nursing homes providing long term custodial care for the aged or infirm, Undertaking establishments, Hospitals, Wholesale establishments, Manufactured housing parks, Lodging houses, hotels, inns, motels, tourists courts, cabins, including such retail businesses.Nat gas + 3 phase elect avail

Property Contacts

Ronald Fredette
KW Commercial NH
603-540-4489 [M]
603-836-2700 [O]
ronald@kw.com

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

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94 Manchester St

94 Manchester St, Concord, NH 03301

Transaction ID:	2020827
Property Type:	Vacant Land - SOLD
Possible Uses:	Industrial, Office
Gross Land Area:	11.08 Acres
Archived Date:	12/18/2014
Closing Date:	12/18/2014
Asking Sale Price:	$2,100,000
Asking Unit Price:	$4.35 PSF
Final Sale Price:	$1,800,000
Final Unit Price:	$3.73 PSF
Days on Market:	441
Nearest MSA:	Concord
County:	Merrimack
Zoning:	CH & OFP

'16 2,454 8/10

Property Overview

11.08± acre mixed use lot in Concord, NH. Part of the parcel is the last large auto sale site in Concord. Flat and dry buildable acres behind it makes it the perfect site for automotive sales/service, retail, senior living development or professional offices. Zoning in both Commercial Highway District and Office Park Performance District creates a wide variety of potential uses.

Current building is 5,497 SF, but expandable to 14,000 with approvals in place.

With 230' road frontage this busy street has 12,000 VPD per NHDOT 2011.

Located off Exit 13, I-93.

Property Contacts

Listing Broker

Douglas Martin

Colliers International

603-493-8784 [M]

603-206-9618 [O]

doug.martin@colliers.com

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

603-298-8904 [O] bruce.waters@LMSRE.com
New Hampshire Real Estate License: 008754

Wentworth Avenue

Wentworth Avenue, Londonderry, NH 03053

Transaction ID:	2020737
Property Type:	Vacant Land -- SOLD
Possible Uses:	Industrial, Office
Gross Land Area:	13.46 Acres
Archived Date:	12/17/2014
Closing Date:	12/15/2014
Asking Sale Price:	$595,000
Asking Unit Price:	$1.01 PSF
Final Sale Price:	$550,000
Final Unit Price:	$0.94 PSF
Days on Market:	484
Nearest MSA:	Boston-Cambridge-Quincy
County:	Rockingham
Zoning:	INDUSTRIAL II

Property Overview

This parcel is a fully approved industrial site with close proximity to the FE Everett Turnpike, the Manchester-Boston Regional Airport and Route 93. The current owners have vested the improvements on the site with substantial investment into the grounds. Site is shovel ready for a owner/user or an investor.

Property Contacts

Listing Broker
Joseph Mendola
NAI Norwood Group
603-668-7000X-203 [O]
joe@nainorwoodgroup.com

Listing Broker
Chris Norwood
NAI Norwood Group
603-668-7000 - 212 [O]
cnorwood@nainorwoodgroup.com

Prepared by Bruce M. Waters, CCIM, Lang McLaughry Commercial Real Estate
Aug 11, 2015 on NECPE

603-298-8904 (O) bruce.waters@LMSRE.com
New Hampshire Real Estate License: 008754

100 Simon St

100 Simon St, Nashua, NH 03060

Transaction ID:	2138104
Property Type:	Vacant Land - SOLD
Possible Uses:	Industrial, Multi-Family
Gross Land Area:	14.23 Acres
Archived Date:	8/7/2015
Closing Date:	8/6/2015
Asking Sale Price:	$3,200,000
Asking Unit Price:	$5.16 PSF
Final Sale Price:	$2,400,000
Final Unit Price:	$3.87 PSF
Days on Market:	271
Nearest MSA:	Manchester-Nashua
County:	Hillsborough
Tax ID Number/APN:	38449
Zoning:	PI
Property Visibility:	Good

168,657 p/p

Property Overview

14 23 Acre zoned PI, as Industrial and RB, as Urban Residential serviced by municipal water, sewer and natural gas. Engineering complete for a 1,640 seat ministry campus with 346 parking a 450 seat gymnasium and a phase two classroom development. Located along the Nashua Canal, the site is NOT in a flood zone. Located right off exit 5A in Nashua off Rte. 3 Everett Turnpike. Large parcel such as this is seldom offered inside the city of Nashua, NH. Owner will pay current use penalty

Property Contacts

Listing Broker

Ronald Fredette

KW Commercial NH

603-540-4489 (M)

603-836-2700 (O)

ronald@kw.com

 BK 4086 PG 0111

8 1 3 5 4 6 5
Tx:4120735

4086-0111
10/02/2014 11:53 AM Pages: 6
REGISTER OF DEEDS, GRAFTON COUNTY

C/H
L-CHIP
GRA079649

STATE OF NEW HAMPSHIRE
DEPARTMENT OF REVENUE ADMINISTRATION
REAL ESTATE TRANSFER TAX
****8 Thousand 5 Hundred 36 Dollars
DATE AMOUNT
10/02/2014 GR044916 $****8536.00
VOID IF ALTERED

055

WARRANTY DEED

CARL L. MOULTON, of Lebanon in the County of Grafton and State of New Hampshire, for consideration paid grants to UPPER VALLEY SAND & GRAVEL LLC, a New Hampshire limited liability company with a place of business in Hartford in the County of Windsor and State of Vermont and with a mailing address of P.O. Box 127, Quechee, VT 05059, with WARRANTY COVENANTS, the following parcels of land:

Being parcels of land known as 384 Plainfield Road and 386 Plainfield Road in the City of Lebanon, County of Grafton and State of New Hampshire and being described as follows:

Being all of the same land and premises conveyed to Carl L. Moulton by the following:

1, Warranty Deed of Moulton Construction, Inc, dated July 11, 1990 and recorded with the Grafton County Registry of Deeds at Book 1869, Page 815; and

2. Warranty Deed of Dennis Eaborn dated April 26, 2000 and recorded with the Grafton County Registry of Deeds at Book 2457, Page 945.

The land and premises conveyed herein are more-particularly described as follows:

PARCEL I: A certain parcel of land situated in the Town of West Lebanon, County of Grafton and State of New Hampshire, located westerly of River Road, so-called, and easterly of the Connecticut River. Said parcel of land is shown on a certain plan entitled "Boundary and Easement Plan, Carl L. Moulton, West Lebanon, NH" dated January 9, 1998, prepared by Holden. Engineering & Surveying, Inc. recorded as Plan No. 9271 in the Grafton County Registry of Deeds (the "Plan"), more particularly bounded and described as follows:

Beginning at a point on the shore of the Connecticut River, said point being the northwesterly corner of the within described premises; thence S 77° 09' 33" E, along land now or formerly of the City of Lebanon, NH, a distance of 200 feet, more or less, to a point; thence continuing along a barbed wire fence S 76° 38' 03" E a distance of 483.40 feet, more or less, to a point; thence S 80° 02' 07" E a distance of 282.69 feet, more or less, to a point; thence S 77° 31' 13" E a distance of 240.74 feet, more or less, to a point; thence S 79° 51' 51 " E a distance of 156.56 feet, more or less, to an iron pin found; thence turning and running along land now or formerly of Dennis Eaborn S 11° 22' 03" E a distance of 411.24 feet to an iron pin found,; thence turning and continuing along said Eaborn land N 79° 37' 57" E a distance of 139.68 feet, more or less, to a

point being 0.72 feet from an iron pin found, as shown on said Plan; thence turning and running along the westerly side of River Road, so-called, S 03° 22' 01" E a distance of 520.53 feet to a point at land now or formerly of the State of New Hampshire Fish & Game Dept.; thence turning and running along said State of New Hampshire land N 67° 02' 52" W a distance of 18.77 feet, more or less, to a concrete bound found; thence continuing N 67° 02' 52" W a distance of 558.54 feet, more or less, to a concrete bound; thence N 79° 09' 24" W a distance of 566.77 feet, more or less, to a concrete bound; thence continuing N 79° 09' 24" W a distance of 108 feet, more or less, to a point on the shore of the Connecticut River; thence running along the easterly shoreline of the Connecticut River in a northerly and westerly direction a distance of 962 feet, more or less, to a point at land now or formerly of the City of Lebanon, NH, said point being the point of beginning.

PARCEL II: Two certain tracts of land, with buildings thereon, situate in West Lebanon, and City of Lebanon, County of Grafton, and State of New Hampshire, bounded and described as follows:

Tract 1: Beginning at an iron pipe driven in the ground on the westerly side of the highway leading from the village of West Lebanon southerly to Plainfield and known as the River Road in said Lebanon. Said iron pipe being the southeasterly corner of land now or formerly of Margaret Wood, and now by the City of Lebanon, and 33 feet westerly from the center line of said highway as now used;

Thence leading South 10° 30' West in a line parallel with and 33 feet westerly from the center line of said highway as now used, a distance or 340 feet to an iron pipe driven in the ground, said iron pipe being about 550 feet northerly from the junction of the highway leading easterly to Meriden;

Thence making an interior angle of 96° and leading North 85° 30' West in the northerly line of land now or formerly of Edward P. and Mary E. Drake, a distance of 140.5 feet to an iron pipe driven in a woodchuck's hole;

Thence making an interior angle of 91° and leading North 03°, 30' East in the easterly line of remaining land of Edward P. and Mary E. Drake, now or formerly, a distance of 408.8 feet to an iron pipe driven in the ground in the southerly line of land of said City of Lebanon;

Thence easterly to the southerly line of land of said City of Lebanon, and following a wire fence, a distance of 196 feet to the point of beginning.

The bearings as given are Magnetic (1949) and all distances to be more or less. Tract 2: Being a small tract of land, 35 feet on the north and south sides, and 50 feet on the east and west sides. Said spring or well of water being of concrete construction, 3 feet in diameter and nearly center of said tract in a valley or ravine, lying 350 feet easterly of the highway known as the River Road in said Lebanon, leading from said West Lebanon southerly to Plainfield, and 150 feet northerly of the junction of the highway leading easterly to Meriden. The northwest corner of said tract being marked by a 12 inch soft maple tree, the northeast corner marked by a

12 inch rock maple tree, the southeast corner marked by a 10 inch walnut tree and the southwest corner marked by a 10 inch beech tree. All said trees being blazed with three hacks.

Together with right to enter, repair, relay and maintain an aqueduct from said concrete spring or well of water westerly to premises now or formerly owned by Edward P. Drake and Mary E. Drake, bounded and described as follows:

Beginning at said spring or well of water and leading North 38° West a distance of 102 feet;

thence South 78° West 57.7 feet;
thence North 77° West 21 feet; thence
North 06° 30' West 84.5 feet; thence
North 04° 30' West 88.7 feet; thence
North 03° 30' West 118.3 feet; thence
North 10° 30' West 65.4 feet; thence
North 36° 40' West 45.2 feet; thence
North 05° 30' West 73 feet; thence
North 19° 30' West 30.6 feet;

thence North 68° 15' West across said River Road, 56 feet to the easterly line of land of Edward P. and Mary E. Drake, now or formerly, at a point 73 feet northerly from an iron pipe at the southeasterly corner of land now or formerly of said Edward P. and Mary E. Drake. Doing no unnecessary damage.

The Bearings are given as Magnetic (1950) and all distances to be more or less. Tree measurements are as of May 27, 1950.

Reference is hereby made to the aforementioned deed and its record and to the deeds - referred to therein and their records in further aid of this description.

The parcels are conveyed subject to (i) the easements and covenants of record set forth on Exhibit A attached hereto; (ii) the Permits, and all federal, state and local laws and administrative regulations promulgated under any thereof; and (iii) all outstanding real property taxes owed to the City (the "Real Estate Taxes"), which balances as of July 15, 2014 are shown on Exhibit B attached hereto, and any liens in favor of the City for such taxes (collectively, the "Permitted Encumbrances").

DATED AND EXECUTED as a sealed instrument on this, the ___ day of September, 2014.

WITNESS:

GRANTOR:

Carl Lloyd Moulton

CERTIFICATE OF ACKNOWLEDGMENT BY FIDUCIARY

STATE OF FLORIDA
COUNTY OF MARION, SS

The foregoing instrument was acknowledged before me this 26th day of September, 2014, by Carl Lloyd Moulton, who is personally known to me or who has produced his driver's license.

Peter Finan
Notary Public
Printed Name: PETER FINAN
My Commission Expires: 11-14-16
Commission # EE851661

PETER FINAN
MY COMMISSION # EE 851661
EXPIRES: November 14, 2016
Bonded Thru Notary Public Underwriters

EXHIBIT A

Permitted Encumbrances

1. Conservation Easement pursuant to Compensatory Flood Storage Easement to the City of Lebanon dated March 18, 1998 and recorded at Book 2311, Page 835 (Parcel I).

2. Notations on Plan No. 9271, Plan Book 1188, Page 24; Plan Book 1187, Page 46; Plan Book 0757, Page 59 (Parcels I and II).

3. Easements for slopes and embankments, as well as a fence obligation, as set forth in deed recorded at Book 810, Page 341 (Parcels I and II).

4. Easement and Agreement for Compensatory Flood Storage between Moulton Construction, Inc. and Juster Development Company dated January 8, 1990 and recorded at Book 1907, Page 147 (Parcel I).

5. Possible Line Rights included in an easement deed to the City of Lebanon dated September 13, 1951 and recorded at Book 815, Page 11 (Parcel I).

6. Easement and Agreement for Compensatory Flood Storage with David D. Glass, Trustee of Wal-Mart Real Estate Business Trust, dated March 18, 1998 and recorded at Book 2310, Page 265, and as shown on Plan No. 9271 (Parcel I).

7. Utility Easement for Parcel 157-2 to Granite State Electric Co. dated December 28, 1978 and recorded at Book 1360, Page 962 (Parcel II).

8. Notice of Underground LP Gas Tank owned by Pratt's Propane, Inc. on Parcel 157-2 dated July 14, 1988 and recorded at Book 1799, Page 28 (Parcel II).

9. Riparian rights of others to Connecticut River (Parcel I).

10. Rights of the public and others entitled thereto in and to those portions of the insured premises lying within the bounds of Route 12-A, a/k/a Plainfield Road, f/k/a River Road, and adjacent streets and ways.

 BK 4086 PG 0116

EXHIBIT B

City of Lebanon Taxes

Tax ID	Bill#	Due Date	Year	Remaining Amount	Costs	Interest to Date	Amount Due
4642	116020	5/02/13	2012	9,323.46	0.00	308.06	9,631.52
4642	126801	5/01/14	2013	29,277.58	69.00	1,082.87	30,429.45
4642	129849	7/01/14	2014	13,638.00	0.00	62.77	13,700.77
4643	126802	5/01/14	2013	8,615.96	69.00	318.68	9,003.64
4643	129850	7/01/14	2014	4,010.00	0.00	18.46	4,028.46

QUITCLAIM DEED
(Conservation Easement)

Carl L. Moulton, having a mailing address of Box 5251, West Lebanon, New Hampshire 03784 (the "Grantor"), grants to the City of Lebanon (the "Grantee"), a municipal corporation, having a mailing address of 51 North Park Street, Lebanon, New Hampshire 03766, with Quitclaim Covenants, the benefit of and the right to enforce a conservation easement in and on a certain portion (the "Conservation Area") of certain property (the "Gravel Pit Property") of the Grantor located in Lebanon, County of Grafton and State of New Hampshire shown as "Compensatory Flood Storage Easement" on a plan (the "Plan") entitled "Boundary and Easement Plan, Carl L. Moulton, West Lebanon, NH" dated January 9, 1998, prepared by Holden Engineering & Surveying, Inc., and recorded or to be recorded herewith in the Grafton County Registry of Deeds. The Conservation Area is more particularly bounded and described in Exhibit 1-A attached hereto and the Gravel Pit Property is more particularly described in Exhibit 1-B attached hereto.

Reference is made to the following facts:

1. The Gravel Pit Property is presently being used by the Grantor for the extraction and sale of sand and gravel.

2. Wal-Mart Stores, Inc. (or successors or assigns thereof) intends to construct a retail shopping facility (the "Project") on a certain tract or parcel of land (the "Project Property") located easterly of Route 12A in the City of Lebanon, Grafton County, New Hampshire. The Project Property is further described in Exhibit 2 attached hereto and made a part hereof.

3. The Project requires filling a portion of the Project Property above the 100 year floodplain as determined by the Lebanon Flood Insurance Study;

4. Pursuant to N.H. Wetland Board Permit No. 95-01844 as affected by letter dated September 24, 1996 from Lori Sommer, Senior Permitting Officer for the New Hampshire Wetlands Bureau to Mr. Paul Korpela and Venture Development (the Permit as amended, and supplemented by the September 24, 1996 letter is referred to as the "Wetlands Permit") and the Army Corps of Engineers Permit No. 199602035, as amended (the "Army Corps Permit"), compensatory flood storage (the "Compensatory Flood Storage") on the Gravel Pit Property in the amount of 157,000 cubic yards will be provided for the floodwaters resulting from 100 year flood which will be displaced by the filling of the Project Property necessary to construct the Project. The Compensatory Flood Storage is being provided in the Conservation Area.

5. This Conservation Easement is being granted pursuant to and in satisfaction of certain conditions of the Wetlands Permit.

007044

BK2311 PG0835

The term "conservation easement" as used herein shall mean that, except as otherwise provided herein, the Grantor shall maintain the Conservation Area as open space and shall not conduct or permit the following activities in the Conservation Area:

(a) construction or placing of permanent buildings, mobile homes, structures of any kind or nature, parking lots, paved roadways, signs or other improvements on or above the ground; and

(b) activities not permitted under the Wetlands Permit and the Army Corps Permit.

The intent of the foregoing restriction is to retain the Conservation Area in a predominantly unimproved and open condition, subject to the exceptions set forth below.

Nothing contained herein shall limit or restrict Grantor's rights to continue to use the Gravel Pit Property (including the Conservation Area) as a gravel pit and Grantor expressly reserves the right to make any other lawful use of the Gravel Pit Property (including the Conservation Area) which does not interfere with the purpose of this conservation restriction, and the Compensatory Flood Storage being provided pursuant to the Wetlands Permit and the Army Corps Permit. The loam and revegetation requirement for the initial compensatory flood storage area is not intended to limit further sand and gravel excavation operations in the Conservation Area. At the conclusion of any further sand and gravel excavation operations, the Grantor, or his successors, will restore the affected area as required by either the Wetlands Permit or the Army Corps Permit. Without limiting the generality of the foregoing, the Grantor specifically reserves the right to:

(a) subdivide the Gravel Pit Property, and any portion thereof not necessary for the construction, operation, maintenance and repair of the Compensatory Flood Storage and related appurtenances (and reasonable access thereto) may be conveyed free and clear of this conservation easement;

(b) enlarge and/or change the configuration of the storage basin, including the right to enlarge the storage basin to provide compensatory flood storage to any other party;

(c) plant trees, shrubs and other vegetation, and mow the grass;

(d) landscape the Gravel Pit Property;

(e) prune, cut and remove trees, brush and other vegetation consistently with sound forestry conservation practices or to implement disease prevention measures;

(f) conduct or permit activities required for the installation of lines, conduits, pipes, mains, wires and cables together with necessary poles, manholes and other appurtenances for the conveyance or transmission of electricity, water, gas, sewer, drainage, telephone or any other utility of any nature on, under or over the Gravel Pit Property;

(g) excavate or remove rocks, minerals, gravel, sand, topsoil, or any other similar materials from any portion of the Gravel Pit Property in connection with providing additional compensatory flood storage or otherwise; provided that, (i) the Grantor shall maintain a 2:1 side slope ratio in the event of further excavation activities; and (ii) the Grantor revegetates any disturbed area after the completion of any excavation activity; and

(h) conduct or permit any and all activities required, authorized or permitted under the Wetlands Permit or the Army Corps Permit.

The conservation easement hereby conveyed does not grant to the Grantee or the general public any right to enter upon the Conservation Area except that the Grantee, through one or more duly designated officers or employees, may enter upon the Conservation Area at reasonable times and in a reasonable manner, for the purpose of inspecting the Conservation Area to assure compliance with the terms of this conservation restriction. The right hereby granted shall be in addition to any other remedies available to the Grantee for the enforcement of the foregoing restrictions. In the event that any enforcement action is taken with regard to the foregoing restrictions, the prevailing party in any such action shall be entitled to its reasonable attorneys fees and costs incurred.

This conservation restriction shall be binding upon and may be enforced against the Grantor, its successors and assigns by the Grantee and its successors as holders of this conservation restriction.

This conservation restriction shall be a permanent easement burdening and running with the Conservation Area and shall be binding upon the Grantor and the Grantor's heirs, successors and assigns.

For Grantor's title, see deed of Moulton Construction Inc. dated July 11, 1990 and recorded with the Grafton County Registry of Deeds at Book 1869, Page 815. This conveyance is made subject to the terms and conditions of a compensatory flood storage easement previously granted by the Grantor in connection with the Project.

This is not a homestead property.

The foregoing conveyance is exempt from New Hampshire real estate transfer taxes pursuant to RSA 78-B:2.

EXECUTED as a sealed instrument this 18 day of March, 1998.

Carl L. Moulton

BK2311 PG0836

STATE OF NEW HAMPSHIRE
COUNTY OF Grafton, ss.

Then personally appeared before me this 18 day of March 1998, the above-named Carl L. Moulton who acknowledged the foregoing instrument to be his free act and deed.

Notary Public/Justice of the Peace
My Commission Expires:
DEBORAH A. JUDD, Notary Public
My Commission Expires December 22, 1999

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ACCEPTED BY:

CITY OF LEBANON

By: James A. McSweeney
Its: City Manager
Duly Authorized

BK2311 PG0835

STATE OF NEW HAMPSHIRE
COUNTY OF Grafton, SS

Then personally appeared before me this 20th day of April, 1998, the above-named James A. McSweeney, the City Manager of the City of Lebanon, who acknowledged the foregoing instrument to be his/her free act and deed.

Sandra L. Alcard
Notary Public/Justice of the Peace
My commission expires:

SANDRA L. ALCARD, Notary Public
My Commission Expires December 18, 2001

EXHIBIT 1-A

Legal Description of Conservation Area

A certain parcel of land shown as a "Compensatory Flood Storage Easement" on a certain plan entitled "Boundary and Easement Plan, Carl L. Moulton, West Lebanon, NH" dated January 9, 1998, more particularly bounded and described as follows:

Beginning at a point on the shore of the Connecticut River thence N 64° 59' 35" E a distance of 151.54 feet to a point; thence turning and running N 42° 37' 01" W a distance of 137.37 feet to a point; thence N 55° 34' 57" W a distance of 37.08 feet to a point; thence N 33° 39' 56" W a distance of 156.05 feet to a point; thence N 16° 46' 25" W a distance of 183.43 feet to a point; thence turning and running N 31° 35' 18" E a distance of 147.58 feet to a point; thence turning and running S 70° 14' 55" E a distance of 92.86 feet to a point; thence S 73° 08' 40" E a distance of 216.88 feet to a point; thence S 78° 43' 24" E a distance of 212.88 feet to a point; thence S 70° 27' 34" E a distance of 171.17 feet to a point; thence turning and running S 08° 29' 40" W a distance of 29.67 feet to a point; thence S 12° 57' 17" E a distance of 200.87 feet to a point; thence S 42° 07' 06" E a distance of 98.93 feet to a point; thence S 17° 15' 13" W a distance of 236.10 feet to a point; thence turning and running N 78° 50' 35" W a distance of 150.80 feet to a point; thence turning and running S 66° 45' 06" W a distance of 26.24 feet to a point; thence N 71° 29' 13" W a distance of 265.36 feet to a point; thence N 65° 14' 44" W a distance of 58.29 feet to a point; thence turning and running S 64° 48' 40" W a distance of 150.49 feet to a point at the shore of the Connecticut River; thence turning and running N 48° 17' 59" W a distance of 54.62 feet along the shore of the Connecticut River to the point of beginning.

The above described parcel contains approximately 8.720 acres, more or less.

