BEFORE THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

In the matter of:	**)**
Liberty Utilities (Energy North Natural Gas) Corp.	**)**
DG 14-380	**)**
Approval of Firm Transportation Agreement	**)**

Brief of the Office of the Consumer Advocate

Dated: **August 7, 2015**

Table of Contents

I. Introduction

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (EnergyNorth or Company) is a public utility pursuant to RSA 362:2, that provides natural gas service to approximately 86,000 customers in southern and central New Hampshire and in Berlin. Order No. 25,767 (March 6, 2015) at 1. On December 31, 2014, EnergyNorth filed a Petition for Approval of a Firm Transportation Agreement (Precedent Agreement or PA) with Tennessee Gas Pipeline Company, LLC (TGP), and supporting testimony. EnergyNorth seeks pre-approval of a twenty-year Precedent Agreement with TGP on the proposed Northeast Energy Direct ~~Delivery~~ (NED) pipeline project. *Id*.

The New Hampshire Public Utilities Commission (PUC or Commission) must determine whether the terms of the PA are prudent, just and reasonable, from the perspective of an arbiter of the Company's shareholders' and customers' interests. RSA 374:1 and 374:2 (public utilities to provide reasonably safe and adequate service at "just and reasonable" rates); RSA 378:7 and RSA 378:28 (rates collected by a public utility for services rendered or to be rendered must be just and reasonable); and RSA 363:17-a (Commission shall be the arbiter between the interests of the customer and the interests of the regulated utilities). *Id*. at 2.

In reviewing utility petitions, the Commission identifies consumer and utility investor interests with an ultimate goal of striking a fair balance or accommodation between them, to be reflected in the charges to customers that may be described as just and reasonable both to the customer and to the utility. *Appeal of Public Service Company of NH*, 130 NH 748, 750 (1988); *see also Federal Power Commission v. Hope Natural Gas*, 320 US 591, 603 (1944). In striking this balance, the PUC exercises its discretion and judgment. *Appeal of Conservation Law Foundation*, 127 NH 606, 634-36, 638 (1986) (citations omitted) (Court recognizes the role of the Commission's discretion and judgment in setting variables used in the revenue requirement calculation); *see also Public Service Company of NH*, 90 NH PUC 542, 559 (2005), rehearing denied, *Public Service Company of NH*, 91 NH PUC 49 (2006) (citations omitted).

The burden of proof regarding the reasonableness of the proposed PA is on EnergyNorth. RSA 378:8.

II. The partial settlement agreement is not in the public interest, as it fails to protect residential ratepayers from the unreasonably high financial risk of excess capacity, thereby failing to balance the interests of the Company and its investors with those of consumers.

The Commission should reject the partial settlement agreement as it does not represent the public interest. Even with the proposed contract modifications, the partial settlement agreement approving either 115,000 Dth or 100,000 Dth of new pipeline capacity (Hearing Transcript of July 21, 2015, Day 1 at 54) remains significantly higher than a reasonable amount of capacity needed for EnergyNorth's service territory. Trend analysis of the net-cost of varying NED capacity levels (while increasing the Dracut Concord lateral capacity commensurately to reach 115,000 Dth per day) shows that costs go down when NED capacity contract levels are reduced. Exh. 15 at 10 (Figure 1) & 13. When analysis is confined strictly to cost, an optimal NED capacity amount is very likely less than 65,000 Dth per day in conjunction with the continuation of the existing Concord lateral contracts. *Id.* at 11. The financial risk of an unreasonable amount of excess capacity over the 20 year contract falls on the consumers. Energy North's proposal to replace 50,000 Dth of current capacity at Dracut and contract for 115,000 Dth/day of NED (including 65,000Dth/day of incremental firm transportation from Wright) is not reasonable because it would add significantly more firm gas supply resources than are needed and therefore inadequately balances consumers interests with those of the utility. Exh. 17 at 4.

