STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

DG 16-852

In the Matter of:
Liberty Utilities (EnergyNorth Natural Gas) Corp., d/b/a Liberty Utilities
Petition for Franchise Authority in Hanover and Lebanon

Direct Testimony

of

Stephen P. Frink
Assistant Director – Gas & Water Division

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New Hampshire Public Utilities Commission

Liberty Utilities (EnergyNorth Natural Gas) Corp., d/b/a Liberty Utilities

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Q. Please state your name, occupation and business address.

A. My name is Stephen P. Frink and I am employed by the New Hampshire Public Utilities Commission (Commission) as Assistant Director of the Gas & Water Division. My business address is 21 S. Fruit Street, Suite 10, Concord, New Hampshire 03301.

Q. Please summarize your educational and professional experience.

A. I joined the Commission in 1990 as a member of the Audit Team and worked as a Utility Analyst and Sr. Utility Analyst before becoming the Assistant Finance Director in 1998. In 2001 Commission operations were restructured and I became the Assistant Director of the Gas & Water Division and have primary responsibility for the administration of the financial aspects of the regulation of the gas utilities and Concord Steam Corporation.

Prior to joining the Commission I worked as a Budget/Financial Analyst for the cities of Austin and Dallas, Texas. I have a Bachelor of Arts and a Master's in Business Administration from the University of New Hampshire.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide Staff's recommendations on whether Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (Liberty or Company) should be granted the franchise to provide natural gas utility service in Hanover and Lebanon, and if so, under what conditions.

Q. Please summarize Staff's findings on these issues.

A. Staff recommends that the Commission grant conditional approval that would prohibit Liberty from commencing construction of the distribution system until it has obtained customer commitments that satisfy 50% of the revenue requirement of a Discounted Cash Flow (DCF) analysis that produces a zero Net Present Value (NPV) over ten years, based on a fully developed business plan using updated revenue and cost projections.

Q. Briefly describe the current filing.

A. On November 28, 2016, Liberty filed a petition with the Commission for approval of a gas franchise in Hanover and Lebanon, New Hampshire. Liberty proposes to operate an "off pipeline" and self-contained natural gas distribution system to serve the franchise area and intends to finance, construct, install, manage, operate and own the facilities and infrastructure. The Company plans to construct a liquid natural gas (LNG) storage and vaporization facility along with a compressed natural gas (CNG) decompression facility in Lebanon to supply the natural gas to the distribution system and will procure both LNG and CNG through a competitive bidding process. The Company plans to install gas mains from the LNG/CNG facilities to prospective customers. Full buildout will occur over a number of years and Phase I anticipates a CNG turn-key operation obtained through a competitive bidding process (Bates p. 98). The estimated capital investment to complete the distribution system for the initial five years is $9.7 million.

Hanover and Lebanon customers will be subject to terms and conditions of Liberty's natural gas tariff, other than cost of gas (COG) rates, which will be separately calculated and a separate provision added to the tariff. The estimated cost of the supply site (land) can be found in the Company's filing on unredacted Bates p. 83 and the estimated cost of the supply facilities was provided in the Company's response to Staff Technical Session Data Request 1-2 and at full build out is 3.5 times the estimated cost of the land. Liberty expects to commence construction of the distribution system in 2018.

Q. How does the current proposal to serve Hanover and Lebanon compare to Liberty's prior proposal in DG 15-289?

A. Liberty's current proposal to serve Hanover and Lebanon is almost identical to Liberty's prior proposal.

Q. What were the issues and outcome in the prior proceeding?

A. At that time there were competing proposals to provide natural gas utility service in Hanover and Lebanon. The primary concern with both proposals was that neither of the petitioners had secured an anchor customer, causing uncertainty as to the financial viability of the proposed projects. In addition, Liberty did not perform a DCF analysis when considering the economic feasibility of its proposal. A hearing on the Liberty proposal was held on March 17, 2016 and the record closed. On September 30, 2016 Liberty filed a motion to reopen the record and on October 10, 2016 the Commission denied Liberty's motion and closed the docket. In its letter denying the motion the Commission recognized that Liberty was still interested in seeking franchise approval but noted that Liberty's business plan remained under development and stated that Liberty should file a new petition and supporting materials once it had a fully developed business plan.