EXHIBIT 1-B

Legal Description of Gravel Pit Property

A certain parcel of land situated in the Town of West Lebanon, County of Grafton and State of New Hampshire, located westerly of River Road, so-called and easterly of the Connecticut River. Said parcel of land is shown on a certain plan entitled "Boundary and Easement Plan, Carl L. Moulton, West Lebanon, NH" dated January 9, 1998, prepared by Holden Engineering & Surveying, Inc, (the "Plan") more particularly bounded and described as follows:

Beginning at a point on the shore of the Connecticut River, said point being the northwesterly corner of the within described premises; thence S 77° 09' 33" E, along land now or formerly of the City of Lebanon, NH, a distance of 200 feet, more or less to a point; thence continuing along a barbed wire fence S 76° 38' 03" E a distance of 483.40 feet, more or less, to a point; thence S 80° 02' 07" E a distance of 282.69 feet, more or less, to a point; thence S 77° 31' 13" E a distance of 240.74 feet, more or less, to a point; thence S 79° 51' 51" E a distance of 156.56 feet, more or less, to a point; thence turning and running along land now or formerly of Dennis Eaborn S 11° 22' 03" E a distance of 411.24 feet, more or less, to an iron pin found; thence turning and continuing along said Eaborn land N 79° 37' 57" E a distance of 139.68 feet, more or less, to a point being 0.72 feet from an iron pin found, as shown on said Plan; thence turning and running along the westerly side of River Road, so-called, S 03° 22' 01" E a distance of 520.53 feet to a point at land now or formerly of the State of New Hampshire Fish & Game Dept.; thence turning and running along said State of New Hampshire land N 67° 02' 52" W a distance of 18.77 feet, more or less, to a concrete bound found; thence continuing N 67° 02' 52" W a distance of 558.54 feet, more or less, to a concrete bound; thence N 79° 09' 24" W a distance of 566.77 feet, more or less, to a concrete bound; thence continuing N 79° 09' 24" W a distance of 108 feet, more or less, to a point on the shore of the Connecticut River; thence running along the easterly shoreline of the Connecticut River in a northerly and westerly direction a distance of 962 feet, more or less, to a point at land now or formerly of the City of Lebanon, NH, said point being the point of beginning.

Containing approximately 23.513 acres, more or less.

EXHIBIT 2

Legal Description of Project Property

A certain tract or parcel of land situated in the Town of Lebanon, Grafton County, New Hampshire as described on a certain plan entitled "Boundary Plan, Valley Square Shopping Center, Lebanon, NH" dated January 9, 1998 and prepared by Holden Engineering & Surveying, Inc. (the "Plan") and more particularly bounded and described as follows:

Beginning at a point on the easterly side of NH Route 12A said point being within the roadway easement referenced on the Plan and being the northernmost corner of the within described premises at land now or formerly of N.D. Development; thence S 56° 22' 50" E a distance of 823.82 feet to a point being the easterly corner of the within described premises at land now or formerly of Lawton Realty; thence turning and running S 30° 15' 53" W a distance of 281.98 feet to a point; thence continuing S 30° 12' 06" W a distance of 592.43 feet to a point at the southerly corner of the premises at land now or formerly of Lebanon Crushed Stone, Inc.; thence turning and running along land of Lebanon Crushed Stone, Inc. N 83° 10' 25" W a distance of 711.92 feet to a point; thence N 44° 55' 38" W a distance of 250.10 feet to a point; thence N 18° 14' 36" W a distance of 181.89 feet to a point on the easterly side of NH Route 12A; thence turning and running along the easterly side of NH Route 12A N 41° 47' 02" E a distance of 226.66 feet to a point; thence N 70° 09' 11" E a distance of 56.82 feet to a point; thence N 41° 47' 02" E a distance of 50.00 feet to a point; thence N 20° 41' 29" E a distance of 75.03 feet to a point; thence N 41° 47' 02" E a distance of 645.70 feet along the easterly side of NH Route 12A to the point of beginning.

Containing 22.883 acres, more or less.

BK2311 PG0842

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OPTION AGREEMENT

THIS OPTION AGREEMENT ("Option Agreement") is made as of the 1st day of September, 2015 (the "Effective Date") by and between Upper Valley Sand & Gravel, LLC ("Seller") and Liberty Utilities (EnergyNorth Natural Gas) Corp. and its affiliates and subsidiaries ("Purchaser").

RECITALS

A. Seller is the owner of real property generally located in the city of West Lebanon, State of New Hampshire consisting of approximately 24.7 acres with improvements and generally described as 384-386 Plainfield Road, West Lebanon, New Hampshire and more particularly described on Exhibit A attached hereto and made a part hereof (the "Property").

B. Seller desires to grant to Purchaser, and Purchaser desires to acquire from Seller, an option to purchase the Property.

AGREEMENT

NOW, THEREFORE, for the mutual covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Option to Purchase the Property

1. Grant of Option. Seller hereby grants to Purchaser an exclusive option (the "Option") to purchase the Property on the terms and conditions set forth herein. This Option Agreement grants a true option to Purchaser to purchase the Property and Purchaser shall have no obligation to purchase all or any portion of the Property.

2. Purchase Price. If Purchaser exercises the Option, the purchase price for the Property shall be [redacted] subject to customary adjustments and adjustments outlined in Sections 4 and 9(c) of this Option Agreement, which shall be paid at the time of closing of the purchase of the Property, as hereinafter provided.

3. Option Period. The term of the Option shall be for a period of [redacted] from the date first above written (the "Option Period"). Purchaser has the right, in its sole discretion, to extend the Option on a month to month basis (the "Option Period Extension") upon giving written notice to Seller on or before the last day of the Option Period or Option Period Extension as applicable. Purchaser shall have the right to terminate this Option Agreement at any time during the Option Period or any Option Period Extension upon the provision of written notice to Seller. The Option Period together with Option Period Extensions (the "Option Term") shall have a maximum term of [redacted].

4. Option Payment and Option Period Extension Payment(s). Upon execution of this Option Agreement, Purchaser shall deliver to Seller a payment in the amount of [redacted] as consideration of Seller's grant of said Option, which consideration is hereby acknowledged by Seller to be received and sufficient (the "Option Payment"). On or prior to the end of the Option Period or Option Period Extension, Purchaser shall deliver to Seller an amount equal to [redacted] for each month of extension to the Option Period as consideration of Seller's grant of an extension to the Option Period or Option Period Extension. Fifty percent (50%) of the Option Payment shall be credited towards the Purchase Price. Option Period Extension payments shall not be credited towards the Purchase Price.

5. Exercise. Purchaser may exercise the Option by executing and delivering to Seller during the Option Term, a copy of the purchase agreement attached hereto as Exhibit C and incorporated herein by reference (the "Purchase Agreement") fully executed by Purchaser (Seller having executed two (2) originals of said Purchase Agreement at the time of execution of this Option Agreement) and specifying therein a Closing Date not more than sixty (60) days from the date of exercise of the Option.

6. Runs with the Land. The Option contained in this Option Agreement shall run with and against the Property and shall be a benefit in gross to Purchaser as provided herein. This Option Agreement shall be binding upon Seller, and its successors in interest in the Property, and shall inure solely to the benefit of Purchaser. Purchaser shall have the sole right and ability to enforce the terms of this Option Agreement against Seller or its successors in interest in the Property and may record a memorandum of this Option Agreement in the Grafton County Registry of Deeds.

7. Affirmative Covenants. Seller shall cause the Property to be maintained free from waste and neglect and shall not allow the dumping on the Property of any wastes or substances of any kind whatsoever, except strictly in accordance with all applicable federal, state or local statutes, ordinances, rules, regulations or other law. Without the prior written consent of Purchaser and with the exception of the agreements listed in Exhibit B to this Option Agreement, Seller shall not (i) enter into any transaction in respect to or affecting the Property, including, without limitation, leases or service, maintenance or repair contracts in respect to or affecting the Property, which will survive the closing of a purchase and sale transaction for the Property between the Purchaser and the Seller, (ii) further encumber the Property in any form or manner whatsoever, or (iii) create or allow to be created any additional exceptions to title to the Property.

8. Seller's Covenants, Representations and Warranties. Seller covenants, represents and warrants that, as of the Effective Date:

a. Seller has full and lawful right and authority to execute and deliver this Option Agreement and to consummate the transactions contemplated hereunder;

b. Seller owns good fee simple marketable title to the Property;

c. To Seller's knowledge, there is currently no litigation, bankruptcy or other proceeding threatened or pending in any manner affecting the Property or any part thereof;

d. To Seller's knowledge, there is no pending or threatened condemnation of the Property or any part thereof;

e. To Seller's knowledge, there are no violations of any federal, state or local law, code, ordinance, rules, regulation or requirement, including without limitation applicable environmental laws or regulations, affecting the Property or any part thereof;

f. To Seller's knowledge, no unrecorded liens, encumbrances or adverse claims exist with respect to the Property or any portion thereof;

g. To Seller's knowledge, there are no management contracts, repair contracts, service contracts, options or any other material agreements relating to the Property which shall survive Closing;

h. Seller is not a "foreign person" as defined in Section 1445 of the Internal Revenue Code and is therefore exempt from the withholding requirements of said section (and Seller will furnish to Purchaser at Closing with an exemption certificate as set forth in said section);

i. Seller shall provide the Title Company with a certified statement in order to comply with Section 6056 or the Internal Revenue Code;

j. There are no leases or occupancy agreements affecting all or any portion of the Property that will survive the Closing except for those leases or agreements listed in Exhibit B to this Option Agreement.

k. Seller represents and warrants that the Property is currently zoned Heavy Industrial in accordance with the City of Lebanon Zoning Ordinance.

As provided in Section 7 and 8 above, Purchaser's obligations under this Option Agreement are expressly conditioned on the foregoing covenants, representations and warranties of Seller being true on the Contract Date and remaining true through Closing. The foregoing covenants, representations and warranties shall survive Closing.

9. Conditions of Option. This Option and subsequent purchase and sale shall be subject to the following:

a. *Access to Property and Inspections by Purchaser:* Seller shall allow Purchaser, its employees, agents, contractors, consultants, and representatives reasonable access to the Property, upon reasonable advance notice, for the purposes of conducting such surveys, tests, and inspections of the Property (including the groundwater and subsurface thereof) as Purchaser deems appropriate. Upon the completion of such investigations, Purchaser shall

promptly restore the Property to its prior condition to the extent practicable. Purchaser shall not incur any mechanics' liens in connection with its due diligence and, if so incurred, shall have same removed by payment or bond or other method reasonably satisfactory to Seller within thirty (30) days of receipt of notice of attachment. Purchaser shall not be responsible for notifying any party, including any public agency, of any conditions discovered at the Property, and Seller shall be responsible for all such notification. Purchaser, its employees, contractors, consultants, servants, and agents, shall have the right to inquire at any and all offices of governmental authorities regarding the Property.

b. *Seller's Right to Remove Aggregate During Option Term:* Purchaser grants to Seller the right to remove up to 10,000 yards per year of the Option Term of stone construction aggregate ("Aggregate") from Property. In the event Seller exercises that right, and subject to other adjustments to the Purchase Price, the Purchaser Price shall be decreased by an amount equal to $1.00 per yard for each yard of Aggregate removed from the Property.

10. Furnishing Documents. Seller shall, within ten (10) days following the date of this Option Agreement, furnish to Purchaser, for Purchaser's review, copies of any and all of the following items with respect to the Property in Seller's possession or control: (i) title insurance policies and underlying title documents, (ii) surveys, plats and other drawings, (iii) engineering reports, (iv) soil reports, (v) maintenance, repair and service contracts and any other material agreements relating to the Property, (vi) correspondence, documents, instruments or other information related to environmental conditions at or pertaining to the Property, (vii) records or information relating to any claims, actions, suits or other proceedings relating to all or any portion of the Property, and (viii) the most recent tax bill(s) with respect to the Property.

Seller shall also deliver to Purchaser (i) copies of any and all documents of the kind described in the foregoing paragraph received by Seller or its agents, employees, representatives or contractors on and after the Effective Date ("After Acquired Documents"), and (ii) any other types of documents or correspondence reasonably requested by Purchaser on or before the Closing with respect to the Property (the "Additional Documents"). After Acquired Documents shall be delivered to Purchaser within ten (10) days after receipt and any and all Additional Documents requested by Purchaser shall be delivered to Purchaser within ten (10) days after Purchaser's written request for such documents.

11. Notice. All notices, consents, requests, demands and other communications hereunder are to be in writing, and are deemed to have been duly given or made: (i) when delivered in person; (ii) three days after deposited in the United States mail, first class postage prepaid; or (iii) in the case of overnight courier services, one business day after delivery to the overnight courier service with payment provided for.

All notices to Seller shall be directed to:
Upper Valley Sand & Gravel, LLC
Ingrid Nichols and Christopher Nichols
P.O. Box 127
Quechee, VT 05059

All notices to Purchaser shall be directed to:
Liberty Utilities (EnergyNorth Natural Gas) Corp.
William Clark
15 Buttrick Road, Londonderry, NH 03053

or to such other persons or addresses as either party shall hereafter designate by notice given from time to time in accordance with this Section.

12. Benefit and Binding. This Option Agreement and the agreement resulting from the exercise of the Option shall bind and inure to the benefit of the heirs, administrators, executors, successors, and assigns of the respective parties. All rights of Purchaser hereunder may be assigned without restriction or consent of Seller.

13. Specific Performance. Purchaser may enforce this Option Agreement by specific performance, it being agreed that Purchaser has no adequate remedy at law.

14. No Conveyance. Seller shall not convey the Property or any portion thereof or interest therein to any person other than Purchaser during the Option Term.

15. Attorney's Fees and Costs. In the event either party to this Option Agreement commences a legal proceeding to enforce any of the terms of this Option Agreement or any rights under this Option Agreement, the prevailing party in such action shall be entitled to recover reasonable attorneys' fees and costs from the other party.

[Remainder of this Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Option Agreement as of the date first above written.

UPPER VALLEY SAND & GRAVEL, LLC

By: _____

Name: Ingrid Nichols Christopher G. Nichols

Title: Owner Owner

9/16/15

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP.

By: _____

Name: KEVIN M. McCARTHY

Title: V.P. FINANCE - TREASURER

By: _____

Name: Daniel G. Saad

Title: President - NH

EXHIBIT A TO OPTION AGREEMENT

LEGAL DESCRIPTION

All and the same land and premises conveyed to Upper Valley Sand & Gravel LLC by Warranty Deed of Carl L. Moulton acknowledged September 26, 2014, recorded October 2, 2014 in Book 4086, Page 111 of the Grafton County Registry of Deeds, and being more particularly described as follows:

PARCEL I: A certain parcel of land situated in the Town of West Lebanon, County of Grafton and State of New Hampshire, located westerly of River Road, so-called, and easterly of the Connecticut River. Said parcel of land is shown on a certain plan entitled "Boundary and Easement Plan, Carl L. Moulton, West Lebanon, NH" dated January 9, 1998, prepared by Holden Engineering & Surveying, Inc. recorded as Plan No. 9271 in the Grafton County Registry of Deeds (the "Plan"), more particularly bounded and described as follows:

Beginning at a point on the shore of the Connecticut River, said point being the northwesterly corner of the within described premises; thence S 77° 09' 33" E, along land now or formerly of the City of Lebanon, NH, a distance of 200 feet, more or less, to a point; thence continuing along a barbed wire fence S 76° 38' 03" E a distance of 483.40 feet, more or less, to a point; thence S 80° 02' 07" E a distance of 282.69 feet, more or less, to a point; thence S 77° 31' 13" E a distance of 240.74 feet, more or less, to a point; thence S 79° 51' 51" E a distance of 156.56 feet, more or less, to an iron pin found; thence turning and running along land now or formerly of Dennis Eaborn S 11° 22' 03" E a distance of 411.24 feet to an iron pin found.; thence turning and continuing along said Eaborn land N 79° 37' 57" E a distance of 139.68 feet, more or less, to a point being 0.72 feet from an iron pin found, as shown on said Plan; thence turning and running along the westerly side of River Road, so-called, S 03° 22' 01" E a distance of 520.53 feet to a point at land now or formerly of the State of New Hampshire Fish & Game Dept.; thence turning and running along said State of New Hampshire land N 67° 02' 52" W a distance of 18.77 feet, more or less, to a concrete bound found; thence continuing N 67° 02' 52" W a distance of 558.54 feet, more or less, to a concrete bound; thence N 79° 09' 24" W a distance of 566.77 feet, more or less, to a concrete bound; thence continuing N 79° 09' 24" W a distance of 108 feet, more or less, to a point on the shore of the Connecticut River; thence running along the easterly shoreline of the Connecticut River in a northerly and westerly direction a distance of 962 feet, more or less, to a point at land now or formerly of the City of Lebanon, NH, said point being the point of beginning.

PARCEL II: Two certain tracts of land, with buildings thereon, situate in West Lebanon, and City of Lebanon, County of Grafton, and State of New Hampshire, bounded and described as follows:

Tract 1: Beginning at an iron pipe driven in the ground on the westerly side of the highway leading from the village of West Lebanon southerly to Plainfield and known as the River Road in said Lebanon. Said iron pipe being the southeasterly corner of land now or formerly of Margaret Wood, and now by the City of Lebanon, and 33 feet westerly from the center line of said highway as now used;

Thence leading South 10° 30' West in a line parallel with and 33 feet westerly from the center line of said highway as now used, a distance or 340 feet to an iron pipe driven in the ground, said iron pipe being about 550 feet northerly from the junction of the highway leading easterly to Meriden;

Thence making an interior angle of 96° and leading North 85° 30' West in the northerly line of land now or formerly of Edward P. and Mary E. Drake, a distance of 140.5 feet to an iron pipe driven in a woodchuck's hole;

Thence making an interior angle of 91° and leading North 03° 30' East in the easterly line of remaining land of Edward P. and Mary E. Drake, now or formerly, a distance of 408.8 feet to an iron pipe driven in the ground in the southerly line of land of said City of Lebanon;

Thence easterly to the southerly line of land of said City of Lebanon, and following a wire fence, a distance of 196 feet to the point of beginning.

The bearings as given are Magnetic (1949) and all distances to be more or less.

Tract 2: Being a small tract of land, 35 feet on the north and south sides, and 50 feet on the east and west sides. Said spring or well of water being of concrete construction, 3 feet in diameter and nearly center of said tract in a valley or ravine, lying 350 feet easterly of the highway known as the River Road in said Lebanon, leading from said West Lebanon southerly to Plainfield, and 150 feet northerly of the junction of the highway leading easterly to Meriden. The northwest corner of said tract being marked by a 12 inch soft maple tree, the northeast corner marked by a 12 inch rock maple tree, the southeast corner marked by a 10 inch walnut tree and the southwest corner marked by a 10 inch beech tree. All said trees being blazed with three hacks.

Together with right to enter, repair, relay and maintain an aqueduct from said concrete spring or well of water westerly to premises now or formerly owned by Edward P. Drake and Mary E. Drake, bounded and described as follows:

Beginning at said spring or well of water and leading North 38° West a distance of 102 feet;

thence South 78° West 57.7 feet;
thence North 77° West 21 feet;
thence North 06° 30' West 84.5 feet;
thence North 04° 30' West 88.7 feet;
thence North 03° 30' West 118.3 feet;
thence North 10° 30' West 65.4 feet;
thence North 36° 40' West 45.2 feet;
thence North 05° 30' West 73 feet;
thence North 19° 30' West 30.6 feet;

thence North 68° 15' West across said River Road, 56 feet to the easterly line of land of Edward P. and Mary E. Drake, now or formerly, at a point 73 feet northerly from an iron pipe at the

southeasterly corner of land now or formerly of said Edward P. and Mary E. Drake. Doing no unnecessary damage.

The Bearings are given as Magnetic (1950) and all distances to be more or less. Tree measurements are as of May 27, 1950.

Reference is hereby made to the foregoing deed and its records, and to the deeds and records referenced therein in further aid of this description.

EXHIBIT B TO OPTION AGREEMENT

SECTION 7. LEASES

1. Lease by and between Upper Valley Sand and Gravel, LLC and CarePlus Ambulance Service Inc. dated January 23, 2015.

EXHIBIT C TO OPTION AGREEMENT

FORM OF PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT ("Purchase Agreement") is made as of the ___ day of _____, 20__ by and between Upper Valley Sand & Gravel, LLC ("Seller") and Liberty Utilities (EnergyNorth Natural Gas) Corp. and its affiliates and subsidiaries ("Purchaser").

1. Property. Subject to the terms and conditions of this Purchase Agreement, Seller agrees to sell and Purchaser agrees to purchase the real property depicted on Exhibit A to the Purchase Agreement attached hereto and made a part hereof (Purchaser's final survey and legal description to govern; provided that Purchaser's final survey is certified to Seller), together with any and all buildings, attachments, improvements, easements, hereditaments and appurtenances thereto (the "Property").

2. Contract Date; Closing; Closing Date. The "Contract Date" shall be the date first set forth above. The "Closing Date" shall be _____, 20___. The closing of the transaction contemplated herein ("Closing") shall take place on the Closing Date at the offices of _____ (the "Title Company").

3. Purchase Price. The total purchase price for the Property, subject to adjustments provided for herein, shall be [redacted] (the "Purchase Price").

4. Deed. Seller shall sell the Property for the Purchase Price on the terms set forth herein and, at Closing, Seller shall convey or cause to be conveyed to Purchaser title to the Property by recordable form of special warranty deed subject only those exceptions accepted by Purchaser prior to the execution of this Purchase Agreement as exceptions to the Purchaser's title (the "Deed"), duly executed and acknowledged by Seller.

5. Inspection Prior to Closing. Purchaser, its agents, employees, representatives and contractors shall have reasonable access to the Property prior to the Closing Date, upon reasonable prior notice to Seller, to confirm, at Purchaser's sole cost and expense, the results of its earlier testing and inspections have not changed, which activities may include, without limitation, additional environmental site assessments and testing. Purchaser shall not allow any mechanic's lien or other lien, charge or order for the payment of money to be filed against the Property.

6. Affirmative Covenants. Seller shall cause the Property to be maintained free from waste and neglect and shall not allow the dumping on the Property of any wastes or substances of any kind whatsoever, except strictly in accordance with all applicable federal, state or local statutes, ordinances, rules, regulations or other law. Without the prior written consent of Purchaser and with the exception of the agreements listed in Exhibit B to this Purchase Agreement, Seller shall not (i) enter into any transaction in respect to or affecting the Property, including, without limitation, leases or service, maintenance or repair contracts in respect to or

affecting the Property, which will survive the Closing, (ii) further encumber the Property in any form or manner whatsoever, or (iii) create or allow to be created any additional exceptions to title to the Property.

7. Conditions Precedent to Purchaser's Obligations. Purchaser's obligation to purchase the Property is expressly contingent upon (i) Seller's representations and warranties being true on the Contract Date and remaining true through the Closing of this transaction; (ii) Seller's removal at Closing by application of the Purchase Price, of all title exceptions pertaining to liens and encumbrances of a definite and ascertainable amount (including, without limitation financing liens) which Seller hereby agrees to remove; (iii) the results of Purchaser's investigations pursuant to Section 5 hereof identifying no material changes to results identified during Purchaser's investigations under the Option Agreement; and (iv) Purchaser's obtaining an ALTA Form 2006 Owner's Title Insurance Policy containing only those exceptions accepted by Purchaser prior to the execution of this Purchase Agreement as exceptions to the Purchaser's title. The foregoing conditions are (x) necessary prerequisites for Purchaser's purchase of the Property; (y) included in this Purchase Agreement solely for Purchaser's benefit; and (z) may be waived solely by Purchaser, in Purchaser's reasonable discretion. Purchaser may terminate this Purchase Agreement at Purchaser's sole election upon written notice to Seller if any of the foregoing conditions are not satisfied.