The Maine Commission reviewed a similar factual pattern in *Northern Utilities Inc. Proposed Precedent Agreement (PA) with Portland Natural Gas Transmission System (PNGTS) for Transportation Service*, State of Maine Public Utilities Commission, Docket No 95-481 (August 9, 1996). (It is attached for your convenience as Attachment 1). In Northern's case the PA proposed delivery quantities for 365 day base load service; it had a contract term of 20 years, and included a Most Favored Nation (MFN) clause should PNGTS give a better rate to any other entity. *Id.* at 10. Additionally, the Maine PNGTS PA included the option to de-contract excess capacity under certain conditions and included a predetermination that unsold capacity in off-peak months will be allocated at no additional demand charge. *Id.* at 10-11.

The Maine Commission undertook the balancing of investor and ratepayer risk and found that the PNGTS PA contained excess pipeline capacity and was not in the public interest. *Id*. at 3.

The Maine PUC rejected Northern's proposed PA for the following reasons:

> Northern's own optimization runs demonstrate that Northern's commitment to PNGTS represents significant excess over the optimal supply portfolio…The evidence regarding the possibility of resale, and Northern's own reluctance to accept any of the risk of such resale, indicate that Northern's assurances that it will be able to de-contract or resell this capacity at fully embedded costs may be overly optimistic…we believe there is no reasonable option other than to reject the Precedent Agreement as adverse to the public interest and require Northern either to renegotiate its commitment to the PNGTS project to more closely reflect its optimal supply needs or to seek some alternate supply.

Id. at 54.

The Maine PUC understood that there was a risk that rejecting the PA could cause the PNGTS project to fail. The Maine Commission held:

> Yet even if our failure to approve the Agreement resulted in the failure of the PNGTS project as currently planned, we do not believe that this fact alone would justify allowing Northern to enter into an agreement for such substantial excess capacity at this time…We believe it is too early in the process to despair of the possibility that the competitive market can provide additional pipeline resources that will more nearly match Northern's needs at reasonable cost…the Commission must demonstrate some confidence in the ability of the market to select the best option without the need for ratepayer commitment to substantial over-capacity in order to jump start a particular pipeline project.

Id at 55.

The similarities to the current PA before this commission are striking. Like Northern, the amount of proposed capacity in the Company's PA far exceeds what the Company's most recent Integrated Resource Plan (IRP) supports. *Id*. at 21-24. Like Northern, EnergyNorth makes overly optimistic projections that it can mitigate oversupply through resale. *Id.* at 34. Like Northern, EnergyNorth has alternative market options which do not require a substantial 20 year ratepayer commitment to a specific pipeline and yet are not chosen by the company to provide for supply. *Id*. at 55. This commission should undertake the same balancing test, and find that the Company's proposed PA is not in the public interest as it does not protect residential ratepayers from the unreasonably high financial risk of excess pipeline capacity.

Here, Commission Staff and the Company argue that the partial settlement agreement's inclusion of growth incentives provides an adequate balancing of customer interests. Exh. 14 at 6. The partial settlement agreement proposes at most a $300,000 "growth incentive" if the Company fails to meet its projections. Exh. 14 at 5. However, given the relative financial investment related to the pipeline and the expected revenues the parent company Algonquin would receive if the entire project is ultimately approved, a fine of three hundred thousand dollars will not provide any meaningful incentive to the Company. Nor will it provide meaningful financial reimbursement to ratepayers should the Company's projections fail to materialize. Algonquin is a $4.5 billion company with diversified assets all over North America. Hearing Transcript of July 22, 2015, Day 2 at 10. Loss of $300,000 will have no noticeable impact on shareholder revenues. Therefore this settlement provision does not adequately balance utility and consumer interests.