Q. How does the current filing compare to the prior filing?

The current filing includes a business plan titled 'Hanover and Lebanon Expansion Plan' (Clark Testimony Attachment WJC-8, Bates pages 59-102) and a DCF analysis (Appendix II-26 Bates pages 256-261).

Q. Does the current filing address the concerns raised by Staff in the prior filing?

A. Liberty addressed a number of the concerns raised by Staff but not the primary concern, that there is no anchor customer. The risk that actual revenue could fall well short of projected revenue and result in financial harm to existing customers through higher rates or harm to Hanover and Lebanon customers if revenues were insufficient to sustain operations.

The filing does address Staff's concern that granting Liberty the franchise would preclude another entity from providing natural gas utility service. There are currently no other proposals to serve the Hanover and Lebanon and none anticipated.

Liberty addressed Staff's concern about the lack of a DCF analysis in evaluating the financial impact of the proposed expansion, although the inputs used in the analysis are highly speculative.

Liberty did not address Staff's concern about the lack of a comprehensive business plan. The filing does include a business plan that roughly tracks the general format of the business plan that Staff provided in DG 15-289 as an example of a comprehensive business plan, but the Liberty plan lacks sufficient detail to be considered comprehensive. That lack of detail creates uncertainty regarding the Company's cost and revenue projections used in the

DCF analysis and the results of that analysis.

Q. Please provide a brief description of the Liberty business plan.

A. Along with the Executive Summary and Appendices, the plan includes five major sections covering sales and marketing, operations and engineering, fuel procurement, financial analysis and community relations.

The sales and marketing section describes Liberty's marketing resources and plans, including its enhanced capabilities to assess opportunities to expand its gas infrastructure by identifying potential customers that are optimal targets for natural gas conversion. Liberty sales representatives will be using the ICF Incorporated, LLC's Strategic Intelligence Management System (Bates p. 112) to search for businesses and residences with the greatest potential to convert to natural gas based on critical criteria such as existing fuel type. The business plan identifies ten large commercial and industrial (C&I) customers that could potentially serve as anchor loads and Liberty is having ongoing discussions with the three largest, all of which are within 11 miles of the planned production plant. A comparison of current oil, propane, kerosene, electricity and natural gas prices per million BTU is also provided (Bates p. 80).

The operating and engineering section discusses the supply site and production facilities, distribution system construction and operating plans, and includes cost estimates and timing.

The fuel procurement section discusses the Company's plans to use CNG and LNG to serve Hanover and Lebanon, fuel storage requirements, identifies CNG and LNG providers, source locations and indicative pricing.

The financial analysis includes cost estimates for the distribution system throughout a five year buildout to satisfy customer demand and the annual revenues associated with that demand. Liberty intends to execute the Option Agreement to purchase the land for the production facilities and begin the permitting and design process when granted the franchise. In the first year, Phase I of the buildout, Liberty intends to contract with a CNG provider for a turn-key supply operation (vendor to provide the CNG equipment and supply and operate the supply facility). The estimated cost of the distribution system construction over the five years is $9.7 million and the NPV of that investment over ten years is $11.3 million.

Q. Do you believe that the business plan is deficient?

A. Yes, the business plan provides a great deal of information regarding Liberty's marketing plans and capabilities, but the Company has made only limited use of those capabilities. Liberty has the means to analyze customer criteria that indicate a high probability of conversion and to design supply facilities and a distribution system accordingly. A comprehensive business plan would include specific routes and supply requirements determined by a thorough analysis of available information. A comprehensive business plan would provide greater assurance that the cost and revenue projections used in the financial analysis are reasonable and increase the probability of achieving the expected results.

Q. The Company suggests that Hanover and Lebanon customers converting to natural gas could see substantial savings, what is the basis for that conclusion?