8. Seller's Covenants, Representations and Warranties. Seller covenants, represents and warrants that, as of the Contract Date and the Closing Date:

a. Seller has full and lawful right and authority to execute and deliver this Purchase Agreement and to consummate the transactions contemplated hereunder;

b. Seller owns good fee simple marketable title to the Property;

c. To Seller's knowledge, there is currently no litigation, bankruptcy or other proceeding threatened or pending in any manner affecting the Property or any part thereof;

d. To Seller's knowledge, there is no pending or threatened condemnation of the Property or any part thereof;

e. To Seller's knowledge, there are no violations of any federal, state or local law, code, ordinance, rules, regulation or requirement, including without limitation applicable environmental laws or regulations, affecting the Property or any part thereof;

f. To Seller's knowledge, no unrecorded liens, encumbrances or adverse claims exist with respect to the Property or any portion thereof;

g. To Seller's knowledge, there are no management contracts, repair contracts, service contracts, options or any other material agreements relating to the Property which shall survive Closing;

h. Seller is not a "foreign person" as defined in Section 1445 of the Internal Revenue Code and is therefore exempt from the withholding requirements of said section (and Seller will furnish to Purchaser at Closing with an exemption certificate as set forth in said section);

i. Seller shall provide the Title Company with a certified statement in order to comply with Section 6056 or the Internal Revenue Code;

j. There are no leases or occupancy agreements affecting all or any portion of the Property that will survive the Closing with the exception of leases or occupancy agreements listed in Exhibit B to this Purchase Agreement.

k. Seller represents and warrants that the Property is currently zoned Heavy Industrial in accordance with the City of Lebanon Zoning Ordinance.

As provided in Section 8 above, Purchaser's obligations under this Purchase Agreement are expressly conditioned on the foregoing covenants, representations and warranties of Seller being true on the Contract Date and remaining true through Closing. The foregoing covenants, representations and warranties shall survive Closing.

9. Closing Escrow. For the purpose of closing the transactions described in this Purchase Agreement, payment of the Purchase Price, the Deed and all other instruments necessary to close such transactions shall be passed through escrow with the Title Company in accordance with the general provisions of the usual form of escrow agreement then in use by the Title Company with such additional provisions inserted in such escrow agreement as may be required to conform with this Purchase Agreement. Purchaser shall pay its attorney's fees, all recording fees (except those necessary to release the encumbrance of Seller's existing deed of trust or other liens), environmental review and test fees and expenses, all closing and escrow fees imposed by the Title Company and all title examination costs and premiums for its owner's and lender's policies of title insurance. Seller shall pay its attorney fees and any costs associated with the removal of Seller's existing deed of trust, other liens or other exceptions to title affecting the Property which Seller has agreed to remove.

10. Adjustments at Closing. The following shall be prorated as of the Closing Date, with Seller being charged through the Closing Date: (i) real estate taxes for the year in which Closing occurs pertaining to the Property based on the latest available tax bill and any accrued but unpaid general or special assessments payable therewith, (ii) utility charges for sewer, water, gas, and electricity pertaining to the Property, and (iii) any other customary prorations. In the event the latest available tax bill does not include the tax bill for taxes due and payable during the year of Closing, upon the issuance of such tax bill for the Property, the parties shall reprorate the taxes and make any necessary cash adjustment. The Purchase Price shall be reduced by (i) fifty percent (50%) of the Option Payment as defined in Section 4 of the Option Agreement dated September 1, 2015 by and between Upper Valley Sand & Gravel, LLC and Liberty Utilities (EnergyNorth Natural Gas) Corp. (the "Option Agreement"), and (ii) an amount equal to $1.00 per yard of Aggregate removed from the Property during the Option Term as outlined in Section 9(c) of the Option Agreement.

11. Events of Closing. At Closing, (i) Seller shall execute and deliver the Deed to Purchaser in accordance with Section 4 of this Purchase Agreement; (ii) Seller shall execute and deliver a title affidavit in customary form, stating that, without limitation, there are no leases, liens, judgments, claims or bankruptcies affecting the Property; (iii) Seller shall execute such other instruments as the Title Company shall reasonably require; (iv) Purchaser shall deliver into escrow with the Title Company the Purchase Price, subject to the adjustments and offsets herein provided, by cash or wire transfer of immediately available funds; (v) the Title Company shall pay the adjusted and offset Purchase Price to Seller; and (vi) Seller and Purchaser shall also execute and deliver such additional documents as may be necessary at Closing or thereafter to conclude the sale of the Property as contemplated by this Purchase Agreement. Seller shall deliver sole and exclusive possession of the Property to Purchaser immediately after Closing.

12. Real Estate Brokers and Commission. Purchaser has retained Bruce M. Waters, CCIM, of Lang McLaughry Commercial to serve as Purchaser's agent ("Purchaser's Agent") and Purchaser shall be responsible to pay any fee due to Purchaser's Agent. Nonetheless, Purchaser and Seller hereby state and warrant to one another that, other than Purchaser's Agent, neither party has dealt with any real estate broker, agent or salesperson in connection with the purchase and sale of the Property. Seller and Purchaser each shall indemnify, defend and hold the other harmless against any claims for real estate commissions made by anyone claiming representation of such party in this transaction. Such obligations to indemnify and hold harmless shall include, without limitation, all costs and attorneys' fees relating to litigation and other proceedings.

13. Default. If Purchaser defaults under this Purchase Agreement and does not cure any such default within ten (10) days after written notice from Seller to Purchaser that such default exists, Seller's sole remedies shall be to either seek specific performance against Purchaser or terminate this Purchase Agreement, Seller hereby waiving all other remedies for breach of this Purchase Agreement, including, without limitation, damages and retaining all payments made by Purchaser under the Option Agreement. If Seller defaults under this Purchase Agreement prior to Closing and does not cure any such default within ten (10) days after written notice from Purchaser to Seller that such default exists, then Purchaser may, as its exclusive remedies hereunder, either (i) terminate this Purchase Agreement and Seller shall immediately refund to Purchaser the Option Payment and all other amounts paid by Purchaser to Seller in connection with the Option Agreement and the Purchase Agreement or (ii) enforce the specific performance of this Purchase Agreement, Purchaser hereby waiving all other remedies for breach of this Purchase Agreement, including, without limitation, damages. In the event of termination by either Party in accordance with this section 13, upon the payment of the amounts stipulated in this section 13, neither Purchaser nor Seller shall have any further liabilities, obligations or rights with regard to this Purchase Agreement which shall then become null and void and of no further force or effect

14. Notices. All notices, consents, requests, demands and other communications hereunder are to be in writing, and are deemed to have been duly given or made: (i) when delivered in person; (ii) three (3) days after deposited in the United States mail, first class postage prepaid; (iii) in the case of telegraph or overnight courier services, one business day after

delivery to the telegraph company or overnight courier service with payment provided for; (iv) in the case of telex or telecopy or fax, when sent, verification received.

All notices to Seller shall be directed to:
Upper Valley Sand & Gravel, LLC
Ingrid Nichols and Christopher Nichols
P.O. Box 127
Quechee, VT 05059

All notices to Purchaser shall be directed to:
Liberty Utilities (EnergyNorth Natural Gas) Corp.
Mr. William Clark
15 Buttrick Road, Londonderry, NH 03053

or to such other persons or addresses as either party shall hereafter designate by notice given from time to time in accordance with this Section.

15. Condemnation; Risk of Loss. If, after this Purchase Agreement is executed and prior to the Closing Date:

a. Any or all of the Property is taken by exercise of the power of eminent domain or any proceedings are instituted, or threatened to be instituted, to effect such a taking or any offer of settlement is made in lieu of a taking, Seller shall promptly notify Purchaser thereof (with a copy of all relevant correspondence and other materials relating thereto) and Purchaser shall have the option (exercisable by notice to Seller within thirty (30) days after the receipt of such notice) to either (i) cancel this Purchase Agreement; or (ii) completing the purchase in accordance with the terms, conditions and provisions of this Purchase Agreement, in which event all condemnation proceeds or claims thereof shall be assigned to Purchaser.

b. Any or all of the improvements located at the Property are destroyed or damaged by fire, windstorm, or other casualty; Purchaser shall have the option of canceling or enforcing this Purchase Agreement. If enforced, Purchaser shall be entitled to all insurance proceeds, if any, and Seller shall assign insurance policies and right to such proceeds at Closing.

16. Miscellaneous.

a. Assignment. This Purchase Agreement and the rights, obligations, duties, interests, and duties of Purchaser hereunder may be assigned by Purchaser. If such assignment is made as permitted herein, then the sale of the Property contemplated by this Purchase Agreement will be consummated in the name of any such assignee.

b. Construction; Severability; Entire Agreement; Binding Effect; Governing Law. The section headings herein are solely for convenience and shall in no way be deemed to affect the meaning or construction of any part hereof. If any provision or provisions of this Purchase Agreement shall be unlawful, then such provision or provisions shall be null and void, but the remainder of the Purchase Agreement shall remain in full force and effect and binding on

Seller and Purchaser. This Purchase Agreement constitutes the entire understanding and agreement between the parties and may not be amended, supplemented, or modified except by a writing executed by both of the parties. This Purchase Agreement shall be binding upon, and shall benefit, the parties and their heirs, personal representatives, successors and assigns. This Purchase Agreement and all related documents shall be governed by the laws of New Hampshire.

c. Time of Essence. Time shall be of the essence in this Purchase Agreement.

d. Business Days. If the last day for making an Earnest Deposit, for conducting due diligence or for providing notice to either party is a Saturday, Sunday or legal holiday, then such last day shall be extended to the next succeeding business day thereafter.

e. Execution in Counterparts. This Purchase Agreement may be executed in two or more identical counterparts which taken together shall constitute one and the same instrument.

f. Attorney's Fees and Costs. In the event either party to this Purchase Agreement commences a legal proceeding to enforce any of the terms of this Purchase Agreement or any rights under this Purchase Agreement, the prevailing party in such action shall be entitled to recover reasonable attorneys' fees and costs from the other party.

g. 1031 Like-Kind Exchange.

(i) The parties shall have the right at or prior to Closing to elect to exchange the Property for any other property or properties (each an "Exchange Property") pursuant to Section 1031 of the Internal Revenue Code of 1986 and regulations thereunder (an "Exchange"), as the same may be amended from time to time (collectively, "Section 1031"; capitalized terms contained in this Section 16(g) not defined in this Agreement shall have the meanings ascribed to them in Section 1031).

(ii) In the event that a party shall elect to use the Property as a Relinquished Property or a Replacement Property (the "Exchanging Party), then the other party (the "Cooperating Party") shall cooperate in such exchange by executing such instruments as may reasonably be required to effect such exchange at no cost or expense to the Cooperating Party. It is understood that the Exchanging Party shall utilize the services of a Qualified Intermediary and/or a Qualified Exchange Trust, and that the Cooperating Party shall have no obligation to undertake to identify or take title to any Exchange Property as part of such transaction or to incur any liability in connection therewith. Further, none of the other terms of this Agreement shall be modified or conditioned upon any such exchange. The Exchanging Party shall indemnify, defend and hold harmless the Cooperating from and against any and all costs (including, without limitation, attorney's fees), expenses, liabilities, losses and damages incurred by reason of the execution and/or delivery of any Seller Exchange documents. The

Exchanging Party warrants and represents that the foregoing indemnity shall survive the Closing, further, the Exchanging Party shall comply with all local, state and federal laws that may exist at the time of Closing with respect to the Exchange.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Purchase Agreement, as of the day and year first above written.

SELLER:

By: _____

Name: Ingrid Nichols Ingrid A Nichols

Title: Owner owner

Date of Execution: 9/16/15

PURCHASER:

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

Date of Execution: _____ ___, _____

EXHIBIT A TO PURCHASE AGREEMENT

LEGAL DESCRIPTION

CN

213R

EXHIBIT B TO PURCHASE AGREEMENT

SECTION 8(j) LEASES

CW

Liberty Utilities (EnergyNorth Natural Gas) Corp. – Keene Division ("Keene")
Binding Request for Indicative Pricing
May 16, 2016

Overview

The purpose of this binding solicitation is to determine the "best-cost" supply alternative for a delivered LNG and/or CNG commodity service to Liberty's Keene Division. The best-cost alternative appropriately balances price and non-price factors such as reliability, flexibility and viability. The responses to this solicitation will help Liberty appropriately analyze the most cost effective and reliable solution to convert the current Propane/Air system serving the Keene Division to a natural gas system. All bids will be kept confidential.

Keene Background and Incremental Requirements

The Keene Division operates via a self-sustained Propane/Air facility in Keene, NH which serves approximately 1,250 residential and commercial customers. Keene is located in the south western region of NH. Liberty would like to be able to offer a more competitive fuel option and expand our customer base and distribution system. Since Keene has a distribution system throughout a good portion of the City, we are interested in exploring CNG/LNG options to help meet the energy needs of the Community, by providing the city with a centralized natural gas distribution system.

Table 1 (below) summarizes the load for which Keene is seeking indicative bids.

Table 1. Keene Estimated Load Requirements

	Normal Year		
	2016/17	2017/18	2018/19
Plan Year (Nov-Oct)	49,129	51,431	53,840
Winter Load (Nov-Apr)	37,880	39,655	41,512
	Design Year		
	2016/17	2017/18	2018/19
Plan Year (Nov-Oct)	52,820	55,295	57,885
Winter Load (Nov-Apr)	41,122	43,049	45,066
	Design Day		
	2016/17	2017/18	2018/19
Plan Year (Nov-Oct)	473	495	518

The table above does not reflect the needs of the entire Keene system. The current requirements reflect the initial phase of the conversion of the existing Keene system from Propane/Air to natural gas. The Company sees the potential to grow the franchise more than tenfold over the next 3-5 years.

Minimum Storage Requirement

The State of New Hampshire requires that all natural gas utilities have sufficient onsite inventory to satisfy a 7-day cold snap. The determination of the requirement is based on the historically coldest 7 consecutive day period. For the purpose of this solicitation the calculated requirement for this 7-day period is approximately 2,700 Dth. This 2,700 Dth requirement can be met through a combination of physical onsite storage and up to 70% of 5 days' worth of truck deliveries. For example, if there is 1,000 Dth of onsite physical storage, the remaining 1,700 Dth would have to be delivered via dedicated trucking but only 70% of the dedicated trucking for 5 days could be used in the calculation. All proposals should address the manner in which this 7-day inventory requirement is to be satisfied.

Bid Requirements

The Company invites interested parties to submit bids for a turnkey delivered LNG and/or CNG service to meet the load requirements of its Keene customers as stipulated in Table 1 above. All bids should address the following requirements:

- A delivered natural gas service commencing November 1, 2016. If bidder cannot meet this in-service date please so indicate and also provide the earliest date that service could commence.
- Binding pricing is to include the cost of the natural gas commodity, transportation, decompression or vaporization and any other associated cost necessary to provide the delivered service.
- Clear delineation of equipment and services bidder intends to own/provide and what Keene is expected to own/provide.
- Pricing structures are at the discretion of the bidder but may include a fixed, floating or index based commodity price, demand charge and/or variable charge.
- Design Day deliveries of up to 500 Dth.
- Peak hour of approximately 40 Dth.
- Clear description on how bidder intends to satisfy the New Hampshire PUC 7-day inventory requirement as described more fully above.
- Annual and winter deliveries per Table 1 under Normal Year with the ability to increase deliveries to those shown under Design Year.

- Bids may be for a term of 1 to 3 years.

Response Instructions

Bidders wishing to respond to this solicitation must do so by **5:00 PM EST on Friday, May 27, 2016**. Each bidder is encouraged to provide as much detail as possible in their response. Please submit your response and any questions you may have by email to the following:

Paul Maffa
paul.maffa@libertyutilities.com

Chico DaFonte
chico.dafonte@libertyutilities.com

Liberty has the right to reject any and all bids. The winning bidder, if any, will be selected based on the offer that yields the overall least cost, consistent with concerns for reliability of service and other business factors applied by Liberty in its sole discretion.

CNG SERVICE TERM SHEET

Buyer	Liberty Utilities (EnergyNorth Natural Gas) Corp.
Seller	Xpress Natural Gas LLC
Service Location	Keene, New Hampshire
Delivery Point	Meter installed immediately prior to Buyer's site based piped connection.
Contract Term	May 1, 2017 to April 30, 2020
Contract Extension	Term may be extended at Buyer request for 12 months on the same terms and conditions provided Buyer notifies Seller at least 180 days prior to end of the initial Term.
Provided Equipment	Seller shall provide a regulator skid, manifold, delivery trailers and attachments required to meet Buyer's projected demand (see Exhibit B, the "CNG Equipment").
Mobilization Fee	[redacted] payable to Seller 90 days prior to the Contract Term to support mobilization.
Contract Quantity	Contract Quantity serves as the basis for expected nominations each month. Buyer and Seller agree that the Contract Quantity shall be as set forth below:

Month	MMBTU
January	9,000
February	7,500
March	6,500
April	4,000
May	2,500
June	2,000
July	1,500
August	1,500
September	1,500
October	3,000
November	5,000
December	7,000
Total	51,000

Nomination	Not less than 7 days prior to the beginning of each month the Buyer shall send to Seller a notice in writing indicating its expected daily usage for the subsequent month.
Purchase Price	Price per MMBtu for natural gas shall be the sum of: (i) Commodity Gas; plus (ii) marketer's basis charges applicable to purchase of the Commodity Gas; plus (iii) Service Adder, a variable delivery charge per MMBtu; plus (iv) Fixed Demand Charge; plus (iv) any other applicable fees and expenses set forth in Exhibit A.
Commodity Gas	Unless otherwise agreed, nominated volumes of natural gas will be priced at the index price (per MMBtu) as posted for "Algonquin city-gate" as published in the monthly first issue of Platts *Inside FERC's Gas Market Report* under the Northeast section of the Market Center Spot Gas Prices for each month in which gas is purchased, or as otherwise contracted. Gas in excess of nominated amounts, when and if available, will be sold on a Spot basis priced at the monthly average of the daily index prices (per MMBtu) as posted for" Algonquin, City-gates" as published in Platt's *Gas Daily - Daily Price Survey*, for the month in which the excess gas was used.
Service Adder	[redacted] per MMBTU
Fixed Demand Charge	[redacted] annually to be paid in twelve (12) equal monthly installments of [redacted]
Title & Risk of Loss	Title and risk of loss shall pass from Seller to Buyer at the Delivery Point.

Special Provisions: Minimum Gas Storage Requirement	The Public Service Commission of the State of New Hampshire requires Buyer to maintain a minimum gas inventory during the period November to March. Seller agrees to provide three (3) CNG trailers on site during this period. Seller agrees to increase the number of trailers or to contract for firm capacity on behalf of the Buyer if required. Any costs related to such request are the responsibility of the Buyer.
General Terms & Conditions Governance	The Compressed Natural Gas Master Agreement attached hereto as Exhibit A.

ALL TERMS AND CONDITIONS INCLUDED IN THIS CONTRACT SHALL APPLY TO EACH SALE AND DELIVERY OF PRODUCT BY SELLER TO BUYER (1) UNDER THIS CONTRACT AND HEREAFTER (2) WHETHER OR NOT UNDER A WRITTEN CONTRACT.

EXHIBIT A – COMPRESSED NATURAL GAS MASTER AGREEMENT

This Compressed Natural Gas Master Agreement ("CMA") between **Xpress Natural Gas LLC,** a Delaware limited liability company (together with its subsidiaries and affiliates "Seller") located at 22 Marin Way, Stratham, NH 03885 and **Liberty Utilities Co.** (together with its subsidiaries and affiliates "Buyer") located at 15 Buttrick Road, Londonderry, NH 03053 (each a "Party" and collectively, the "Parties") is entered into and effective as of November 4, 2016 ("Effective Date").

A. Compressed Natural Gas Master Agreement

1. Delivery Requirement: Seller will provide Natural Gas to the Buyer in compressed form (~3,600 psi) and decompressed prior to the Delivery Point. Seller acknowledges that Buyer has firm needs for an uninterrupted supply of natural gas, and that any failure of Seller to supply any nominated volumes, in accordance with the applicable Contract Quantity, without interruption exposes Buyer to significant costs. It is therefore a material condition of Seller's performance under this Agreement to supply all nominated volumes without interruption.

2. Commodity Gas Purchasing: If the Buyer elects to enter a separate agreement to purchase Commodity Gas on a fixed volume commitment (a "Transaction Confirmation"), Buyer will pay the price stated in each Transaction Confirmation. This CMA, any amendments to this CMA and any associated commodity gas Transaction Confirmation ("Transaction") that may be entered into (together, a single integrated, "Agreement") are the entire understanding between Parties and supersedes all other communication and prior writings with respect thereto; no oral statements are effective.

3. Billing and Payment: Not more than 5 days after the conclusion of any month the Seller will invoice Buyer for all delivered gas pursuant to this Agreement. Payment shall be due and payable within 20 days after the date of such invoice. If the Actual Quantity cannot be verified by the time the invoice is issued, the invoice will be based on Seller's good faith estimate of the Actual Quantity derived using internal calculations of the net gas delivered and adjusted for the Actual Quantity by a credit or charge, as applicable, in the next invoice for which the Actual Quantity is available. Seller will adjust Buyer's account following (i) confirmation of the Actual Quantity or (ii) any adjustment to, or re-calculation of, Taxes. Buyer will pay interest on late payments at 1.5% per month or, if lower, the maximum rate permitted by law ("Interest Rate"). Buyer is also responsible for all costs and fees, including reasonable attorney's fees, incurred in collecting payment. "Actual Quantity" means the actual quantity of Commodity that is either delivered or metered, as applicable, to Buyer's account. If the Purchase Price incorporates an index and the index is not announced or published on any day for any reason or if the Seller reasonably determines that a material change in the formula for or the method of determining the Purchase Price has occurred, then the Parties will use a commercially reasonable replacement price that is calculated by the Seller. If Seller concludes that a change in any Law(s) increases Seller's costs, the Purchase Price may be adjusted by Seller to reflect such costs. "Law(s)" mean all tariffs, laws, orders, rules, taxes and regulations. Beginning on the 3rd anniversary of the Effective Date of the Agreement, the XNG Adder shall be subject to annual adjustment based on increases in the Producer Price Index, as published annually by the Bureau of Labor Statistics. The adjustment shall be communicated 30 days prior to the anniversary of this Agreement.

4. Taxes: Buyer is responsible for paying any Taxes associated with the Actual Quantity of Commodity sold under this Agreement that may become due at and after the Delivery Point. The Purchase Price does not include Taxes that are or may be the responsibility of the Buyer, unless such inclusion is required by Law. Buyer will reimburse Seller for any Taxes that Seller is required to collect and pay on Buyer's behalf and will indemnify, defend and hold Seller harmless from any liability against all Buyer's Taxes. Buyer will furnish Seller with any necessary documentation showing its exemption from Taxes, if applicable, and Buyer will be liable for any Taxes assessed against Seller because of Buyer's failure to timely provide or properly complete any such documentation. "Taxes" means all applicable federal, state and local taxes, including any associated penalties and interest and any new taxes imposed in the future during the term of this Agreement. Liabilities imposed in this Section will survive the termination of this Agreement.

5. Disputes: If either Party in good faith disputes amounts owed under Sections 2, 3, 4, or 7 the disputing Party will contact the non-disputing Party promptly and pay the undisputed amount by the payment due date. The Parties will negotiate in good faith regarding such dispute for a period of not more than fifteen (15) Business Days. In the event the Parties are unable to resolve such dispute, the disputing Party will pay the balance of the original invoice and either Party may exercise any remedy available to it in law or equity pursuant to this Agreement. In the event of a dispute other than for an invoiced amount, the Parties will use their best efforts to resolve the dispute promptly. Actions taken by a Party exercising its contractual rights will not be construed as a dispute for purposes of this Section. "Business Day" means any day on which banks are open for commercial business in New York, New York.

6. Title and Risk of Loss: Title to, possession of and risk of loss to the Commodity will pass to Buyer at the Delivery Point.

7. Force Majeure: A Party claiming Force Majeure will be excused from its obligations under Section 1 as long as it provides prompt notice of the Force Majeure and uses due diligence to remove its cause and resume performance as promptly as reasonably possible. During a Force Majeure, Buyer will not be excused from its responsibility to pay for Commodity received. "Force Majeure" means a material, unavoidable occurrence beyond a Party's control, and does not include inability to pay, an increase or decrease in Taxes or the cost of Commodity, the economic hardships of a Party, or the full or partial closure of Buyer's facilities, unless such closure itself is due to Force Majeure.