It is not sufficient for the Company to demonstrate that the New England region as a whole is in need of additional gas pipeline capacity. The question before the Commission today is whether the Company has shown that Energy North's New Hampshire customers must bear the financial burden of 115,000 Dth of pipeline capacity supply over 20 years to meet anticipated New Hampshire customer demand. New Hampshire customers are not lawfully obligated to subsidize a regional capacity resource whose benefits will flow disproportionately to other consumers. From the New Hampshire residential ratepayer perspective, these other consumers are future consumers, consumers in other states, commercial and industrial consumers and electric consumers seeking gas supplies for generators. While the needs of all these consumers are legitimate, the Commission must allocate the financial burdens proportionately. This partial settlement agreement fails to do so, allocating a substantial and undue financial risk on today's New Hampshire Energy North gas consumers for the benefit of the Company and the interests of other consumers. Under the proposed partial settlement agreement, ratepayers in current years will pay substantially more than ratepayers who are actually driving the needs of the future. Exh. 15 at 13. For residential ratepayers, the cost disparities are even greater. Growth in the commercial and industrial transportation is driving the Company's overall demand forecast, (Exh. 12 at 30), resulting in undue cross subsidization of industrial consumers by residential ratepayers.

Particularly, where KinderMorgan has announced in July 2015 that it will go ahead with the pipeline without additional confirmed subscribers (Hearing Transcript of July 21, 2015, Day 1 at 60) the cost difference to KinderMorgan of 25,000 Dth to 40,000 Dth per day of additional capacity is insignificant and unlikely to derail the project. However to the customers of Energy

North, the cost difference of reducing the NED capacity commitment by 25,000 Dth to 40,000 Dth per day is significant and should be removed.

III. The Company fails to meet its burden of proof regarding the amount of capacity requested in the Precedent Agreement as it failed to reasonably model alternative scenarios to find the least cost means of providing supply.

Several experts provided testimony concerning the Company's methodology in analyzing its capacity supply needs: Dr. Pradip Chattopadhyay (OCA expert) Melissa Whitten (Staff Expert), John Rosenkranz (Pipe Line Awareness Network (PLAN) expert) and Francisco Dafonte (Company expert). Dr. Chattopadhyay describes the failures of the Company's analytical support of its PA as follows:

> …[T]he Company's analysis is not thorough enough to conclude that 115,000 Dth per day contract with NED kkis reasonably cost-effective…the Company compares the NED project with two other projects, i.e. C2C and the Atlantic Bridge pipeline proposals. For each comparison the Company assumes a contract amount of 115,000 Dth per day…[T]he Company's discussion about non-cost factors such as reliability, flexibility and viability is limited to a comparison of the three projects assuming a capacity level of 115,000 Dth per day. Such an analysis is insufficient to come to a conclusion that the specific contract with NED is reasonably cost-effective.

Exh. 15 at 06.

The Company fails to consider lesser amounts of pipeline capacity for the NED project. It also fails to consider other possible levels of capacity in other projects. "The crucial threshold question, as to what is the optimal capacity amount from NED, requires a comparison of contracts with different levels of capacity for NED." *Id*. at 07. It is an obvious conclusion that if the Company only considers 115,000 Dth of capacity in its comparisons, no other amount will be found reasonable. Because the Company did not analyze NED capacity levels less than 115,000 Dth per day, it has failed to meet its burden in showing what is a prudent and reasonable level of NED capacity.

Staff witness Whitten made a similar finding about the inadequacy of the Company's analysis, stating "The Filing is notably lacking in an adequately-developed cost-benefit analysis of the PA to support its claim that the PA is the "best cost" or least-cost option for ratepayers." Exh. 13 at 11. During the adjudicative hearing, Ms. Whitten softened her criticism of the Company finding in support of the partial settlement agreement. She relied in substantial part on the rebuttal testimony of Mr. Dafonte. Exh. 9. While this testimony provides price details of the Company's analysis that were left out of the original petition, the rebuttal testimony does not include any new analysis of least cost options. The Company's filing still relies on an assumption that 115,000 Dth is the optimal amount of capacity for Energy North's service territory. Exh. 9 at 29. While the partial settlement agreement allows for a modest reduction to 100,000 Dth of capacity under certain circumstances, this limited relief to New Hampshire consumers does not provide adequate financial protection for a highly speculative investment.