A. The business plan compares Liberty's natural gas prices with those of alternative fuels as of

November 8, 2016 (Bates p. 80).[1] Prices per MMBtu (one million BTUs) for natural gas (1st tier), fuel oil (#2) and propane were $11.21, $15.40 and $32.65, respectively. In response to OCA Data Request (DR) 2-1 Liberty calculated annual energy savings for an average residential heating customer converting to natural gas from oil and propane, based on the Liberty rate request in DG 17-048 and oil and propane prices as of May 1, 2017. The calculation shows a 10% savings for oil customers and a 53% for propane customers.

Q. Are those potential savings what customers in Hanover and Lebanon should expect if the Liberty proposal is approved?

A. No. Liberty's COG winter rates include an indirect gas charge of approximately $0.02 per therm for production facilities whereas the production facilities (land and supply facilities) to be included in the Hanover and Lebanon COG rates would be substantially higher and would applicable in both the summer and winter. It is also reasonable to assume that the supply portfolio to serve Hanover and Lebanon comprised of CNG and LNG will cost significantly more than Liberty's current supply portfolio, which uses pipeline natural gas to meet its base load requirements and supplements that with propane and LNG for peaking purposes in order to meet its supply requirements at the lowest possible cost.

Q. Do you believe the potential energy savings are sufficient to incentive customer conversions?

A. For potential customers using propane, yes. The cost of converting from propane to natural gas is relatively low and energy savings can be significant, therefor those customers should be

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1 Prices from the New Hampshire Office of Energy and Planning.

able to recover their conversion cost through energy savings in a relatively short period of time.

For potential customers using oil, potential energy savings are not likely to incent conversion to natural gas. For a residential heating customer the cost of converting from oil to natural gas is relatively high ($7,000 to $12,000) [2] and energy savings, if any, would be modest, therefore those customers would have little or no economic incentive to convert.

Q. Do the potential anchor customers identified in the business plan (Bates p. 80) have an economic incentive to convert?

A. Probably, as those potential customers are currently using either propane, CNG or LNG. For those customers conversion costs should be relatively small so even a modest savings should incent conversion. Although the Liberty savings analysis indicates substantial savings for propane customers converting to natural gas, the propane prices used in the Liberty savings analysis are probably higher than what the potential anchor customers are paying, as large users can typically negotiate a more favorable rate, and the Hanover/Lebanon COG rate is expected to be higher than the Liberty rates use in the analysis. To acquire anchor customers Liberty is considering offering transportation service or special contracts to increase the economic incentive for those customers to convert.

Q. How will acquiring an anchor customer impact the financial viability of the project?

A. It would depend on the terms of service. The revenue estimates used in DCF analysis assumed tariffed rates for all but one customer, signing any of the potential anchor customers

2 DG 13-198, December 4, 2013 hearing transcript p. 23, lines 21-24.

at tariffed rates would help to achieve the expected positive return. However, if a customer is provided service at a discounted rate that load may have a negligible impact on the financial viability of the project. If Liberty requests approval to offer transportation service or service under the terms of a special contract Staff will evaluate the proposal(s) to ensure that the rates exceed the marginal cost to serve and that the projected revenues in the DCF analysis are adjusted accordingly.

Q. Do you have other concerns regarding potential anchor customers?

A. Yes, there are other concerns both general and specific. Some, in not all, of those customers may have multiyear contacts with energy providers and that would prohibit converting to natural gas for some time. One of the largest customers, Keene Laundry, recently came out of bankruptcy and could pose a credit risk. Dartmouth College, the largest energy user, is looking to reduce its usage and may switch to renewable energy sources, which could limit its interest in converting to natural gas and, if it did, may terminate service before Liberty fully recovered the costs incurred to serve the College. The Dartmouth College website indicates an interest in using natural gas in place of #6 fuel oil but whether that is still the case and, if so, how much and for how long is unknown. [3]

Q. Is there sufficient demand to recoup the cost to serve?

A. The potential load is more than enough to generate sufficient revenue to cover project costs but the actual demand will be far less, as determined by the factors discussed above. Without

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3 http://energy.dartmouth.edu/?page_id=235 2017 - The Future of Energy at Dartmouth - For the future, Dartmouth is considering plans to convert the plant to natural gas, a fuel that produces 30% fewer emissions than #6 oil. Meanwhile, our innovative Energy Initiatives will continue to drive down energy demand as we meet and exceed our carbon reduction goals.

a comprehensive business plan that would indicate a high probability of growth based on critical factors, the projected revenue from the Hanover and Lebanon customers are highly speculative and actual revenue could fall short of the cost to serve those customers.