8. Financial Responsibility: Seller's entry into this Agreement and each Transaction is conditioned on Buyer, its parent, any guarantor or any successor maintaining its creditworthiness during the Contract Term and any Contract Extension. When Seller has reasonable grounds for insecurity regarding Buyer's ability or willingness to perform all of its outstanding obligations under any agreement between the Parties, Seller may require Buyer to provide adequate assurance, which may include, in the Seller's discretion, security in the form of cash deposits, prepayments, letters of credit or other guaranty of payment or performance ("Credit Assurance").

9. Default: "Default" means: **(i)** failure of either Party to make payment by the applicable due date and the payment is not made within three (3) Business Days of a written demand; **(ii)** failure of Buyer to provide Credit Assurance within two (2) Business Days of Seller's demand; **(iii)** either Party, its parent or guarantor, becomes Bankrupt or fails to pay its debts generally as they become due; or **(iv)** failure of either Party to satisfy any representations and warranties applicable to it contained in Section 12A or 12B and the failure is not cured within fifteen (15) Business Days of a written demand, provided that no cure period or

demand for cure applies to a breach of Section 12A(c). "Bankrupt" means an entity **(a)** files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, **(b)** makes an assignment or any general arrangement for the benefit of creditors, **(c)** otherwise becomes bankrupt or insolvent, however evidenced, **(d)** has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, **(e)** has a secured party take possession of all or any substantial portion of its assets or **(f)** is dissolved or has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger.

10. Remedies: In the event of a Default, the non-defaulting Party may: **(i)** withhold any payments or suspend performance; **(ii)** upon written notice, provided that no notice is required with respect to Section 9(iii) or a breach of Section 11A(c), accelerate any or all amounts owing between the Parties and terminate any or all Transactions and/or this Agreement; **(iii)** calculate a settlement amount by calculating all amounts due to Seller for Actual Quantity and the Close-out Value for each Transaction being terminated; and/or **(iv)** net or aggregate, as appropriate, all settlement amounts and all other amounts owing between the Parties and their affiliates under this Agreement and other energy-related agreements between them and their affiliates, whether or not then due and whether or not subject to any contingencies, plus costs incurred, into one single amount ("Net Settlement Amount"). Any Net Settlement Amount due from the defaulting Party to the non-defaulting Party will be paid within three (3) Business Days of written notice from the non-defaulting Party. Interest on any unpaid portion of the Net Settlement Amount will accrue daily at the Interest Rate. "Close-out Value" is the sum of **(a)** the amount due to the non-defaulting Party regarding the Contract Quantities (or, as applicable, estimated Contract Quantities) remaining to be delivered during the Contract Term or, if applicable, the current Contract Extension, calculated by multiplying the Service Adder for such untaken quantities; and **(b)** without duplication, any net losses or costs incurred by the non-defaulting Party for terminating the Transaction(s), including costs of obtaining, maintaining and/or liquidating commercially reasonable hedges and/or transaction costs. For purposes of determining Close-out Value, **(i)** Commodity Price will be determined by the non-defaulting Party in good faith as of a date and time as close as reasonably practical to the date and time of termination or liquidation of the applicable Transaction(s), and **(ii)** Commodity Price may be ascertained through reference to quotations provided by recognized energy brokers or dealers, market indices, bona-fide offers from third-parties, or by reference to commercially reasonable forward pricing valuations. The Parties agree that the Close-out Value constitutes a reasonable approximation of damages, and is not a penalty or punitive in any respect. Seller may, but need not, physically liquidate a Transaction or enter into a replacement transaction to determine Close-out Value or Net Settlement Amount. The defaulting Party is responsible for all costs and fees incurred for collection of Net Settlement Amount, including, reasonable attorney's fees and expert witness fees.

11. Representations and Warranties:

A. Each Party represents that: **(a)** it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and is qualified to conduct its business in those jurisdictions necessary to perform to this Agreement; **(b)** the execution of this Agreement is within its powers, has been duly authorized and does not violate any of the terms or conditions in its governing documents or any contract to which it is a party or any law applicable to it; and **(c)** it is not Bankrupt.

B. Buyer represents and warrants that: **(a)** it is not a residential customer; **(b)** it will immediately notify Seller of any change in its ownership; **(c)** execution of this Agreement initiates service for the Contract Term and any Contract Extension; **(d)** no communication, written or oral, received from the Seller will be deemed to be an assurance or guarantee as to any results expected from this Agreement; **(e)** if it is executing this Agreement in its capacity as an agent, such Party represents and warrants that it has the authority to bind the principal to all the provisions contained herein and agrees to provide documentation of such agency relationship, and **(f)** (i) it will provide, to Seller, information reasonably required to substantiate its usage requirements, including information regarding its business, locations, historical/projected usage, time of use, hours of operation, agreements, schedules, which in substantial part form the basis for the calculation of charges for the transactions hereunder; (ii) acceptance of this Agreement constitutes an authorization for release of such usage information; (iii) it will assist Seller in taking all actions necessary to effectuate Transactions, including, if requested, executing an authorization form permitting Seller to obtain its usage information from third parties; and (iv) the usage information provided is true and accurate as of the date furnished and as of the effective date of the Agreement.

C. Each Party acknowledges that: **(a)** this Agreement is a forward contract and a master netting agreement as defined in the United States Bankruptcy Code ("Code"); **(b)** this Agreement shall not be construed as creating an association, trust, partnership, or joint venture in any way between the Parties, nor as creating any relationship between the Parties other than that of independent contractors for the sale and purchase of Commodity; and **(c)** Seller is not a "utility" as defined in the Code.

12. Indemnification: Both parties shall release, indemnify, and hold the other, its affiliates, and their officers and employees harmless from any and all claims, losses, liabilities, and expenses (including reasonable attorney's fees and costs of defense) in any way arising out of or relating to (1) any act or omission by Indemnifying Party which results in personal injuries (including death) or property damage, This indemnification obligation shall survive the termination of this Agreement. NEITHER PARTY WILL BE LIABLE TO THE OTHER UNDER THE AGREEMENT FOR CONSEQUENTIAL, INDIRECT OR PUNITIVE DAMAGES OR SPECIFIC PERFORMANCE, EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT.

13. Insurance: Both parties agree at all times during the term of this Agreement to carry adequate insurance, but in no event less than five million dollars ($5,000,000) general liability insurance, covering all such liability and contractual obligations, and upon request shall furnish the requesting party evidence satisfactory to it of such insurance.

14. Measurement: The quantity of Gas delivered to the Delivery Point shall be measured by means of a revenue grade meter consistent with industry practice. Buyer shall be invoiced for the actual number of dekatherms of Gas recorded by the meter at the Delivery Point. If the Buyer elects to install sub-metering downstream of the Seller's meter, and in the event of a discrepancy between Buyer and Seller meter results for the same period of time that leads to a billing question, either party may request the other to verify its meter. In the event a meter is found to be inaccurate by recording results in excess of 2% of actual volume, the owner of the inaccurate meter will pay for the calibration and invoicing will be adjusted to correct any inaccuracy. If the recalibrated meter is within 2% of actual volume, the party requesting the calibration pays for the calibration and invoicing for any previous period in question shall not be changed. If the period of such error is not known definitely or agreed upon, the Parties agree that Seller truck delivery logs for the period in question provide an audit record acceptable for invoicing. Buyer may witness all testing and gauging; provided however, if no representative for Buyer is present, Seller's measurement and/or determination of quantity shall be final.

15. Security: Each party shall provide to the other together with the annual nomination, its most recent set of audited financials. In the event that XNG has a reasonable concern with respect to the credit worthiness of the Buyer after review of the annual financial statements and prior period payment history, the Seller may submit such financial statements to an independent third party for evaluation of solvency. If the third party determines the Buyer insolvent, then on written notice to the Buyer XNG may request security (cash or letter of credit) for up to one month of expected deliveries.

16. Other:

(a) This Agreement is governed by the law of the State of New Hampshire without regard to any conflict of rules doctrine. The Parties submit to the non-exclusive jurisdiction of the courts of the State of New Hampshire and any United States District Court located in New Hampshire. **(c)** Each Party waives its right to a jury trial regarding any litigation arising from this Agreement. **(d)** No delay or failure by a Party to exercise any right or remedy to which it may become entitled under this Agreement will constitute a waiver of that right or remedy. **(e)** Seller warrants that (i) it has good title to Commodity delivered, (ii) it has the right to sell the Commodity, and (iii) the Commodity will be free from all royalties, liens, encumbrances, and claims. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, ARE DISCLAIMED. **(f)** All notices and waivers will be made in writing and may be delivered by hand delivery, first class mail (postage prepaid), overnight courier service or by facsimile and will be effective upon receipt; provided, however, that any termination notice may only be sent by hand or by overnight courier service, and, if sent to Seller, a copy delivered to: Seth Berry, 22 Marin Way, Stratham, NH 03885. **(g)** If the Parties entered into Gas transactions prior to the execution of this Agreement ("Existing Transactions"), the Parties agree that these Existing Transactions shall be Transactions governed under the terms of

this Agreement. This Agreement supersedes and replaces any other agreement that may have applied to the Existing Transactions. **(h)** No amendment to this Agreement will be enforceable unless reduced to writing and executed by both Parties. **(i)** Either Party may assign this Agreement with consent from the other Party, which consent shall not be unreasonably withheld. In addition, Seller may pledge, encumber, or assign this Agreement or the accounts, revenues, or proceeds of this Agreement in connection with any financing or other financial arrangements without Buyer's consent; in which case Seller shall not be discharged from its obligations to Buyer under this Agreement. **(j)** This Agreement may be executed in separate counterparts by the Parties, including by facsimile, each of which when executed and delivered shall be an original, but all of which shall constitute one and the same instrument. **(k)** Any capitalized terms not defined in this CMA are defined in the Transaction Confirmation or shall have the meaning set forth in any applicable rules, tariffs or other governmental regulations, or if such term is not defined therein then it shall have the well-known and generally accepted technical or trade meanings customarily attributed to it in the natural gas or electricity generation industries, as applicable. **(l)** The headings used in this Agreement are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Agreement. **(m)** Any executed copy of this Agreement and other related documents may be digitally copied, photocopied, or stored on computer tapes and disks ("Imaged Agreement"). The Imaged Agreement will be admissible in any judicial, arbitration, mediation or administrative proceedings between the Parties in accordance with the applicable rules of evidence; provided that neither Party will object to the admissibility of the Imaged Agreement on the basis that such were not originated or maintained in documentary form. **(n)** Where multiple parties are Party to this Agreement with Seller and are represented by the same agent, it is agreed that this Agreement will constitute a separate agreement with each such Party, as if each such Party had executed a separate Agreement, and that no such Party shall have any liability under this document for the obligations of any other Parties. **(o)** The Buyer will not disclose the terms of this Agreement, without prior written consent of the Seller, to any third party, other than the Party's employees, affiliates, agents, auditors and counsel who are bound by substantially similar confidentiality obligations, trading exchanges, governmental authorities, courts, adjudicatory proceedings, pricing indices, and credit ratings agencies; provided that a Party that receives a demand for disclosure pursuant to court order or other proceeding will first notify the other Party, to the extent practicable, before making the disclosure.

EXHIBIT B – CONSTRUCTION, COMMISSIONING and MAINTENANCE

As conditions to the delivery of CNG to the Buyer under this contract,

1. **SITE PREPARATION & PERMITTING:**

   a. Buyer will be responsible for design, engineering and construction work to construct an unloading site (the "Site") for the installation of Seller's equipment and delivery of CNG to the Buyer.

   b. Buyer shall be required to reasonably prepare the Site, including ensuring that the Site is cleared, level, secured by fencing, and provided with utilities including electric, data, and an interconnect with any controls systems Buyer requires the CNG delivery system to interface with, as well as an access point equipped with a piping flange interconnect capable of coupling with Seller's skid. All costs of preparing and maintaining the Site shall be borne by the Buyer.

   c. Seller shall provide reasonable engineering support and site layout recommendations to the Buyer. Seller shall review and approve the Site design prior to construction, consistent with minimum setbacks and other requirements per NFPA 52.

   d. Seller shall be responsible for all permits required for the installation and operation of the XNG equipment provided however that Buyer shall be responsible for all permits related to land use, air, and environmental.

2. **CNG EQUIPMENT:**

   a. Seller shall provide a package of skid-mounted equipment capable of delivering CNG to the Buyer Facility at a maximum rate of 40 SCFH. Such equipment shall be provided at the Buyer site to serve as a delivery trailer connection and unloading point for the Seller. The equipment shall be connected via piping to the flange as provided by the Buyer at the site as the point of delivery for natural gas.

   b. The CNG Equipment is expected to conform to the following general specifications:

      i. Manifold connections allowing for up to 3 CNG delivery trailer with hose connections compatible with delivery trailers.

      ii. Heater(s) sized to support proper intermediate temperatures as well as final delivery temperature of the gas stream. Heating must be sufficient to prevent cold temperatures and possible hydrate formation downstream of regulator.

      iii. 2-stage primary pressure step-down regulation with over-pressure protection. Custody transfer metering to be provided on outlet of skid. Meter shall be a custody grade meter with capability to interface with control system.

      iv. Safety systems to include gas and flame detection. Methane detection system to be included with process skid. Flame detector located along truck loading area. Flame detectors coverage area shall include the connection end of the transports and the process skid. Detectors will input alarms and faults into the control system.

      v. Control system required to monitor key process conditions, switch trucks when empty, provide emergency shutdown, and remotely communicate system condition. System shall have a method to transmit data or screen control to remote site for customer monitoring.

   c. During the Delivery Period the Seller shall be responsible for all maintenance and support for the CNG Equipment.

3. **INSTALLATION & COMMISSIONING:**

   a. Seller shall review the completed Site prior to installation to evaluate and confirm that the Site was built to the approved design and specifications. Determination of whether the Site is suitable for installation shall be on mutual agreement. Upon acceptance of the Site, Seller shall install the CNG Equipment.

   b. Seller shall deliver and unload its equipment to the Service Location prior to the Start Date. Buyer will provide and allow for storage of that equipment as needed at no charge.

   c. Seller will be responsible for connecting its equipment to existing utilities. Once the CNG Equipment is connected, Seller and Buyer will initiate gas flow. Controls and safety systems will be tested during commissioning period prior to commencing operation.

4. **SITE MAINTENANCE:**

   a. For the duration of the Agreement, all site maintenance, including but not limited to snow removal, and all costs related to the upkeep of the site and its ingress and egress shall be borne by the Buyer. Failure to maintain the site in a manner sufficient to permit delivery shall be a Buyer act of default.

IN WITNESS WHEREOF, this CMA is entered into and effective as of the date written above.

BUYER:

By: F. Chico DaFonte

Name: F. Chico DaFonte

Title: Vice President, Energy Procurement

SELLER:

By: Matthew F. Smith

Name: Matthew F. Smith

Title: EVP, Sales and Marketing

Xpress Natural Gas

Xpress Natural Gas
Gas Solutions for Utility Customers

Propane/Air Conversion for Keene, NH

July 11, 2016

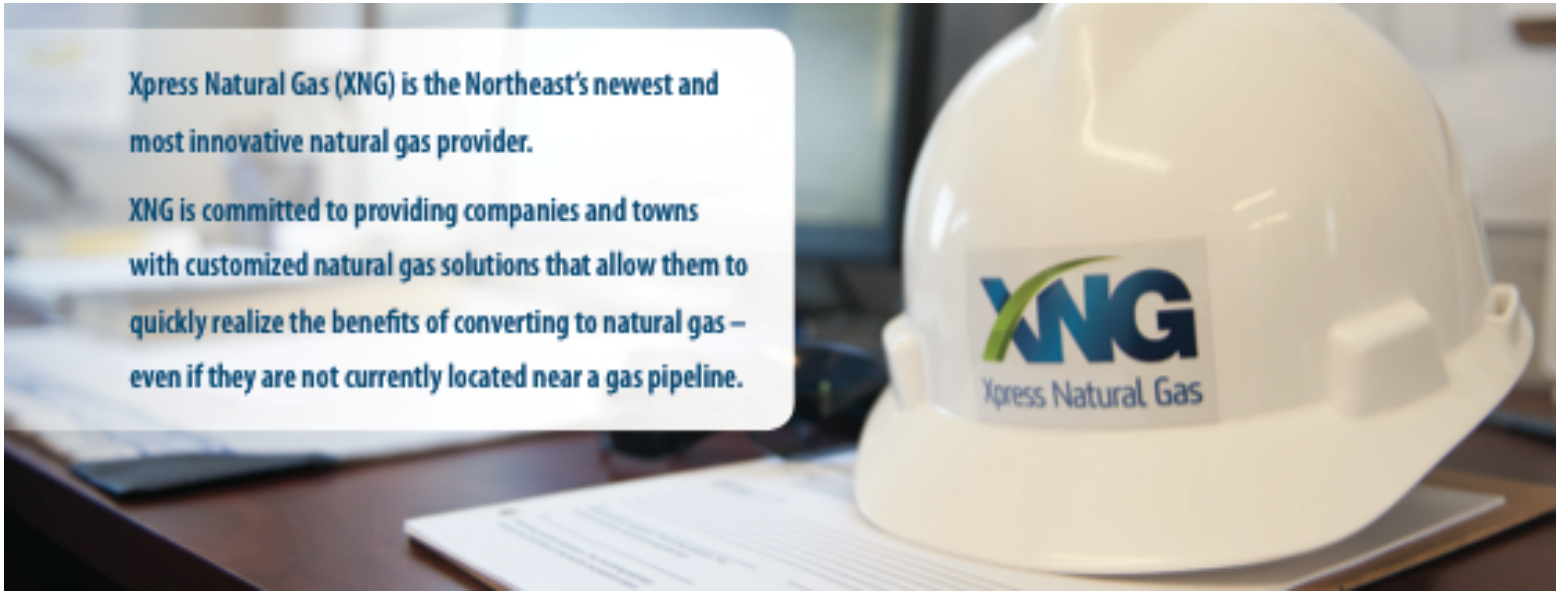
Agenda

- **Introduction to Xpress Natural Gas**
  - Gas Delivery to Industrial and Utility Customers
- **Utility Experience and Standard Equipment**
  - Utility CNG Decompression
  - LNG Vaporization
- **Keene Project Discussion**
  - Site Schematics: NYSEG Case Study and Design Walkthrough
  - Gas Procurement
  - Logistics and Gas Replenishment
  - Reliability, Safety and Compliance
- **Next Steps**

226R

We provide customized off-pipeline natural gas solutions to businesses, institutions and utilities.

- **Extensive experience designing, installing and operating CNG decompression and LNG vaporization facilities for customers**
  - We offer both CNG and LNG technologies for maximum reliability tailored to a wide range of customer demand applications
- **Delivered more than 8 billion cubic feet of natural gas to customers**
  - Equivalent to servicing ~100,000+ households annually



227R

Core business is "Virtual Pipelines" that make natural gas available to customers.

Our core business focuses on two primary applications:

1. Gas supply for off-pipeline industrial and commercial businesses to displace oil or propane, or solid fuels like biomass and coal

2. **Gas supply for utilities that seek to:**
   - **Support baseload ahead of capacity upgrades**
   - **Provide supplemental supply to manage system peaks**
   - **Deliver gas during scheduled or emergency repairs**

228R

Company Milestones

2011

- Seaside Energy launched using Liquefied Natural Gas (LNG)
- Very large industrials contracted as anchor customers
- Contracts represent nearly 2bcf of natural gas in first 18 months

2012

- Rebranded to Xpress Natural Gas
- Construction begins on first CNG terminal (Baileyville, ME)
- Enroll first industrial and commercial customers for CNG

2013

- XNG commissions first CNG terminal on US/Canadian border
- First to be awarded FERC approval to export to Canada
- First US company to be approved for distribution in Canada

2014

- XNG introduces its own trucking fleet
- Completes 6,000th delivery of CNG
- Commissions 2nd CNG terminal (Eliot, ME)

2015

- First PUC-approved CNG solution for a utility
- Enters partnership with Direct Energy
- Commissions 3rd CNG terminal (Manheim, NY)

2016

- Con Edison installs XNG in Manhattan
- Completes 20,000th delivery
- Commissioning of 4th CNG Center (WA)

229R

XNG Utility Project
Mechanicville, NY

NYSEG

- **Situation**
  - Moratorium on expanded service because of supply constraint in Mechanicville, NY
- **XNG Solution**
  - Install XNG Gen-2 utility CNG decompression solution on existing distribution system with approximately 2,400 customers
  - Provide ability to inject gas as needed to maintain pressure on lateral as demand increases
    - Phase 1: Inject of demand during periods of peak consumption
    - Phase 2: Provide incremental baseload supply to support new distribution customers
- **Results**
  - Moratorium lifted
  - Design certified for continuous operation under NY PSC inspection
  - Flow up to 100K SCF/hour to NYSEG's regulators that control pressure to their system
  - Expansion capacity for trailers on site to meet growth while maintaining redundancy and safety
    - Each trailer has enough natural gas to supply an average home for ~3 years

230R

XNG

XNG Utility Project
Roosevelt Island, NYC

- **Situation**
  - Turn of the century pipeline risers needed replacement to meet new pressure requirements
  - Community (hospital, local school, 10,000 residents) needed gas to maintain pressure and in case of pipeline failure during repairs

- **XNG Solution**
  - Located XNG Gen-2 utility mobile decompression skid on the island with 24-hour staffing and trailers both on-site and off-site for supplemental storage
  - Con Ed was able to repair one riser while the other supplied gas, and vise versa, without risking a gas flow interruption

- **Results**
  - Complied with various regulation changes from Con Ed and NYFD
  - Created a customized skid compatible with Roosevelt Island's existing gas pressure
  - Completed entire project in six weeks
  - Project implemented with N+1 design for maximum reliability

231R

XNG Utility Project
Roosevelt Island, NYC

conEdison

Bridge accessing Roosevelt Island with local NYFD workers

Lead Engineer Doug Hanson working in decompression skid

232R

XNG

XNG CNG solutions represent utility-grade reliability.

1 Compression

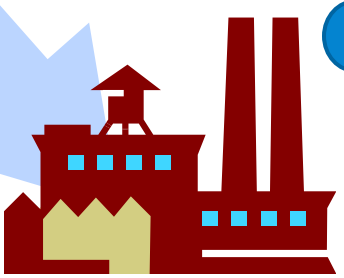
We take natural gas, either off a pipeline or compressed at a production facility at a high pressure and fill a large transport trailer

2 Delivery and Storage

Using light weight, high capacity trailers, we provide cost-effective transportation and mobile storage options that ensure a reliable level of on-site natural gas

3 Depressurization

Trailers are connected to a manifold skid at the facility and pressure regulators are used to control the gas as it is unloaded, ensuring a consistent flow



4 Send Out

XNG oversees each customer to ensure reliable delivery of high quality, safe natural gas

233R

CNG Compression

Terminals located on interstate transmission pipelines.

- **Interstate pipelines enable XNG to offer firm service at a lower cost**
  - Not subject to interruptible service curtailment
  - Compressors sized to fill individual CNG trailers in under 1 hour
  - Capacity to support up to 8 truck-loading stations
  - Staffed 24x7 by a dispatch manager and truck filling attendant

234R

CNG Supply Terminal, Eliot ME – PNGTS and M&NE Joint Facilities

CNG Decompression
Gen-2 system is approved and in utility service.