After its initial filing, the Company also provided data on the need for an additional Supply Path for the PA to be achievable. At hearing Ms. Whitten responded to questions about the Company's obligations.

> Q. Do you agree that, if the Company is successful in negotiating a Supply Path Precedent Agreement with TGP, that it will only serve to benefit the customers of Liberty Utilities?
>
> A. (Whitten) I agree that that's what's going to give them the ability to do so. They have to actually go out and put supply behind that, to make sure that that is the least-cost path for supply in their portfolio.

Hearing Transcript of July 21, 2015, Day 1 at 96.

The cost of this Supply Path infrastructure necessary to implement the PA is not provided by the Company. The Company will make an additional filing in the future. In the meantime, they are asking the Commission to blindly approve a substantial investment of ratepayer money without knowledge of the ultimate financial burden of both projects to customers. In such a situation, the

Commission should either hold its decision until all the Supply Path data is available, or take a prudent approach to investing ratepayer money in more modest capacity levels in the PA.

IV. Company growth projections are unreasonably high as the Company used the highest possible projections for each discrete element of customer growth, creating bias in favor of highest possible demand.

Throughout the Company's filing, Energy North makes assumptions regarding variables related to customer demand. Specifically, the Company gives a number to projected demand for iNATGAS sales, capacity-exempt returning customers, and new franchise territories. Exh. 3 at 10-12; Exh. 11 at 11. For each variable the Company projects the greatest possible growth imaginable. The Company is hugely optimistic:

> Q: Do you consider the growth targets, whether it's the Dekatherm Target or the Customer Target in the Settlement Agreement to be achievable by the Company?
> A. (Clark) They are achievable. They are -- they will be the biggest numbers that we've ever done, but they are achievable. As I mentioned, last year was our best year, at 1,200 customers.

Hearing Transcript of July 21, 2015, Day 1 at 76.

In terms of customer growth Mr. Clark states, "It would be on the order of a 65 percent increase over what our best year was." *Id* at 76. For the Dekatherm target it was "approximately 15 to 20 percent increase over our best year." *Id.* This is unsustainable irrational exuberance.

For iNATGAS sales the Company uses the facility design capability of 8,800 Dth per day. This is the highest possible capacity for a customer that has yet to enter into service and for which Energy North has no advance information on the level of customer subscription. Exh. 3 at 10. To rely so heavily on the projected need of a single customer for purchasing long term firm pipeline capacity is imprudent.

For capacity exempt returning customers, the Company uses the highest peak of data for returning customers experienced after the historic gas price spikes of the last two recent winters - 3,363 Dth a day. Exh.9 at 61. This number triples the Company's previous estimate of 1,000 Dth only months before. The Company's projection of needed capacity assumes that all customers experience their maximum daily requirement at the same time (a synchronous peak). This presumes that each customers load is primarily temperature driven. Exh. 1 at 11. This may not be the case for all commercial and industrial customers, some of whom may have a process requirement that results in a nonsyncronous peak. The Company admits that such predictions are unreliable, stating, "It is very difficult to project with any certainty what the returning Capacity-Exempt load will be over the forecast period, given the many factors influencing a customer's decision to return including market prices, weather and the nature of their contracts with competitive suppliers." Exh. 3 at 10-11. Because the Company's forecast appears to be exaggerated, the Commission should question the Company's projection~~s.~~

For new franchise territories the Company originally made projections for no residential area growth. *Id.* at 12-13. Staff prefiled direct testimony stated, "The Company's latest IRP forecast, which we [Staff witness] reviewed, showed that residential growth was expected to be flat, to perhaps even negative." Exh 12 at 9~~.~~

~~In testimony~~ T~~t~~he Company later added the following data about the potential for new franchise service territories, stating: "[t]here's a couple different saturation rates that we're assuming. And, depending on which rate is used, the load for those towns is between 850,000 and 1.2 million Dekatherms annually." Hearing Transcript of July 21, 2015, Day 1 at 77.