Q. **What would be the consequences if the Hanover and Lebanon revenues are less than the cost to serve?**

A. Liberty's existing customers may wind up subsidizing the Hanover/Lebanon operations and/or the Commission could find that the certain of the certain of the assets are not used and useful and deny recover of the costs associated with those assets when Liberty seeks recovery.

Q. **What are the financial risks if the Commission were to approve the Liberty petition at this time?**

A. Capital and operating costs are largely dependent on serving a specific load, without a reasonable assurance targeted customers will take service the supply facilities and distribution system may be over or under built which could impact rates, for both the Hanover/Lenanon and existing customers. To some extent customers are protected through the rate process, as cost recovery will be addressed in a future proceeding and Liberty will carry the burden of proof in its rate filing that the investments were prudent and used and useful. Even with that protection, existing ratepayers could be harmed if Liberty were denied recovery of a substantial portion of its investment from utility customers and resulted in a higher cost of capital.

Q. **Does the Liberty proposal address the financial risk?**

A. Yes, to a limited degree. Per its tariff Liberty cannot commence construction until it has customer commitments for 25% of the project costs.

Q. Does the 25% commitment level adequately address the financial risk?

A. Not in this instance where the revenue and cost projections are highly speculative and the communities and businesses in the proposed franchise area have offered little support. Typically major expansions are triggered by a large customer seeking natural gas service and willing to commit to taking service in advance of a franchise filing.

Q. Is it possible for Liberty to acquire customer commitments before being granted the franchise?

A. It is possible but highly unlikely in this instance. Normally there is a good deal of price certainty when a customer commits to taking natural gas service as there are existing rates based on known costs and overall demand that far exceeds any single customer. In this instance there is a great deal of price uncertainty, as the cost of the supply facilities and land is to be recovered from the customers in the proposed franchise area and supply will be limited to trucked CNG and/or LNG. Even if the cost variables were more certain there would still be a great deal of price uncertainty as the billing determinates (therm sales) are also very speculative.

Q. How will granting the franchise improve Liberty's prospects of acquiring customer commitments?

A. Liberty would have the legal authority to provide utility service and be more willing to expend the resources needed to develop a comprehensive business plan, provide rate estimates and implement an aggressive marketing plan, which should make it easier to attain customer commitments.

Q. What is Staff recommendation regarding Liberty's petition?

A. The Commission should grant conditional approval, granting the franchise but requiring Liberty to acquire customer commitments that meet or exceed fifty percent of the required margins necessary to achieve a ten year payback before commencing construction. Liberty should be required to file an updated business plan and DCF analysis demonstrating that it has obtained the required customer commitments.

Liberty should also be required to file an update business plan and DCF analysis demonstrating that it has acquired customer commitments for 50% of required margins before commencing Phase 2 of the buildup, as Phase 2 entails a very significant increase in project costs as LNG facilities are added and the full cost of land on which the supply facilities are to be located will be included in the Hanover/Lebanon COG rate.

Q. Does obtaining customer commitments for 50% of the required margins prior to commencing construction adequately address the financial risk?

A. Yes, that level of commitment would demonstrate that the cost and revenue projections in the updated business plan are reasonable and that the project is economically feasible.

Q. Does Liberty have the managerial and engineering expertise to safely operate the proposed system?

A. Yes. Liberty has demonstrated its managerial and engineering expertise in safely and reliably operating and maintaining LNG facilities and a natural gas distribution system. While Liberty has not operated a CNG facility it is in the process of converting its Keene operations to CNG and will be filing the required operating manuals with the Commission's Safety Division for review.

Q. Does that conclude your testimony?

A. Yes.