- **Dual-Flow System designed by XNG has been approved by NY PSC for utility applications**
  - Fully-redundant flowpath design supports easy maintenance and 99.9% uptime availability
  - Pre-assembled in a single container for rapid installation on-site
  - Supported by 24x7 remote monitoring and logistics center owned and operated by XNG

NYSEG Facility (New York State Electric and Gas) in Mechanicville, NY

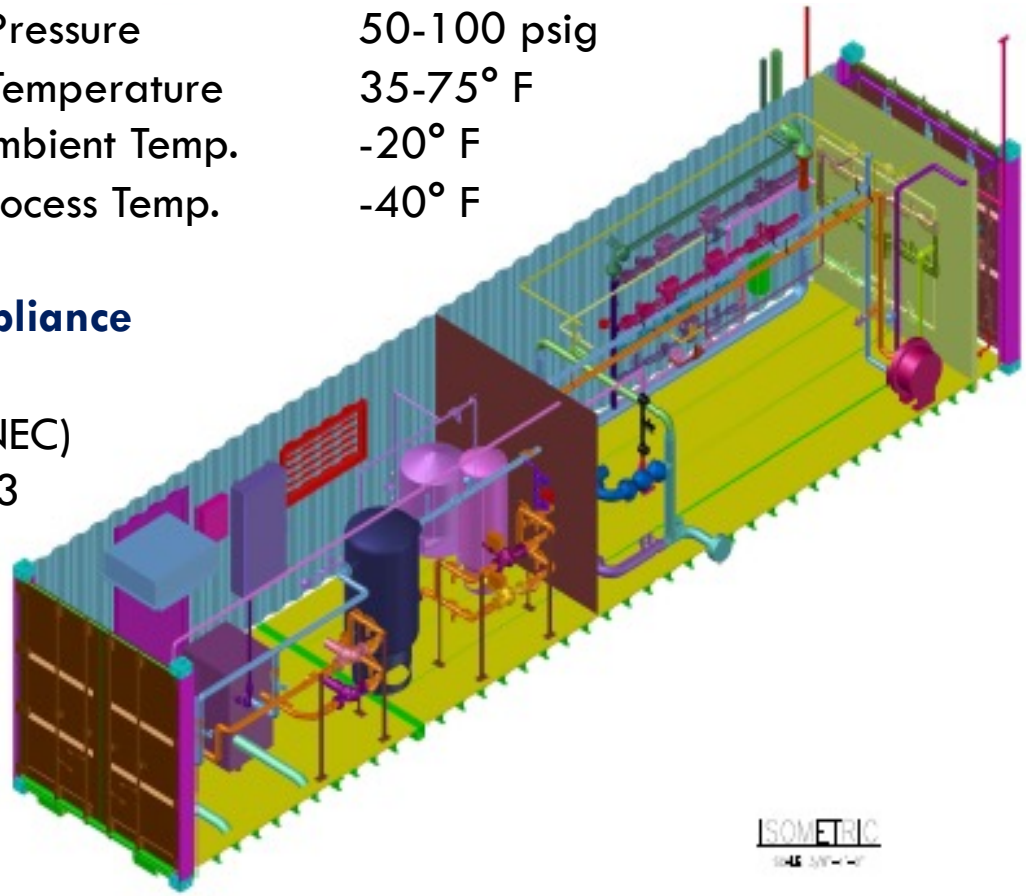
235R

CNG Decompression Equipment Overview

Design Flow Rate	up to 150 MSCFH
Turndown:	10:1 Min
Design Pressure	4250 psig
Discharge Pressure	50-100 psig
Discharge Temperature	35-75° F
Minimum Ambient Temp.	-20° F
Minimum Process Temp.	-40° F

Code Compliance

NFPA 52
NFPA 70 (NEC)
ASME B31.3



236R

Dual-Flow System

- ✓ Approved by NY PSC for utility applications
- ✓ 24/7 remote monitoring
- ✓ 100% redundant flowpaths
- ✓ Designed to automatically change flow patterns and by-pass affected area
- ✓ 50% of system can be shut down and system retains 100% flow rate

CNG Trailers

Trailers provide both delivery and on-site storage.

Transport and Logistics

- "Drop-and-swap service" = CNG trailers are used for both delivery and on-site storage
- Own drivers, tractors, and largest CNG fleet (75+ trailers)

237R

- Carbon tubes hold 350-475 MMBtu
- Reduced weight and greater delivery capacity combine to improve fuel efficiency and lower trucking expenses

Summary: CNG Utility Solutions
What We Provide

① **Decompression Systems**

- Engineering and Design
- Complete Equipment Packages
- Maintenance Team on Staff
- On-Site Staffing Available

② **Gas Procurement**

- Access to multiple pipeline suppliers offers greatest supply flexibility at lowest cost
- Full-time internal Gas Desk with additional support options provided by Direct Energy (joint venture partner)

③ **Transportation and Logistics**

- Own Drivers / Tractors / CNG Fleet
- 24x7 Monitoring and Dispatch
- Real-time Site Management

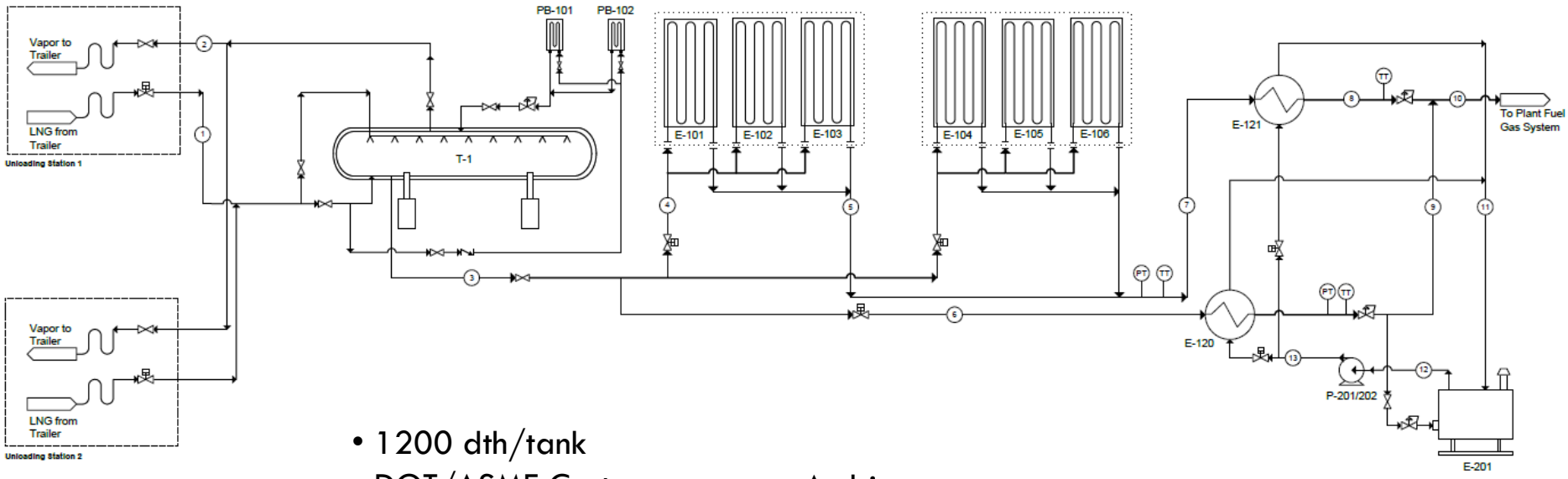
④ **Project Management**

- PM with 20+ years in Utility Construction
- Engineers with 40+ years in CNG/LNG

238R

Our LNG systems also represent a utility grade reliable natural gas supply solution.

LNG Delivery | Storage | Vaporization | Send Out



- 900 dth/load
- 24/7 delivery

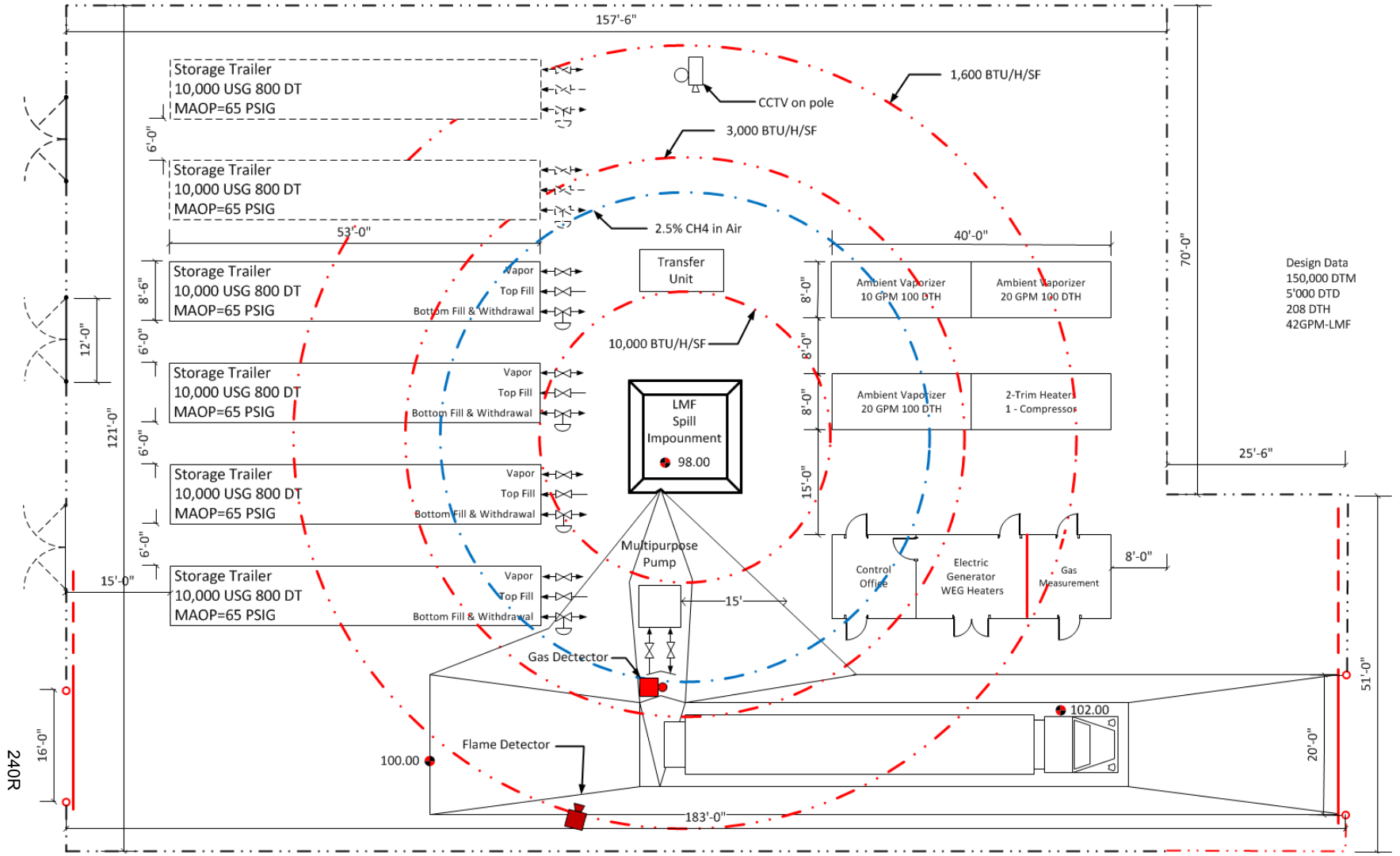
239R

- 1200 dth/tank
- DOT/ASME Cert
- Stackable
- Portable
- Parallel service
- High pressure control

- Ambient system
- Low operating cost
- Quick start-up
- Expandable
- No moving parts

- Pressure control
- Temp Control
- Odorization
- Metering

Equipment is easily configured to fit your site. Capacity is sized for your demand profile.



Summary: LNG Utility Solutions

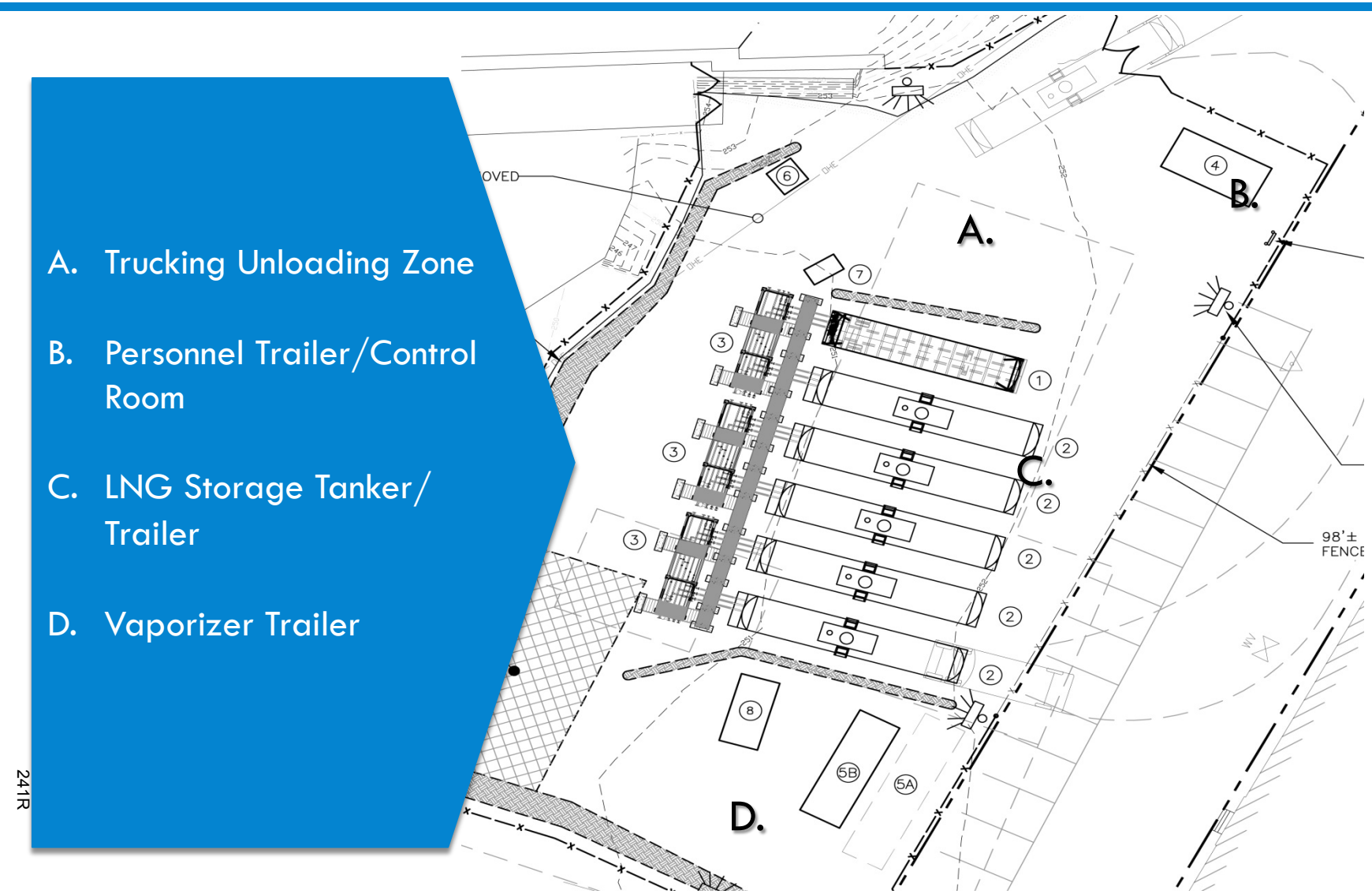
We can provide a full turnkey installation.

A. Trucking Unloading Zone

B. Personnel Trailer/Control Room

C. LNG Storage Tanker/ Trailer

D. Vaporizer Trailer



Site Schematics

- NYSEG Case Study and Design Walkthrough

242R

Utility Experience

- **CNG team is recognized as preferred utility vendor in the Northeast**
  - Baseload and peaking solutions using permanent CNG injection systems in New York
  - Mobile, temporary utility gas solutions for CNG injection in Florida
  - Backup supply as a pipeline repair solution for Con Edison on Roosevelt Island, NYC

- **LNG team has worked on projects for gas utilities around the US, including:**
  - Xcel Energy – Parachute, CO
  - Virginia Natural Gas – Virginia Beach, VA
  - NStar – Dedham, MA
  - El Paso Natural Gas – Morenci, AZ
  - Dominion – Ligonier, PA
  - Dominion Peoples Gas – Washington Lands, WV
  - Elizabethtown Gas – Newton, NJ
  - Northern Natural Gas – Dyersville, IA

243R

Gas Procurement

- **We assume CNG will provide the baseload for this system**
  - Absent any other arrangement, commodity gas will default to an index-based price for delivery from our Eliot, Maine terminal on the PNGTS/Maritimes Joint Facilities
  - We can offer indexing based on Algonquin, Tennessee Zone 6 or Dawn
  - As back-up, we offer supply from the Iroquois Gas Transmission System

- **XNG has contractual relationships with all major suppliers on both Maritimes and PNGTS**
  - We can assist in meeting Liberty's commodity needs at a fixed price, fixed basis, monthly index, daily index, or any commercially reasonable combination of the above
  - If Liberty would prefer to contract for its own supply on either pipeline serving Eliot (or both), simply arrange for delivery to our pipeline meter(s) and XNG will take care of the rest.

- **For LNG, XNG has relationships with key northeastern LNG suppliers (UGI, Gaz Metro and GDF Suez) and can facilitate bids for liquid supply from any and all of those suppliers.**

244R

We will work closely with you to achieve the lowest commodity price available for your customers.

Gas Logistics and Replenishment
Meeting the NH PUC Minimum Storage Requirement

- **Minimum Storage Requirement using CNG**
  - We will station three (3) CNG trailers on site representing 1,000 Dth of on-site gas storage at full capacity
  - We will contract for 100% firm supply at our terminal for at least 2,500 Dth per week, sufficient to meet 1,700 Dth if credited at 70% toward the 5-day balance.

- **Minimum Storage Requirement using LNG**
  - We will provide three (3) 10,000-gallon cryogenic LNG storage tanks representing 3,000 Dth of on-site available storage at all times
  - LNG can be positioned on site for November to March, or year-round as needed
  - LNG used for back-up storage can be injected into the distribution pipe at the end of winter
  - An installed LNG vaporization system can be used on a continuous basis to supply the franchise area distribution as baseload, or to provide full redundancy as back-up to CNG.

245R

With our own fleet, we can provide the NH PUC full assurance that trailers are available at all times to satisfy requirements for off-site storage.

Focus on Reliability

- **Redundancy is key to operational dependability**

- **On Gas Supply:**
  - Multiple terminals on different interstate pipelines
  - N+1 compressors at each terminal
  - Round-the-clock monitoring and support

- **On Gas Delivery:**
  - 75+ CNG trailer fleet
  - 25+ tractor fleet
  - Gen-2 decompression equipment has dual-flow paths

In all cases, we monitor pressure, flow and temperature in real-time 24 / 7 / 365 to guarantee a continuous flow of gas.

246R

Focus on Safety

Total commitment to safety of our employees and everyone in the communities where we work

- Full time safety officer with direct access to senior management team
- Training for employees and all community first responders
- Sophisticated online maintenance management program implemented for all sites and rolling stock
- Integrated Emergency Response Plan for each fixed base operation site.

Full compliance with all Federal, State, and local laws, rules, and regulations

- NFPA 52 (CNG) and NFPA 59A (LNG)
- All OSHA Safety regulations with regard to construction and operations
- Any state or city code or local ordinance that may be applied to a project.

247R

Compliance Safety/Accountability Results Last 24 months	
Metric	Rating
Unsafe Driving	No Violations
Hours of Service	No Violations in Q1
Driver Fitness	No Violations
Controlled Substances & Alcohol	No Violations
Vehicle Maintenance	No Violations
Hazmat Compliance	No Violations
Crash Indicator	None Recordable
Inspection Selection System (ISS)	Improved to 21 from 31
Out-of-Service Rates	
Vehicle	Zero (vs. 20.7% national average
Driver	Zero (vs. 5.5% national average)
Hazmat	Zero (vs. 4.5% national average)

Key Utility Team Members

- **Matt Campano, XNG Solutions Group**
  - 20+ years in construction management in roles ranging from Project Engineer to Project Manager to Divisional President; responsible for all XNG gas installations
  - Launched Utility Services division for Daniel O'Connell & Sons, with a total project portfolio in excess of $150M in project work over 5 years
  - Focus on system safety and operations, contract negotiations and cost control.

- **Doug Hanson, Chief Technology Officer**
  - Responsible for all technology development for both LNG and CNG
  - Former Field Engineer for CryoFuels Systems; Oversees operational staff of 4 engineers, 12 trained operators and 5 trained fabrication professionals
  - Lead engineer on both the NYSEG and Con Edison projects.

- **Dan Smith, VP Procurement**
  - 20+ years of natural gas industry experience; responsible for all gas procurement
  - Previously, Director of Business Analysis for Sprague Energy, responsible for portfolio planning, asset valuation, risk analysis, market development and financial structured products

248R

CNG Services for Local Distribution Companies (LDCs)

Baseload and Supplemental Gas Supply

Indicative Pricing for

Liberty Utilities

Prepared by Xpress Natural Gas LLC

Xpress Natural Gas
160 State Street, 8th Floor
Boston, MA 02109

Xpress Natural Gas

October 14, 2016

Mr. Chico DaFonte
Vice President, Energy Procurement
Liberty Utilities
15 Buttrick Road
Londonderry, NH 03053

Dear Chico,

Thank you for inviting XNG to provide an indication of pricing for delivered CNG to support your baseload and peaking gas requirements in New Hampshire.

XNG works with each LDC partner to provide a fully-assembled skid-mounted injection system that is hard-piped to an approved tap on your system. Our offering is backed by our multiple terminal locations on different supply pipelines, with pricing enabled by our newest terminal in the Marcellus.

The following table outlines current pricing on a 12-month basis to each location based on the daily volume shown.

Daily Volume in Dth (Nov – March)

Delivered to:	1,000	2,000	3,000	4,000
Concord	[redacted]	[redacted]	[redacted]	[redacted]
Manchester	[redacted]	[redacted]	[redacted]	[redacted]
Tilton	[redacted]	[redacted]	[redacted]	[redacted]
Algonquin Index	$6.42	$6.42	$6.42	$6.42

Using CNG, we can offer savings of [redacted] versus regional pipeline indices for the same period. We are able to discuss any volume that might be of interest to you both year-round baseload and winter only supply.

Please contact us at any time with questions. I look forward to speaking further.

Sincerely,

Matthew F. Smith
EVP, Sales and Marketing
Xpress Natural Gas LLC

PROJECT COST ESTIMATE

Estimate Level	Level I		
Project Name:	**Phase I West Lebanon**		
Work Order #:		**Program ID:**	ENI101
Company:	Liberty Utilities - Gas	**Bid Area:**	NH
City:	ALLENSTOWN	**Overhead Area:**	Energy North
State:	NH	**Date Requested:**	9/1/2016
Reimbursable :	Yes	**Date Completed:**	9/1/2016
		Estimated By:	ITC
		Project CY	CY17
New Main (length/size/matl):	**17,001'/8"; 27,712'/2"**		
Abandon Main (length/size/matl):			
Number of Services Involved:	**487**		

Scope of Work:

Install 8" main from storage facility on Plainfield Rd to intersection of Seminary Hill Rd and Old Pine Tree Cementary Rd. 12,249' out of pavement and 4752' in pavement. Install 2" pipe throughout shopping plazas, Airport Rd, Plaza Heights Rd, Romano Cir, all sides off Seminary to Old Pine Tree including Powers, Tenly and Cottage. All service lines and meters (627 meters and 487 services included in estimate) also included is Pike 4" service and rotary meter. Includes 6 HDD's for highways.

Liberty Labor (Mgt.)		$0.00
Liberty Labor (Union)		$0.00
Contractor Labor		$2,259,391.98
Traffic Control		$67,080.45
Stock Materials		$349,565.06
Non-Stock Materials		$0.00
Degradation Fees		$0.00
Other		$23,100.00
	Total Direct Cost	$2,699,137.49
Overheads		
Company Mgt. Labor (%)	123.62%	$0.00
Company Union Labor (%)	123.62%	$0.00
Transportation (%)	0.00%	$0.00
Contractor Labor (%)	35.00%	$790,787.19
Stock Material (%)	2.74%	$9,578.08
	Subtotal	$3,499,502.76
Capital Overhead (%)	0.00%	$0.00
	Subtotal	$3,499,502.76
AFUDC		$0.00
Total Project Estimate		**$3,499,502.76**

Contingency (%)	10%
Equivalent Overall OH (%)	30%

Comments:

Ver. 13 - Liberty Utilities - Effective 4/01/2015

PROJECT COST ESTIMATE

Estimate Level	Level I		
Project Name:	**Phase II Lebanon**		
Work Order #:		**Program ID:**	ENI101
Company:	Liberty Utilities - Gas	**Bid Area:**	NH
City:	ALLENSTOWN	**Overhead Area:**	Energy North
State:	NH	**Date Requested:**	9/1/2016
Reimbursable :	Yes	**Date Completed:**	9/1/2016
		Estimated By:	ITC
		Project CY	CY17
New Main (length/size/matl):	**14,784'/8"; 3146'/4"; 35,318'/2"**		
Abandon Main (length/size/matl):			
Number of Services Involved:	**293**		

Scope of Work:

Install 8" main from Old Pine Tree Cementary Rd. to Rte 89 a total of 14,784. Includes HDD under Mascoma River. Install 4" pipe through downtown Lebanon area. Install 27,442' of 2" pipe through residential areas. All service lines and meters (330 meters and 293 services included in estimate) also included is Kleen 4" service and rotary meter. Includes 6 HDD's.

Liberty Labor (Mgt.)		$0.00
Liberty Labor (Union)		$0.00
Contractor Labor		$2,030,162.93
Traffic Control		$67,080.45
Stock Materials		$322,805.13
Non-Stock Materials		$0.00
Degradation Fees		$0.00
Other		$23,100.00
	Total Direct Cost	$2,443,148.51
Overheads		
Company Mgt. Labor (%)	123.62%	$0.00
Company Union Labor (%)	123.62%	$0.00
Transportation (%)	0.00%	$0.00
Contractor Labor (%)	35.00%	$710,557.03
Stock Material (%)	2.74%	$8,844.86
	Subtotal	$3,162,550.40
Capital Overhead (%)	0.00%	$0.00
	Subtotal	$3,162,550.40
AFUDC		$0.00
Total Project Estimate		**$3,162,550.40**

Contingency (%)	10%
Equivalent Overall OH (%)	29%

Comments:

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PROJECT COST ESTIMATE

Estimate Level	Level I		
Project Name:	**Phase III Lebanon**		
Work Order #:		**Program ID:**	ENI101
Company:	Liberty Utilities - Gas	**Bid Area:**	NH
City:	ALLENSTOWN	**Overhead Area:**	Energy North
State:	NH	**Date Requested:**	9/1/2016
Reimbursable :	Yes	**Date Completed:**	9/1/2016
		Estimated By:	ITC
		Project CY	CY17
New Main (length/size/matl):	12883'/8"; 10675'/4"; 2094'/2"		
Abandon Main (length/size/matl):			
Number of Services Involved:	85		

Scope of Work:

Install 8" main intersection of Hanover St and Rte 120 to entrance of DHMC a total of 12,883'. Includes HDD under interstate interchange. Install 4" pipe on Heater Rd east and east 2156'. Install 4" on Etna Rd and from rte120 to DHMC meter. Install 2094' of 2" pipe total. All service lines and meters (330 meters and 293 services) included in estimate. Includes 8 HDD's.

Liberty Labor (Mgt.)		$0.00
Liberty Labor (Union)		$0.00
Contractor Labor		$1,232,036.20
Traffic Control		$67,080.45
Stock Materials		$300,107.93
Non-Stock Materials		$0.00
Degradation Fees		$0.00
Other		$23,100.00
	Total Direct Cost	$1,622,324.58
Overheads		
Company Mgt. Labor (%)	123.62%	$0.00
Company Union Labor (%)	123.62%	$0.00
Transportation (%)	0.00%	$0.00
Contractor Labor (%)	35.00%	$431,212.67
Stock Material (%)	2.74%	$8,222.96
	Subtotal	$2,061,760.21
Capital Overhead (%)	0.00%	$0.00
	Subtotal	$2,061,760.21
AFUDC		$0.00
Total Project Estimate		**$2,061,760.21**

Contingency (%)	10%
Equivalent Overall OH (%)	27%

Comments:

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PROJECT COST ESTIMATE

Estimate Level	Level I		
Project Name:	**Phase IV Lebanon**		
Work Order #:		**Program ID:**	ENI101
Company:	Liberty Utilities - Gas	**Bid Area:**	NH
City:	ALLENSTOWN	**Overhead Area:**	Energy North
State:	NH	**Date Requested:**	9/1/2016
Reimbursable :	Yes	**Date Completed:**	9/1/2016
		Estimated By:	ITC
		Project CY	CY17
New Main (length/size/matl):	**13200'/8"; 400'/6"; 5009'/4"**		
Abandon Main (length/size/matl):			
Number of Services Involved:	**80**		

Scope of Work:

Install 8" main from DHMC a total of 13,200' to DC boiler plant entrance. Includes. Install 4" pipe through Centerra Business Park a total of 5009'. Install 4435' of 2" thru resi. All service lines and meters (85 meters and 80 services) included in estimate. Includes 6 HDD's.

Liberty Labor (Mgt.)		$0.00
Liberty Labor (Union)		$0.00
Contractor Labor		$1,149,246.71
Traffic Control		$67,080.45
Stock Materials		$276,284.81
Non-Stock Materials		$0.00
Degradation Fees		$0.00
Other		$23,100.00
	Total Direct Cost	$1,515,711.97
Overheads		
Company Mgt. Labor (%)	123.62%	$0.00
Company Union Labor (%)	123.62%	$0.00
Transportation (%)	0.00%	$0.00
Contractor Labor (%)	35.00%	$402,236.35
Stock Material (%)	2.74%	$7,570.20
	Subtotal	$1,925,518.52
Capital Overhead (%)	0.00%	$0.00
	Subtotal	$1,925,518.52
AFUDC		$0.00
Total Project Estimate		**$1,925,518.52**

Contingency (%)	10%
Equivalent Overall OH (%)	27%

Comments:

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Phase IV West Lebanon

PROJECT COST ESTIMATE

Estimate Level	Level I		
Project Name:	**Phase V Lebanon**		
Work Order #:		**Program ID:**	ENI101
Company:	Liberty Utilities - Gas	**Bid Area:**	NH
City:	ALLENSTOWN	**Overhead Area:**	Energy North
State:	NH	**Date Requested:**	9/1/2016
Reimbursable :	Yes	**Date Completed:**	9/1/2016
		Estimated By:	ITC
		Project CY	CY17
New Main (length/size/matl):	**13200'/8"; 400'/6"; 5009'/4"**		
Abandon Main (length/size/matl):			
Number of Services Involved:	**165**		

Scope of Work:

Install 6" main from College boiler room a total of 2066 thru downtown. Install 4" pipe thru surrounding streets a total of 3062'. Install 18,144' of 2" thru resi streets. All service lines and meters (185 meters and 165 services) included in estimate. Includes 6 HDD's.

Liberty Labor (Mgt.)			$0.00
Liberty Labor (Union)			$0.00
Contractor Labor			$1,268,079.32
Traffic Control			$67,080.45
Stock Materials			$108,380.75
Non-Stock Materials			$0.00
Degradation Fees			$0.00
Other			$23,100.00
		Total Direct Cost	$1,466,640.52
Overheads			
Company Mgt. Labor (%)		123.62%	$0.00
Company Union Labor (%)		123.62%	$0.00
Transportation (%)		0.00%	$0.00
Contractor Labor (%)		35.00%	$443,827.76
Stock Material (%)		2.74%	$2,969.63
		Subtotal	$1,913,437.92
Capital Overhead (%)		0.00%	$0.00
		Subtotal	$1,913,437.92
AFUDC			$0.00
Total Project Estimate			**$1,913,437.92**

Contingency (%)	10%
Equivalent Overall OH (%)	30%

Comments:

Ver. 13 - Liberty Utilities - Effective 4/01/2015

Docket No. DG 16-xxx
DCF for Hanover & Lebanon **Phase 1**

Rate Base model	CapEx
Distribution Piping (direct cost)	$ 2,699,137.00
Total	$ 2,699,137.00
Required Return (pre tax)	10.15%
NPV (Delta yrs 1-10, discount rate 10.15%)	$1,967,886.97
Vehicles (trucks)	$275,000.00
Vehicle Revenue Requirement ($275K, 10.15%, 5 years)	($45,043.78)

	MACRS Rates	MACRS Table	Book Depr (40 yrs/2.5%)	Delta	Tax Rate	DIT	ADIT	Rate Base	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	O&M 3% inflation	Revenue Requirement for Vehicles ($275K, 10.15%, 5yrs)	Revenue Requirement	Distribution Revenues	Delta
								2,699,137								
1	5	134,957	67,478	(67,478)	34%	(22,943)	(22,943)	2,608,716	$269,374	$56,682	$5,938	$ 248,000	$45,044	$692,516	$ 976,281.00	$283,765.28
2	9.5	256,418	67,478	(188,940)	34%	(64,239)	(87,182)	2,476,998	$258,100	$54,783	$5,938	$ 255,440	$45,044	$686,783	$ 976,281.00	$289,497.68
3	8.55	230,776	67,478	(163,298)	34%	(55,521)	(142,703)	2,353,998	$245,173	$52,017	$5,938	$ 263,103	$45,044	$678,754	$ 976,281.00	$297,527.47
4	7.7	207,834	67,478	(140,355)	34%	(47,721)	(190,424)	2,238,799	$233,084	$49,434	$5,938	$ 270,996	$45,044	$671,975	$ 976,281.00	$304,305.96
5	6.93	187,050	67,478	(119,572)	34%	(40,654)	(231,079)	2,130,666	$221,750	$47,015	$5,938	$ 279,126	$45,044	$666,352	$ 976,281.00	$309,929.35
6	6.23	168,156	67,478	(100,678)	34%	(34,230)	(265,309)	2,028,957	$211,101	$44,744	$5,938	$ 287,500		$616,761	$ 976,281.00	$359,519.60
7	5.9	159,249	67,478	(91,771)	34%	(31,202)	(296,511)	1,930,277	$200,931	$42,608	$5,938	$ 296,125		$613,081	$ 976,281.00	$363,200.25
8	5.9	159,249	67,478	(91,771)	34%	(31,202)	(327,713)	1,831,597	$190,915	$40,536	$5,938	$ 305,009		$609,876	$ 976,281.00	$366,404.85
9	5.91	159,519	67,478	(92,041)	34%	(31,294)	(359,007)	1,732,824	$180,894	$38,464	$5,938	$ 314,159		$606,933	$ 976,281.00	$369,347.60
10	5.9	159,249	67,478	(91,771)	34%	(31,202)	(390,209)	1,634,144	$170,874	$36,389	$5,938	$ 323,584		$604,263	$ 976,281.00	$372,017.77

O&M		$ 248,000.00	
Annual Distribution Revenues			
R-3	$ 97,740.00		
G41	$ 242,595.00		
G42	$ 596,700.00		
Pike	$ 39,246.00	based on G54 rate	
total	$ 976,281.00		

Return	55%	9.75%	14.77%	8.13%
Debt	45%	4.50%	4.50%	2.03%
				10.15%

See Construction Estimate for details

[1]Insurance for value of distribution piping

Docket No. DG 16-xxx
DCF for Hanover & Lebanon **Phase 2 Incremental**

Rate Base model	CapEx
Distribution Piping (direct cost)	$ 2,443,148.00
Total	$ 2,443,148.00
Required Return (pre tax)	10.15%
NPV (Delta yrs 1-10, discount rate 10.15%)	$4,537,787.37

Return	55%	9.75%	14.77%	8.13%
Debt	45%	4.50%	4.50%	2.03%
				10.15%

	MACRS Rates	MACRS Table	Book Depr (40 yrs/2.5%)	Delta	Tax Rate	DIT	ADIT	Rate Base	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	Revenue Requirement	Distribution Revenues	Delta
								2,443,148						
1	5	122,157	61,079	(61,079)	34%	(20,767)	(20,767)	2,361,303	$243,826	$51,306	$5,375	$361,586	$ 1,058,576.00	$696,990.40
2	9.5	232,099	61,079	(171,020)	34%	(58,147)	(78,914)	2,242,077	$233,622	$49,587	$5,375	$349,662	$ 1,058,576.00	$708,913.51
3	8.55	208,889	61,079	(147,810)	34%	(50,256)	(129,169)	2,130,743	$221,921	$47,084	$5,375	$335,458	$ 1,058,576.00	$723,118.17
4	7.7	188,122	61,079	(127,044)	34%	(43,195)	(172,364)	2,026,469	$210,978	$44,746	$5,375	$322,178	$ 1,058,576.00	$736,398.28
5	6.93	169,310	61,079	(108,231)	34%	(36,799)	(209,163)	1,928,592	$200,719	$42,556	$5,375	$309,729	$ 1,058,576.00	$748,847.19
6	6.23	152,208	61,079	(91,129)	34%	(30,984)	(240,147)	1,836,529	$191,080	$40,500	$5,375	$298,034	$ 1,058,576.00	$760,542.07
7	5.9	144,146	61,079	(83,067)	34%	(28,243)	(268,390)	1,747,208	$181,875	$38,567	$5,375	$286,895	$ 1,058,576.00	$771,680.64
8	5.9	144,146	61,079	(83,067)	34%	(28,243)	(296,632)	1,657,886	$172,808	$36,691	$5,375	$275,953	$ 1,058,576.00	$782,622.52
9	5.91	144,390	61,079	(83,311)	34%	(28,326)	(324,958)	1,568,481	$163,738	$34,816	$5,375	$265,007	$ 1,058,576.00	$793,568.62
10	5.9	144,146	61,079	(83,067)	34%	(28,243)	(353,201)	1,479,160	$154,668	$32,938	$5,375	$254,060	$ 1,058,576.00	$804,516.46

O&M $ 248,000.00

Annual
Distribution Revenues

R-3	$ 79,762.00	
G41	$ 246,136.00	
G42	$ 609,964.00	
Kleen	$ 122,714.00	based on G53 rate
total	$ 1,058,576.00	

See Construction Estimate for details

[1]Insurance for value of distribution piping

Docket No. DG 16-xxx
DCF for Hanover & Lebanon **Phase 3 Incremental**

Rate Base model	CapEx
Distribution Piping (direct cost)	$ 1,622,324.00
Total	$ 1,622,324.00
Required Return (pre tax)	10.15%
NPV (Delta yrs 1-10, discount rate 10.15%)	$2,934,743.27

Return	55%	9.75%	14.77%	8.13%											
Debt	45%	4.50%	4.50%	2.03%											
				10.15%											

	MACRS Rates	MACRS Table	Book Depr (40 yrs/2.5%)	Delta	Tax Rate	DIT	ADIT	Rate Base	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	Revenue Requirement	Distribution Revenues	Delta
								1,622,324						
1	5	81,116	40,558	(40,558)	34%	(13,790)	(13,790)	1,567,976	$161,908	$34,069	$3,569	$240,104	$ 690,071.00	$449,967.25
2	9.5	154,121	40,558	(113,563)	34%	(38,611)	(52,401)	1,488,807	$155,132	$32,927	$3,569	$232,186	$ 690,071.00	$457,884.56
3	8.55	138,709	40,558	(98,151)	34%	(33,371)	(85,772)	1,414,877	$147,362	$31,265	$3,569	$222,754	$ 690,071.00	$467,316.87
4	7.7	124,919	40,558	(84,361)	34%	(28,683)	(114,455)	1,345,637	$140,096	$29,712	$3,569	$213,936	$ 690,071.00	$476,135.27
5	6.93	112,427	40,558	(71,869)	34%	(24,435)	(138,890)	1,280,643	$133,284	$28,258	$3,569	$205,669	$ 690,071.00	$484,401.72
6	6.23	101,071	40,558	(60,513)	34%	(20,574)	(159,465)	1,219,511	$126,883	$26,894	$3,569	$197,904	$ 690,071.00	$492,167.48
7	5.9	95,717	40,558	(55,159)	34%	(18,754)	(178,219)	1,160,199	$120,770	$25,610	$3,569	$190,507	$ 690,071.00	$499,563.82
8	5.9	95,717	40,558	(55,159)	34%	(18,754)	(196,973)	1,100,886	$114,750	$24,364	$3,569	$183,241	$ 690,071.00	$506,829.56
9	5.91	95,879	40,558	(55,321)	34%	(18,809)	(215,782)	1,041,519	$108,727	$23,119	$3,569	$175,973	$ 690,071.00	$514,098.10
10	5.9	95,717	40,558	(55,159)	34%	(18,754)	(234,536)	982,207	$102,704	$21,872	$3,569	$168,703	$ 690,071.00	$521,367.80

O&M $248,000.00

Annual
Distribution Revenues
R-3
G41
G42
Hypertherm
DHMC [redacted] Based on estimated special contract to remain dual fuel
total $ 690,071.00

See Construction Estimate for details

[1]Insurance for value of distribution piping

Docket No. DG 16-xxx
DCF for Hanover & Lebanon **Phase 4 Incremental**

Rate Base model	CapEx
Distribution Piping (direct cost)	$ 1,515,711.00
Total	$ 1,515,711.00
Required Return (pre tax)	10.15%
NPV (Delta yrs 1-10, discount rate 10.15%)	$4,047,943.18

Return	55%	9.75%	14.77%	8.13%											
Debt	45%	4.50%	4.50%	2.03%											
				10.15%											

	MACRS Rates	MACRS Table	Book Depr (40 yrs/2.5%)	Delta	Tax Rate	DIT	ADIT	Rate Base	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	Revenue Requirement	Distribution Revenues	Delta
								1,515,711						
1	5	75,786	37,893	(37,893)	34%	(12,884)	(12,884)	1,464,935	$151,268	$31,830	$3,335	$224,325	$ 858,649.00	$634,323.96
2	9.5	143,993	37,893	(106,100)	34%	(36,074)	(48,957)	1,390,968	$144,937	$30,764	$3,335	$216,928	$ 858,649.00	$641,720.97
3	8.55	129,593	37,893	(91,701)	34%	(31,178)	(80,136)	1,321,897	$137,678	$29,210	$3,335	$208,116	$ 858,649.00	$650,533.43
4	7.7	116,710	37,893	(78,817)	34%	(26,798)	(106,933)	1,257,206	$130,890	$27,760	$3,335	$199,877	$ 858,649.00	$658,772.32
5	6.93	105,039	37,893	(67,146)	34%	(22,830)	(129,763)	1,196,484	$124,525	$26,401	$3,335	$192,153	$ 858,649.00	$666,495.53
6	6.23	94,429	37,893	(56,536)	34%	(19,222)	(148,985)	1,139,369	$118,545	$25,126	$3,335	$184,898	$ 858,649.00	$673,750.95
7	5.9	89,427	37,893	(51,534)	34%	(17,522)	(166,507)	1,083,955	$112,834	$23,927	$3,335	$177,988	$ 858,649.00	$680,661.23
8	5.9	89,427	37,893	(51,534)	34%	(17,522)	(184,029)	1,028,540	$107,209	$22,763	$3,335	$171,200	$ 858,649.00	$687,449.50
9	5.91	89,579	37,893	(51,686)	34%	(17,573)	(201,602)	973,074	$101,582	$21,599	$3,335	$164,409	$ 858,649.00	$694,240.37
10	5.9	89,427	37,893	(51,534)	34%	(17,522)	(219,123)	917,660	$95,955	$20,435	$3,335	$157,617	$ 858,649.00	$701,032.33

O&M $248,000.00

Annual
Distribution Revenues
R-3
G41
G42
College [redacted] Based on estimated special contract to remain dual fuel and 50% take or pay
total $ 858,649.00

See Construction Estimate for details

[1]Insurance for value of distribution piping

Docket No. DG 16-xxx
DCF for Hanover & Lebanon **Phase 5 Incremental**

Rate Base model	CapEx
Distribution Piping (direct cost)	$ 1,466,640.00
Total	$ 1,466,640.00
Required Return (pre tax)	10.15%
NPV (Delta yrs 1-10, discount rate 10.15%)	$2,169,320.75

Return	55%	9.75%	14.77%	8.13%											
Debt	45%	4.50%	4.50%	2.03%											
				10.15%											

	MACRS Rates	MACRS Table	Book Depr (40 yrs/2.5%)	Delta	Tax Rate	DIT	ADIT	Rate Base	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	Revenue Requirement	Distribution Revenues	Delta
								1,466,640						
1	5	73,332	36,666	(36,666)	34%	(12,466)	(12,466)	1,417,508	$146,370	$30,799	$3,227	$217,063	$ 544,606.00	$327,543.46
2	9.5	139,331	36,666	(102,665)	34%	(34,906)	(47,372)	1,345,936	$140,245	$29,768	$3,227	$209,905	$ 544,606.00	$334,701.00
3	8.55	125,398	36,666	(88,732)	34%	(30,169)	(77,541)	1,279,101	$133,221	$28,265	$3,227	$201,378	$ 544,606.00	$343,228.16
4	7.7	112,931	36,666	(76,265)	34%	(25,930)	(103,471)	1,216,505	$126,652	$26,861	$3,227	$193,406	$ 544,606.00	$351,200.31
5	6.93	101,638	36,666	(64,972)	34%	(22,091)	(125,562)	1,157,748	$120,493	$25,547	$3,227	$185,933	$ 544,606.00	$358,673.48
6	6.23	91,372	36,666	(54,706)	34%	(18,600)	(144,162)	1,102,482	$114,707	$24,313	$3,227	$178,912	$ 544,606.00	$365,694.01
7	5.9	86,532	36,666	(49,866)	34%	(16,954)	(161,116)	1,048,862	$109,181	$23,152	$3,227	$172,225	$ 544,606.00	$372,380.57
8	5.9	86,532	36,666	(49,866)	34%	(16,954)	(178,071)	995,241	$103,738	$22,026	$3,227	$165,657	$ 544,606.00	$378,949.06
9	5.91	86,678	36,666	(50,012)	34%	(17,004)	(195,075)	941,571	$98,293	$20,900	$3,227	$159,086	$ 544,606.00	$385,520.09
10	5.9	86,532	36,666	(49,866)	34%	(16,954)	(212,029)	887,951	$92,848	$19,773	$3,227	$152,514	$ 544,606.00	$392,092.16

O&M $248,000.00

Annual
Distribution Revenues

R-3	$ 56,973.00
G41	$ 89,831.00
G42	$ 397,802.00
total	$ 544,606.00

See Construction Estimate for details-higher paving due to downtown

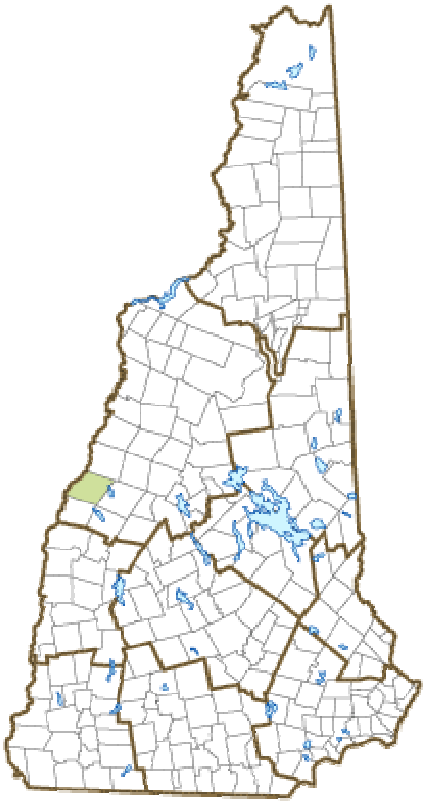
[1]Insurance for value of distribution piping

Total Capex spent over 5 years **$ 9,746,960.00**
Required return pretax 10.15%

NPV $11,277,260

Year	Book Depreciation	Return Required	Property Tax 2.1%	Insurance[1] 0.22%	O&M	Revenue Requirement for Vehicles	Revenue Requirement	Distribution Revenues	Delta
1	$ 67,478	$ 269,374	$ 56,682	$ 5,938	$ 248,000	$ 45,044	$ 692,516	$ 976,281	$ 283,765
2	$ 128,557	$ 501,926	$ 106,089	$ 11,313	$ 255,440	$ 45,044	$ 1,048,369	$ 2,034,857	$ 986,488
3	$ 169,115	$ 640,702	$ 135,673	$ 14,882	$ 263,103	$ 45,044	$ 1,268,520	$ 2,724,928	$ 1,456,408
4	$ 207,008	$ 761,405	$ 161,275	$ 18,217	$ 270,996	$ 45,044	$ 1,463,944	$ 3,583,577	$ 2,119,633
5	$ 243,674	$ 871,398	$ 184,588	$ 21,443	$ 279,126	$ 45,044	$ 1,645,274	$ 4,128,183	$ 2,482,909
6	$ 243,674	$ 829,839	$ 175,990	$ 21,443	$ 287,500	$ -	$ 1,558,447	$ 4,128,183	$ 2,569,736
7	$ 243,674	$ 789,405	$ 167,391	$ 21,443	$ 296,125	$ -	$ 1,518,038	$ 4,128,183	$ 2,610,145
8	$ 243,674	$ 750,849	$ 159,259	$ 21,443	$ 305,009	$ -	$ 1,480,234	$ 4,128,183	$ 2,647,949
9	$ 243,674	$ 713,511	$ 151,437	$ 21,443	$ 314,159	$ -	$ 1,444,225	$ 4,128,183	$ 2,683,958
10	$ 243,674	$ 676,902	$ 143,809	$ 21,443	$ 323,584	$ -	$ 1,409,412	$ 4,128,183	$ 2,718,771

[1]Insurance for value of distribution piping



Hanover, NH

Community Contact	**Town of Hanover** **Julia N. Griffin, Town Manager** **PO Box 483** **Hanover, NH 03755**
Telephone	**(603) 643-0701**
Fax	**(603) 643-1720**
E-mail	**TownMgr@HanoverNH.org**
Web Site	**www.hanovernh.org**
Municipal Office Hours	**Monday through Friday, 8:30 am - 4:30 pm**
County	**Grafton**
Labor Market Area	**Lebanon, NH-VT Micropolitan NECTA, NH part**
Tourism Region	**Dartmouth-Lake Sunapee**
Planning Commission	**Upper Valley Lake Sunapee**
Regional Development	**Grafton County Economic Development Council**
Election Districts	
US Congress	**District 2**
Executive Council	**District 1**
State Senate	**District 5**
State Representative	**Grafton County District 12**

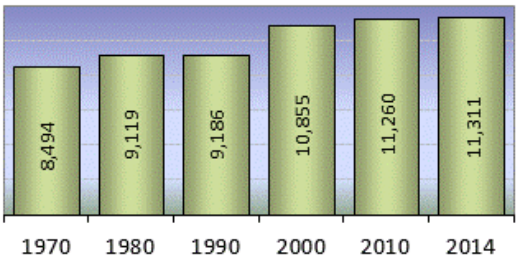
Incorporated: 1761

Origin: Granted in 1761, the town was named for Hanover Parish, the home parish of settlers from Lisbon, Connecticut. In 1769, Reverend Eleazar Wheelock, received a charter for a college to educate Native Americans, an expansion of the Charity School he had established in Connecticut. The college was named for William Legge, Second Earl of Dartmouth, a supporter of the Reverend's efforts. In 1771, Governor John Wentworth, upon petition from Reverend Wheelock, chartered 300 acres between Hanover and Lebanon for Dartmouth College. The land chartered to the college was for a time known as Dresden, one of 16 towns involved in a border dispute with Vermont. Today, the name Dresden is that of the local school district, a bi-state district including towns from both sides of the Connecticut River.

Grafton County

Villages and Place Names: Etna, Hanover Center, Dartmouth College

Population, Year of the First Census Taken: 1,380 residents in 1790



Population Trends: Population change for Hanover, including resident students, totaled 3,982 over 54 years, from 7,329 in 1960 to 11,311 in 2014. The largest decennial percent change was an 18 percent increase between 1990 and 2000. The 2014 Census estimate for Hanover was 11,311 residents, which ranked 26th among New Hampshire's incorporated cities and towns.

Population Density and Land Area, 2014 *(US Census Bureau)***:** 230.4 persons per square mile of land area. Hanover contains 49.1 square miles of land area and 1.0 square miles of inland water area.

Municipal Services

Type of Government	**Selectmen**
Budget: Municipal Appropriations, 2015-2016	**$26,277,320**
Budget: School Appropriations, 2016-2017	**$26,277,340**
Zoning Ordinance	**1931/13**
Master Plan	**2003**
Capital Improvement Plan	**Yes**
Industrial Plans Reviewed By	**Planning Board**

Boards and Commissions

Elected: **Selectmen; Trust Funds; Library; Town Clerk; Moderator; Checklist; Assessors**

Appointed: **Planning; Zoning; Conservation; Parks & Recreation; Finance; Affordable Housing**

Public Library **Howe; Hanover Town**

Emergency Services

Police Department	**Full-time**
Fire Department	**Full-time**
Emergency Medical Service	**Full-time**

Nearest Hospital(s)	Distance	Staffed Beds
Dartmouth-Hitchcock Med Ctr, Lebanon	**3 miles**	**417**
Alice Peck Day Memorial, Lebanon	**7 miles**	**25**

Utilities

Electric Supplier		**Eversource Energy; Liberty Utilities; NH Electric Coop**
Natural Gas Supplier		**None**
Water Supplier		**Municipal**
Sanitation		**Municipal**
Municipal Wastewater Treatment Plant		**Yes**
Solid Waste Disposal		
Curbside Trash Pickup		**Private**
Pay-As-You-Throw Program		**No**
Recycling Program		**Curbside**
Telephone Company		**Comcast; G-4; Fairpoint**
Cellular Telephone Access		**Yes**
Cable Television Access		**Limited**
Public Access Television Station		**Yes**
High Speed Internet Service:	Business	**Limited**
	Residential	**Limited**

Property Taxes *(NH Dept. of Revenue Administration)*

2015 Total Tax Rate (per $1000 of value)	**$19.35**
2015 Equalization Ratio	**86.9**
2015 Full Value Tax Rate (per $1000 of value)	**$16.78**

2015 Percent of Local Assessed Valuation by Property Type

Residential Land and Buildings	**72.5%**
Commercial Land and Buildings	**26.9%**
Public Utilities, Current Use, and Other	**0.6%**

Housing *(ACS 2010-2014)*

Total Housing Units	**3,278**
Single-Family Units, Detached or Attached	**2,270**
Units in Multiple-Family Structures:	
Two to Four Units in Structure	**262**
Five or More Units in Structure	**734**
Mobile Homes and Other Housing Units	**12**

Demographics *(US Census Bureau)*

Total Population	Community	County
2014	**11,311**	**89,360**
2010	**11,260**	**89,118**
2000	**10,855**	**81,826**
1990	**9,186**	**74,998**
1980	**9,119**	**65,806**
1970	**8,494**	**54,914**

Demographics, American Community Survey (ACS) 2010-2014

Population by Gender

Male **5,506** Female **5,805**

Population by Age Group

Under age 5	**358**
Age 5 to 19	**2,756**
Age 20 to 34	**3,942**
Age 35 to 54	**1,878**
Age 55 to 64	**1,033**
Age 65 and over	**1,344**
Median Age	**23.2 years**

Educational Attainment, population 25 years and over

High school graduate or higher	**96.8%**
Bachelor's degree or higher	**78.1%**

Income, Inflation Adjusted $ *(ACS 2010-2014)*

Per capita income	**$34,140**
Median family income	**$129,000**
Median household income	**$94,063**

Median Earnings, full-time, year-round workers

Male	**$87,550**
Female	**$53,141**

Individuals below the poverty level **12.0%**

Labor Force *(NHES – ELMI)*

Annual Average	2005	2015
Civilian labor force	**5,329**	**4,915**
Employed	**5,207**	**4,713**
Unemployed	**122**	**202**
Unemployment rate	**2.3%**	**4.1%**

Employment & Wages *(NHES – ELMI)*

Annual Average Covered Employment	2004	2014
Goods Producing Industries		
Average Employment	**1,027**	**1,257**
Average Weekly Wage	**$1,048**	**$1,312**
Service Providing Industries		
Average Employment	**7,543**	**7,924**
Average Weekly Wage	**$1,003**	**$1,382**
Total Private Industry		
Average Employment	**8,570**	**9,181**
Average Weekly Wage	**$1,008**	**$1,372**
Government (Federal, State, and Local)		
Average Employment	**794**	**697**
Average Weekly Wage	**$ 943**	**$1,275**
Total, Private Industry plus Government		
Average Employment	**9,364**	**9,878**
Average Weekly Wage	**$1,003**	**$1,366**

EDUCATION AND CHILD CARE

Schools students attend: **Hanover operates grades K-5; grades 6-12 are part of Dresden Cooperative (Hanover NH and Norwich VT)** District: **SAU 70**

Career Technology Center(s): **Hartford Area Career & Technology Center (VT)** Region: **7**

Educational Facilities (includes Charter Schools)	Elementary	Middle/Junior High	High School	Private/Parochial
Number of Schools	**1**	**1**	**1**	
Grade Levels	**K 1-5**	**6-8**	**9-12**	
Total Enrollment	**470**	**402**	**691**	

Nearest Community College: **River Valley**
Nearest Colleges or Universities: **Dartmouth; Colby-Sawyer; Lebanon**

2016 NH Licensed Child Care Facilities (DHHS-Bureau of Child Care Licensing) Total Facilities: **8** Total Capacity: **338**

LARGEST BUSINESSES	PRODUCT/SERVICE	EMPLOYEES	ESTABLISHED
Dartmouth College	Education	3,497	1769
Hypertherm	Plasma arch cutting	610	1968
Town of Hanover	Municipal services	247	1761
Dartmouth Printing Co.	Printing services	245	1938
Hanover Inn	Lodging	112	1769
Creare	Research & development services	83	1969
Trumbull Nelson Construction Co.	Construction	55	1917
Kendall at Hanover	Continuing Care Retirement Community		1992

Employer Information Supplied by Municipality

TRANSPORTATION *(distances estimated from city/town hall)*

Road Access US Routes
State Routes **10, 10A, 120**
Nearest Interstate, Exit **I-91 (VT), Exit 13; I-89, Exit 18**
Distance **1 mile; 5 miles**

Railroad **No**
Public Transportation **Advance Transit**

Nearest Public Use Airport, General Aviation
Lebanon Municipal Runway **5,496 ft. asphalt**
Lighted? **Yes** Navigation Aids? **Yes**

Nearest Airport with Scheduled Service
Lebanon Municipal Distance **6 miles**
Number of Passenger Airlines Serving Airport **1**

Driving distance to select cities:

Manchester, NH	**76 miles**
Portland, Maine	**168 miles**
Boston, Mass.	**126 miles**
New York City, NY	**270 miles**
Montreal, Quebec	**188 miles**

COMMUTING TO WORK *(ACS 2010-2014)*

Workers 16 years and over	
Drove alone, car/truck/van	**45.3%**
Carpooled, car/truck/van	**9.4%**
Public transportation	**4.2%**
Walked	**30.1%**
Other means	**4.7%**
Worked at home	**6.3%**
Mean Travel Time to Work	**13.3 minutes**

Percent of Working Residents: ACS 2010-2014

Working in community of residence	**58.1**
Commuting to another NH community	**30.9**
Commuting out-of-state	**11.0**

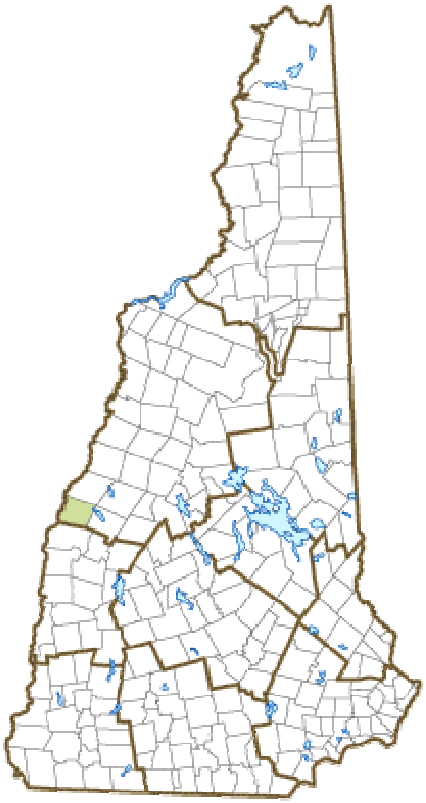
RECREATION, ATTRACTIONS, AND EVENTS

X	Municipal Parks
	YMCA/YWCA
	Boys Club/Girls Club
X	Golf Courses
	Swimming: Indoor Facility
X	Swimming: Outdoor Facility
X	Tennis Courts: Indoor Facility
X	Tennis Courts: Outdoor Facility
X	Ice Skating Rink: Indoor Facility
	Bowling Facilities
X	Museums
X	Cinemas
X	Performing Arts Facilities
X	Tourist Attractions
X	Youth Organizations (i.e., Scouts, 4-H)
X	Youth Sports: Baseball
X	Youth Sports: Soccer
X	Youth Sports: Football
X	Youth Sports: Basketball
X	Youth Sports: Hockey
X	Campgrounds
X	Fishing/Hunting
X	Boating/Marinas
X	Snowmobile Trails
X	Bicycle Trails
X	Cross Country Skiing
X	Beach or Waterfront Recreation Area
X	Overnight or Day Camps

Nearest Ski Area(s): **Dartmouth Skiway**

Other: **Community Rowing Facility; Hood Museum of Art; Hopkins Center**

Economic & Labor Market Information Bureau, NH Employment Security, August 2016. Community Response Received **6/21/2016**



Lebanon, NH

Community Contact	**City of Lebanon** **Kelly Crate, Administrative Assistant** **51 North Park Street** **Lebanon, NH 03766**
Telephone	**(603) 448-1457**
Fax	**(603) 442-6141**
E-mail	**kelly.crate@LebCity.com**
Web Site	**www.lebnh.net**
Municipal Office Hours	**Monday through Friday, 8 am - 4:30 pm**
County	**Grafton**
Labor Market Area	**Lebanon, NH-VT Micropolitan NECTA, NH part**
Tourism Region	**Dartmouth-Lake Sunapee**
Planning Commission	**Upper Valley Lake Sunapee**
Regional Development	**Grafton County Economic Development Council**
Election Districts	
US Congress	**District 2 (All Wards)**
Executive Council	**District 1 (All Wards)**
State Senate	**District 5 (All Wards)**
State Representative	**Grafton County District 13 (All Wards)**

Incorporated: 1761

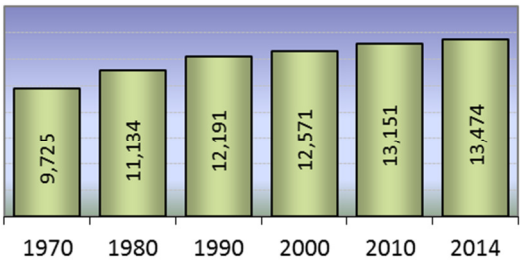
Origin: The name Lebanon comes from the biblical cedars of ancient Lebanon, a Semitic word meaning "white" that refers to the nearby mountain with perpetual snows on its summit. Established in 1761, the name for this town was probably selected by the many early settlers who were from Lebanon, Connecticut, including Eleazar Wheelock, founder of Dartmouth College. Lebanon was the original location of the Indian Charity School from which Dartmouth is descended. In 1781, Lebanon was one of the towns that attempted to join Vermont, but later returned to New Hampshire. Lebanon was incorporated as a city in 1957.

Grafton County

Villages and Place Names: East Wilder, Mascoma, Sachem Village, West Lebanon

Population, Year of the First Census Taken: 1,180 residents in 1790

Population Trends: Population change for Lebanon totaled 4,175 over 54 years, from 9,299 in 1960 to 13,474 in 2014. The largest decennial percent change was a 14 percent increase between 1970 and 1980; the smallest, a three percent increase between 1990 and 2000. The 2014 Census estimate for Lebanon was 13,474 residents, which ranked 22nd among New Hampshire's incorporated cities and towns.



Population Density and Land Area, 2014 *(US Census Bureau)***:** 334.1 persons per square mile of land area. Lebanon contains 40.3 square miles of land area and 0.9 square miles of inland water area.

Municipal Services

Type of Government	**Manager & Council**
Budget: Municipal Appropriations, 2016	**$52,347,280**
Budget: School Appropriations, 2015-2016	**$24,970,510**
Zoning Ordinance	**1936/16**
Master Plan	**2012**
Capital Improvement Plan	**Yes**
Industrial Plans Reviewed By	**Planning Board**

Boards and Commissions
Elected: **City Council**
Appointed: **Planning; Zoning; Library; Conservation; Heritage**

Public Library **Lebanon Public; West Lebanon**

Emergency Services

Police Department	**Full-time**
Fire Department	**Full-time**
Emergency Medical Service	**Full-time**

Nearest Hospital(s)	Distance	Staffed Beds
Dartmouth-Hitchcock Med Ctr, Lebanon	**Local**	**417**
Alice Peck Day Memorial, Lebanon	**Local**	**25**

Utilities

Electric Supplier		**Liberty Utilities; NH Electric Coop**
Natural Gas Supplier		**None**
Water Supplier		**Municipal**
Sanitation		**Municipal**
Municipal Wastewater Treatment Plant		**Yes**
Solid Waste Disposal		
Curbside Trash Pickup		**Private**
Pay-As-You-Throw Program		**Yes**
Recycling Program		**Volunraty**
Telephone Company		**Fairpoint**
Cellular Telephone Access		**Yes**
Cable Television Access		**Yes**
Public Access Television Station		**Yes**
High Speed Internet Service:	Business	**Yes**
	Residential	**Limited**

Property Taxes *(NH Dept. of Revenue Administration)*

2015 Total Tax Rate (per $1000 of value)	**$27.61**
2015 Equalization Ratio	**98.0**
2015 Full Value Tax Rate (per $1000 of value)	**$26.20**

2015 Percent of Local Assessed Valuation by Property Type

Residential Land and Buildings	**54.9%**
Commercial Land and Buildings	**40.7%**
Public Utilities, Current Use, and Other	**4.5%**

Housing *(ACS 2010-2014)*

Total Housing Units	**6,594**
Single-Family Units, Detached or Attached	**3,115**
Units in Multiple-Family Structures:	
Two to Four Units in Structure	**1,185**
Five or More Units in Structure	**2,099**
Mobile Homes and Other Housing Units	**195**

Demographics *(US Census Bureau)*

Total Population	Community	County
2014	**13,474**	**89,360**
2010	**13,151**	**89,118**
2000	**12,571**	**81,826**
1990	**12,191**	**74,998**
1980	**11,134**	**65,806**
1970	**9,725**	**54,914**

Demographics, American Community Survey (ACS) 2010-2014

Population by Gender

Male	**6,504**	Female	**6,970**

Population by Age Group

Under age 5	**730**
Age 5 to 19	**2,124**
Age 20 to 34	**2,902**
Age 35 to 54	**3,606**
Age 55 to 64	**2,023**
Age 65 and over	**2,089**
Median Age	**39.4 years**

Educational Attainment, population 25 years and over

High school graduate or higher	**92.6%**
Bachelor's degree or higher	**44.9%**

Income, Inflation Adjusted $ *(ACS 2010-2014)*

Per capita income	**$34,226**
Median family income	**$71,868**
Median household income	**$52,825**

Median Earnings, full-time, year-round workers

Male	**$51,631**
Female	**$46,974**

Individuals below the poverty level **11.5%**

Labor Force *(NHES – ELMI)*

Annual Average	2005	2015
Civilian labor force	**7,656**	**7,630**
Employed	**7,483**	**7,420**
Unemployed	**173**	**210**
Unemployment rate	**2.3%**	**2.8%**

Employment & Wages *(NHES – ELMI)*

Annual Average Covered Employment	2004	2014
Goods Producing Industries		
Average Employment	**2,353**	**1,773**
Average Weekly Wage	**$ 858**	**$1,314**
Service Providing Industries		
Average Employment	**14,805**	**15,656**
Average Weekly Wage	**$ 831**	**$1,203**
Total Private Industry		
Average Employment	**17,158**	**17,429**
Average Weekly Wage	**$ 835**	**$1,214**
Government (Federal, State, and Local)		
Average Employment	**898**	**808**
Average Weekly Wage	**$ 691**	**$ 974**
Total, Private Industry plus Government		
Average Employment	**18,055**	**18,237**
Average Weekly Wage	**$ 828**	**$1,203**

EDUCATION AND CHILD CARE

Schools students attend: **Lebanon operates grades K-12** District: **SAU 88**
Career Technology Center(s): **Hartford Area Career & Technology Center (VT)** Region: **7**

Educational Facilities (includes Charter Schools)	Elementary	Middle/Junior High	High School	Private/Parochial
Number of Schools	**2**	**1**	**2**	
Grade Levels	**P K 1-4**	**5-8**	**9-12**	
Total Enrollment	**600**	**450**	**641**	

Nearest Community College: **River Valley**
Nearest Colleges or Universities: **Dartmouth; Colby-Sawyer; Lebanon**

2016 NH Licensed Child Care Facilities (DHHS-Bureau of Child Care Licensing) Total Facilities: **7** Total Capacity: **521**

LARGEST BUSINESSES	PRODUCT/SERVICE	EMPLOYEES	ESTABLISHED
Dartmouth Hitchcock Medical Center/Hitchcock Clinic	Health care services	6,904	1857
Alice Peck Day/Lifecare Center	Health care services	607	
Hypertherm	Manufacturing	569	1958
FujiFilm	Technology	390	

Employer Information Supplied by Municipality

TRANSPORTATION *(distances estimated from city/town hall)*

Road Access US Routes **4**
State Routes **10, 12A, 4A, 120**
Nearest Interstate, Exit **I-89, Exits 17 - 20**
Distance **Local access**

Railroad **CCRR**
Public Transportation **Advance Transit**

Nearest Public Use Airport, General Aviation
Lebanon Municipal Runway **5,496 ft. asphalt**
Lighted? **Yes** Navigation Aids? **Yes**

Nearest Airport with Scheduled Service
Lebanon Municipal Distance **Local**
Number of Passenger Airlines Serving Airport **1**

Driving distance to select cities:

Manchester, NH	**71 miles**
Portland, Maine	**163 miles**
Boston, Mass.	**121 miles**
New York City, NY	**269 miles**
Montreal, Quebec	**187 miles**

COMMUTING TO WORK *(ACS 2010-2014)*

Workers 16 years and over	
Drove alone, car/truck/van	**72.8%**
Carpooled, car/truck/van	**9.9%**
Public transportation	**5.2%**
Walked	**2.8%**
Other means	**2.4%**
Worked at home	**6.9%**
Mean Travel Time to Work	**16.8 minutes**

Percent of Working Residents: ACS 2010-2014

Working in community of residence	**61.2**
Commuting to another NH community	**27.3**
Commuting out-of-state	**11.5**

RECREATION, ATTRACTIONS, AND EVENTS

X	Municipal Parks
	YMCA/YWCA
	Boys Club/Girls Club
X	Golf Courses
X	Swimming: Indoor Facility
X	Swimming: Outdoor Facility
X	Tennis Courts: Indoor Facility
X	Tennis Courts: Outdoor Facility
X	Ice Skating Rink: Indoor Facility
	Bowling Facilities
X	Museums
X	Cinemas
X	Performing Arts Facilities
X	Tourist Attractions
X	Youth Organizations (i.e., Scouts, 4-H)
X	Youth Sports: Baseball
X	Youth Sports: Soccer
X	Youth Sports: Football
X	Youth Sports: Basketball
X	Youth Sports: Hockey
X	Campgrounds
X	Fishing/Hunting
X	Boating/Marinas
X	Snowmobile Trails
X	Bicycle Trails
X	Cross Country Skiing
X	Beach or Waterfront Recreation Area
X	Overnight or Day Camps

Nearest Ski Area(s): **Storrs Hill, Lebanon**

Other: **Hiking Trails; Lebanon Adult Sports; Backcountry Camping**

Economic & Labor Market Information Bureau, NH Employment Security, August 2016. Community Response Received **6/17/2016**

Liberty Utilities[SM]

Liberty Utilities Natural Gas Franchise Hanover/Lebanon

September 29, 2015
Lebanon Opera House

268R

Agenda

- Overview of Liberty Utilities
- Why Natural Gas
- Site Selection
- System Buildout
- Safety
- Engineering & Operations
- Sales and Outreach
- Next Steps
- Questions

269R

Liberty Utilities℠

Speakers

David Swain
President Liberty Utilities – NH

Michael Licata
Director, Government and Community Relations

William Clark
Business Development Professional

Ian Crabtree
Senior Engineer

Lisa DeGregory
Manager, Sales and Marketing

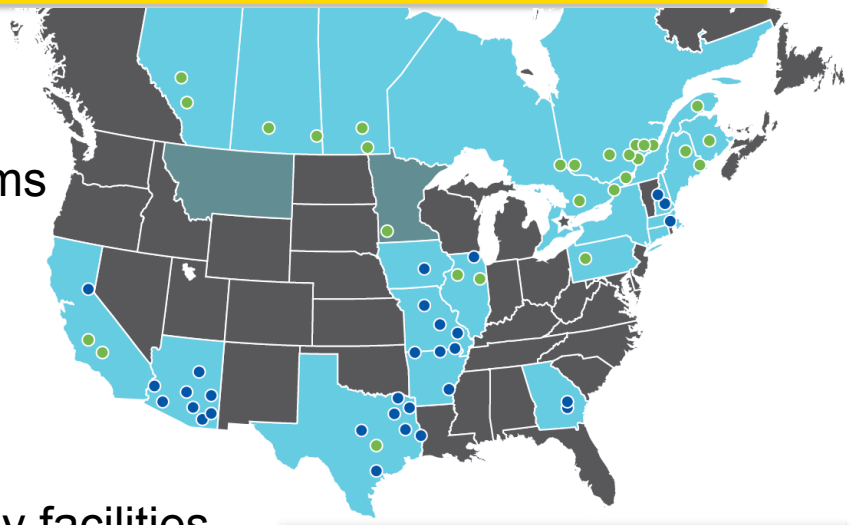
270R

Liberty Utilities

Algonquin Power & Utilities Corp.

Liberty Utilities

- Over 30 electric, gas & water utility systems
- Operates in 10 states
- Approx. 1200 employees



Algonquin

- 40 contracted renewable and clean energy facilities
- Operates in 7 states and 6 provinces
- 486MW of acquisition and development opportunities
- Approx. 170 employees
- A $3.6 billion diversified generation, transmission and distribution utility
- Traded on the Toronto Stock Exchange

Legend

States / provinces with power generation or utilities distribution

States / provinces with acquisitions or projects in development

Generation facility

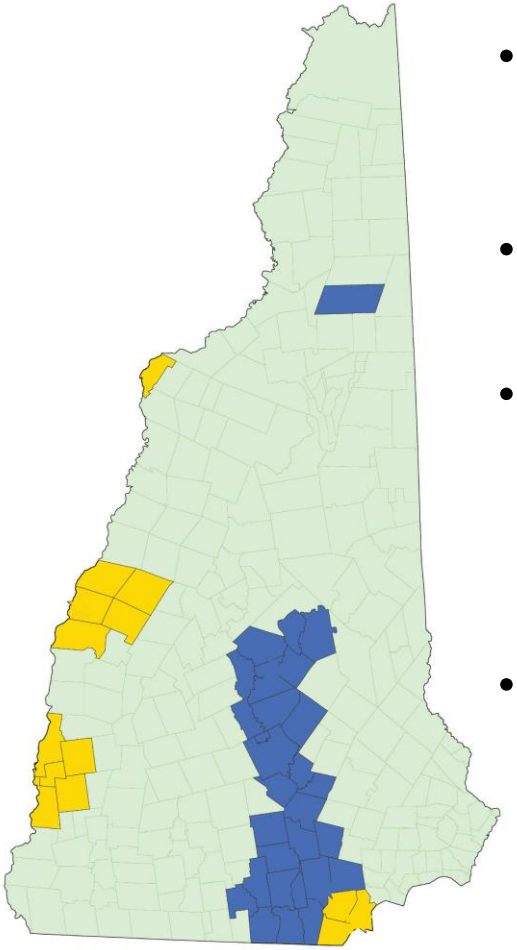
Electric, gas or water utility

271R

Liberty Utilities

Liberty Utilities New Hampshire

- Electric distribution company serving 21 communities, including Hanover and Lebanon
- 43,000 customers in New Hampshire, including 21,000 in the Upper Valley
- 30,000 sq/ft Operations and Customer Service facility located in Lebanon
- Approximately 30 full-time employees serving Upper Valley



- Largest gas utility in New Hampshire, serving 90,000 customers
- Serves 31 communities with Natural Gas
- Propane and Liquefied Natural Gas (LNG) facilities, located in Nashua, Manchester, Concord and Tilton
- 24/7 Emergency, Dispatch and Control Center located in Londonderry

272R

Liberty Utilities

Keene Division

- Liberty acquired NH Gas Corp. in Jan 2015. Keene Division of EnergyNorth
- Serves 1250 customers
- 30 miles of distribution pipe
- Customers served through underground distribution system from a single supply and storage plant located in Keene
- Very similar to proposal to serve Upper Valley

273R

Liberty Utilities

Natural Gas vs Other Fuels

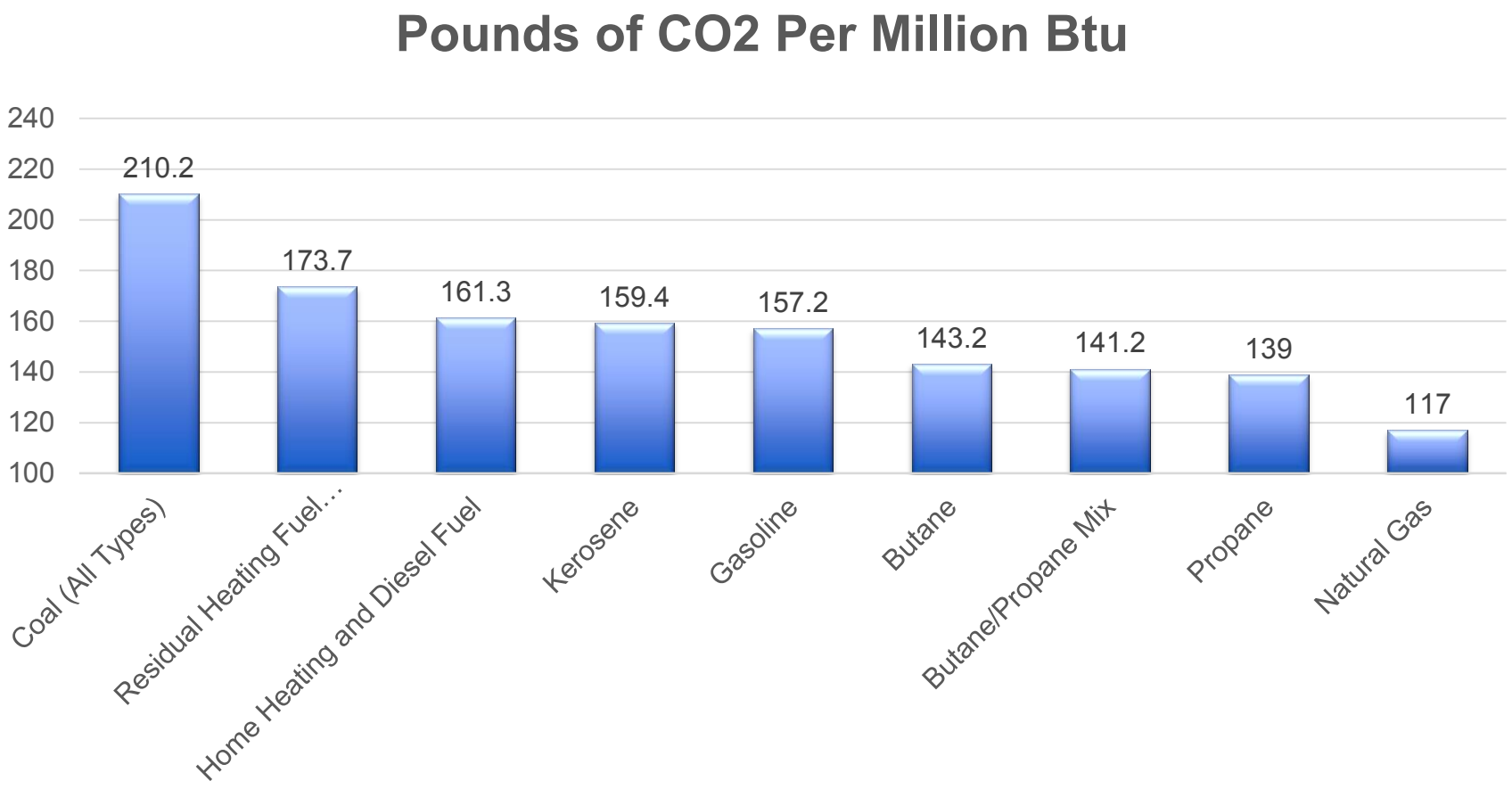
- Using natural gas for heating and manufacturing processes releases less carbon dioxide than other fuels

- Displace usage of oil and propane for home and commercial heating

274R

Liberty Utilities

Natural Gas vs Other Fuels



275R

Source: U.S. Energy Information Administration
http://www.eia.gov/environment/emissions/co2_vol_mass.cfm

Liberty Utilities

Natural Gas vs Other Fuels

- Safe
- Reliable
- Low cost
- Convenient

Current Heating Fuel Values - Updated September 9, 2015			
Fuel Type	**Price/Unit**	**Heat Content Per Unit (BTU)**	**Price Per Million BTU**
Fuel Oil (#2)	$2.23/Gallon	138,690	$16.05
Propane	$2.54/Gallon	91,333	$27.79
Kerosene	$3.07/Gallon	135,000	$22.75
Natural Gas 1st Tier (<20 Therms)	$0.78/Therm	100,000	$7.84
Natural Gas 2nd Tier (>20 Therms)	$0.72/Therm	100,000	$7.24
Wood (Bulk Delivered Pellets)	$251.38/Ton	16,500,000	$15.24
Wood (Cord)	$325/Cord	20,000,000	$16.25
Electricity	$0.14/kwh	3,412	$41.55

- Liquefied Natural Gas - $15.09
- Compressed Natural Gas - $12.25

276R

Source: N.H. Office of Energy and Planning
http://www.nh.gov/oep/energy/energy-nh/fuel-prices/index.htm

Liberty Utilities

Site Selection

277R

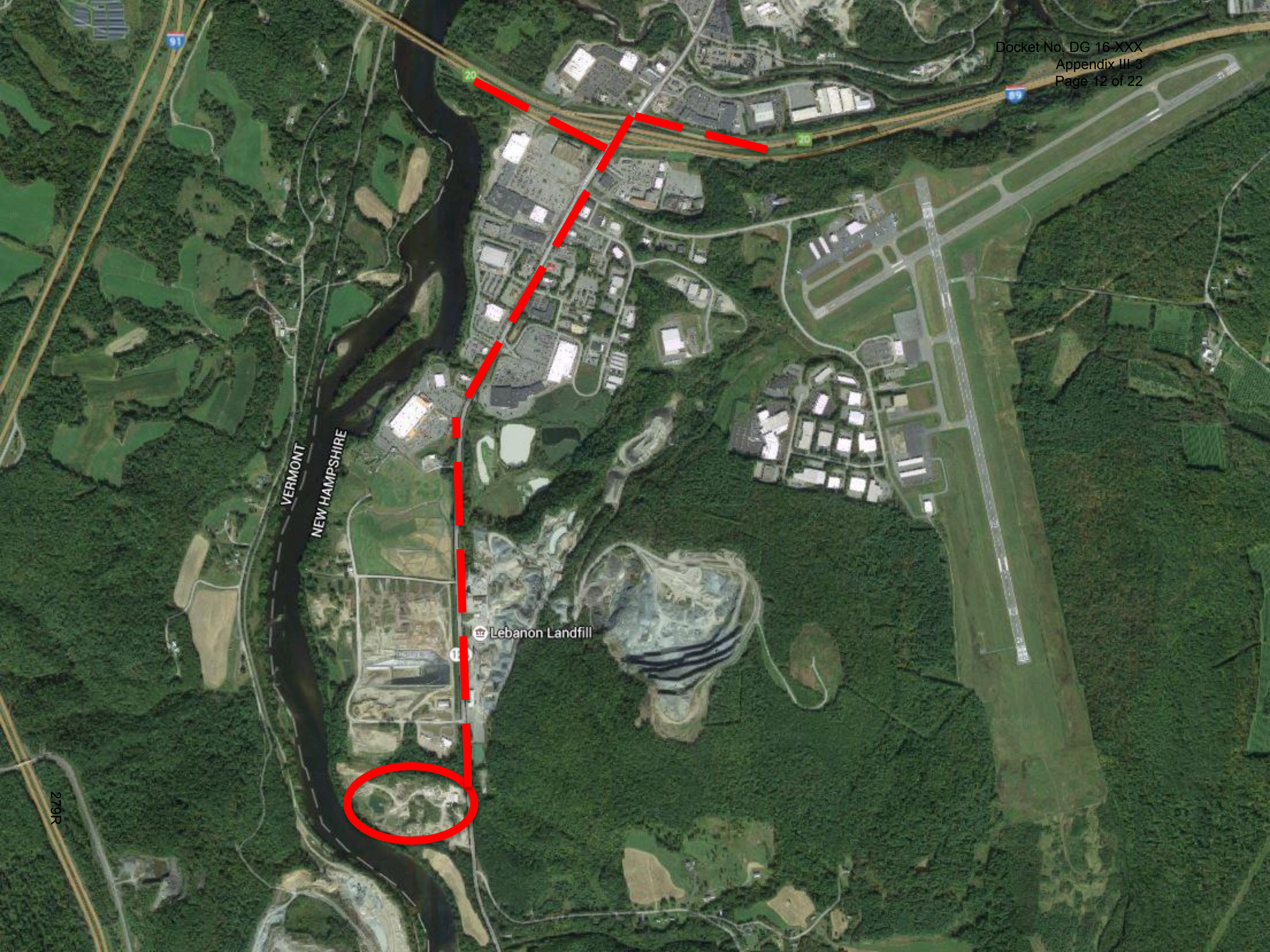
Liberty Utilities

Site Selection

- Located at 384 & 386 Plainfield Road in West Lebanon, adjacent to the Lebanon Landfill
- Potential to utilize renewable landfill gas
- Zoned Industrial Heavy. There are no residential homes in close proximity
- Accessible from Exit 20 off Interstate 89 without traveling through any residential neighborhoods
- Route is already being utilized by heavy trucking to access the landfill, Pike Industries, Carroll Concrete and big box retailers

278R

Liberty Utilities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NEW HAMPSHIRE
Lebanon Landfill
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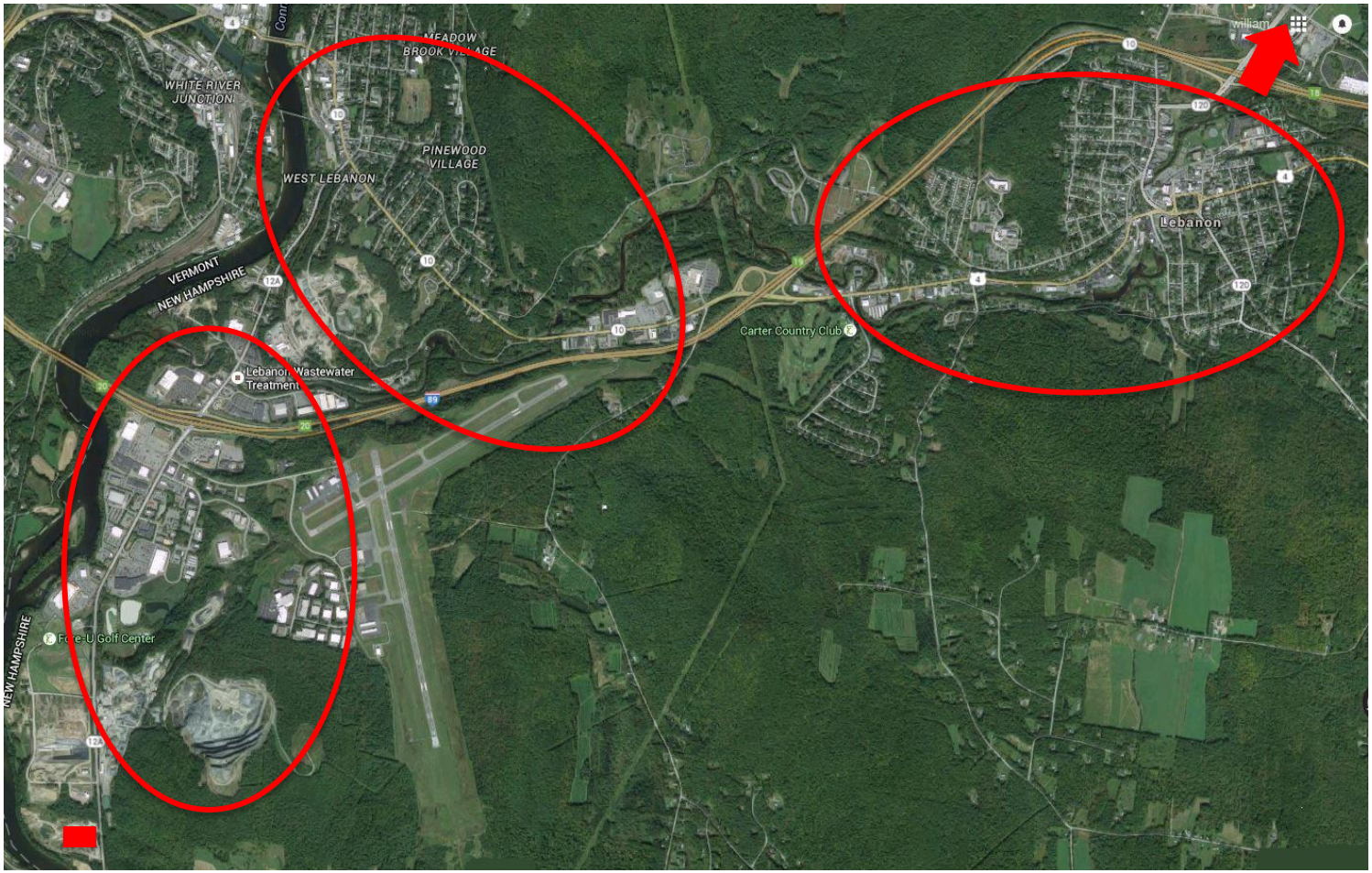
279R

Build Out



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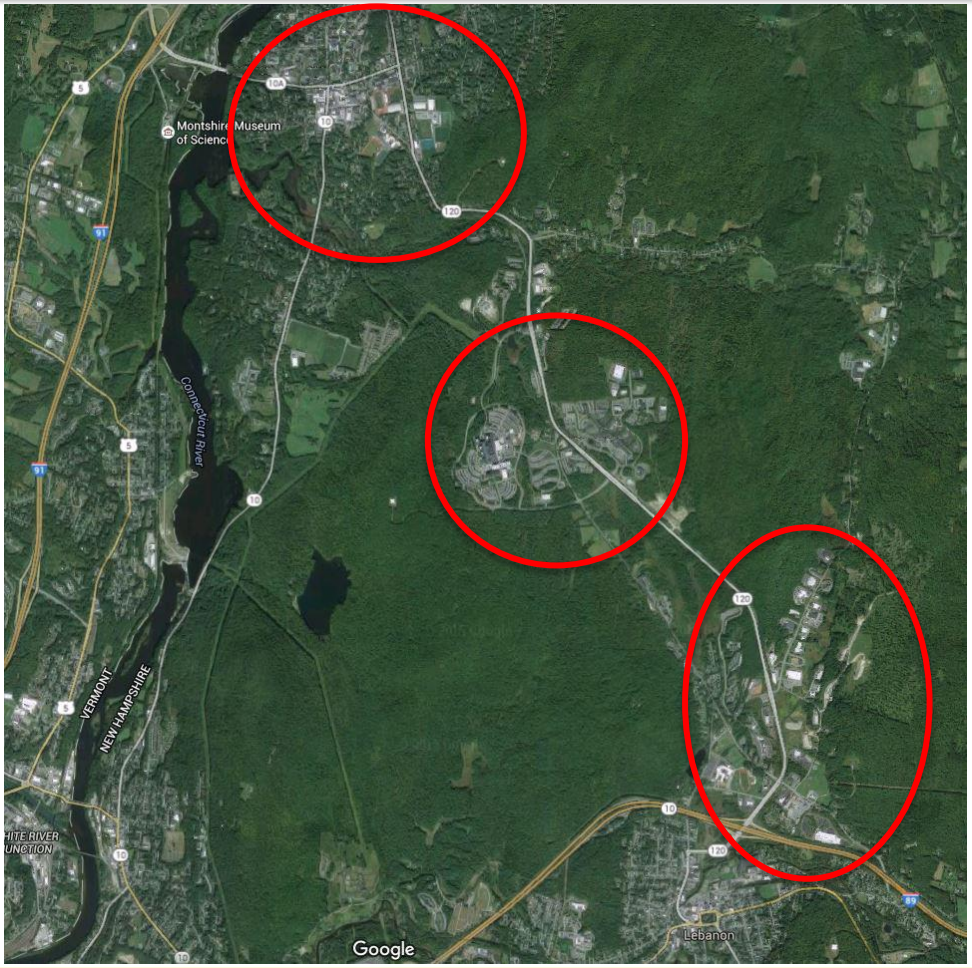
Build Out



281R

Liberty Utilities

Benefits

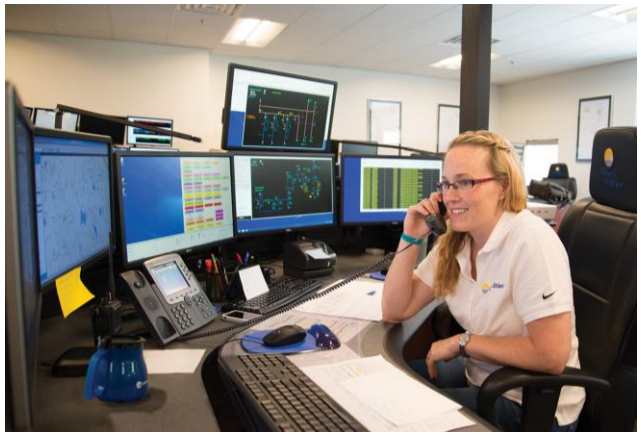
- Unique opportunity to use renewable natural gas from the Lebanon Landfill
- Potential source of revenue for the community
- Serving the whole region
- Site zone Industrial Heavy
- Easy access from highway with limited traffic disruption
- Potential for LNG or CNG vehicle refueling facility

282R

Liberty Utilities

Safety

- Compliance with Federal & State Requirements
  - Liberty Utilities Operation and Maintenance Specifications
- Qualifications
  - Contractors & Liberty Employees
- Traffic Control & Public Safety
- Emergency Response
  - Monitoring and response 24/7



- 2012 AGA Safety Achievement Award
  - Lowest reportable motor vehicle accidents

283R

Liberty Utilities

Engineering & Operations

- Engineering Objectives
  - Building good relationships with state & local municipalities
  - Gas Operations support
- Construction Practices
  - Gas line installation requirements
  - Permitting / restoration
- Operating Specifications
  - Line pressure
  - Pipe size & material

284R

Liberty Utilities

Liberty Sales Team

- Located in Manchester
- Dedicated staff of 10 representative ready to speak with you about the benefits of converting your home or business to natural gas

285R

Liberty Utilities

New Customer Outreach

- To date we have reached out to all of the residents of Lebanon and Hanover
- Our commercial team has performed over 100 field visits, meeting with local business owners
- We have developed a customized brochure to answer common asked questions
- We will continue our outreach. One-on-one meetings, luncheons and mailings.

286R

Liberty Utilities

We Make the Process Easy

- Energy efficiency rebates will be available
  - Incentives for installing qualified energy savings products
  - Turnkey solutions to identify savings opportunities
  - Education and workforce training
  - NHSAVES.COM to review current programs available for both electric and gas customers
- Financing programs will be available for new gas customers
- Contractor Referral Program

287R

Liberty Utilities

Next Steps

- Continued Outreach
  - Meetings with potential residential, commercial and industrial customers
  - Presentations to municipal officials, town boards, chambers of commerce
- Regulatory Approval
  - Public Utilities Commission Docket DG 15-289
  - State, Local and Federal Permitting
- Work with Municipal Officials

288R

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Questions

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Liberty Utilities

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