The Company does not include specific estimates regarding the cost of new infrastructure to serve new territory and provides no specific customer commitments in any new territories. At the same time the Company is adding capacity to meet new projected load, the Company disclaims responsibility for its projections. The Company states:

A. (Clark) There are a few [towns] that are more likely than the others, however,

> determining that will be the ultimate route selection of the NED. If that varies by one mile, one way or the other, it could greatly determine the town and what part of town it serves. There seems to be small pockets in each one of those towns that would make sense. But, if the route were to switch a mile or more closer or further, it could be more economic or more uneconomic to serve them.

Id. at 5-6.

To rely on this very uncertain forecast for growth with no cost projections presented for needed infrastructure to serve additional customers for purchasing long term firm pipeline capacity is imprudent.

In contrast, the Company does have specific cost numbers to show the negative costs of an alternative supply. Mr. Dafonte states:

> As shown in Table 8, there is a calculation there that determines a breakeven price. That calculation for the total cost of Dracut purchases did not include the Tennessee demand charges that the Company currently pays for its capacity from Dracut up the Concord Lateral. So, adding those demand charges in there would increase the total Dracut purchases and result in a higher production area breakeven price.

Hearing Transcript of July 21, 2015, Day 1 at 47.

The Company found ”… that revised expansion cost is more than double what the initial estimate was.” *Id.* at 63. If cost projections for an alternative can change so significantly between one filing and another in a few months, what is the likelihood that the Company’s own projections are subject to error over its 20 year horizon?

The Company admits that delays and cost overruns are included in the PA at customer risk. *Id.* at 195. In addition, the Company’s original growth projections include an estimate for 7000 Dth of new customer growth. *Id* at 129. The Company does not deduct this amount from its newer Dekatherm projections, overinflating its estimates further. The Company presents data on the highest possible need and downplays alternatives that are just as likely. This does not represent prudent least cost analysis of future capacity requirements.

The Company also overstates the problems with its Dracut supply. Exh. 17 at 8-9. While a reduction in supply from Dracut is occurring, other market opportunities are expected to become available as the competitive market responds. Hearing Transcript of August 6, 2015 at 81-82~~——~~. It is not true that this is the last and only opportunity for the Company to meet all of its capacity requirements for 20 years. Pipeline expansion projects, pipeline compression and other supply resources will all be part of the supply mix for the next 20 years. Exh. 17 at 10, 19-20.

The Company argues that its need to meet the system maximum design day capacity drives its aggressive growth projections. The Company fails to take into consideration that all growth events occurring at the highest amount simultaneously is unlikely. While new growth is desirable, overbuilding capacity at ratepayer expense over 20 years is not. As demonstrated in DG 15-155 Valley Green Natural Gas, LLC, Petition for Franchise Approval (5/15/2015), competition for natural gas customers is here. Customers have options. Overbuilding stifles competition.

V. The Commission should reject the proposed Precedent Agreement for 115,000 Dth, with the 100,000 Dth option as the Company's own Integrated Resource Plan (IRP) projected a need for about one half the amount of new capacity now requested in the Precedent Agreement.

In November 2013, the Company filed its IRP. DG 13-313, EnergyNorth Natural Gas Inc. d/b/a Liberty Utilities Integrated Resource Plan. The Company undertook a rigorous Resource Mix Optimization analysis to determine what mix of resources – new and existing - were needed to cost effectively provide for its supply over a 5 year planning horizon. *Id*. at 46-47. In the IRP the Company tested a low, base and high case of demand. *Id* .at 37. The Company used a Resource Mix Optimization SENDOUT run to arrive at its projected need for new capacity on the TGP-NEX pipeline (predecessor to the NED project). *Id* at 48-49. Assuming the availability of a new pipeline, the SENDOUT run predicted a need for 90,000 Dth of capacity. *Id.* This included removing 33,000 Dth of existing propane storage capacity. Hearing Transcript of July 21, 2015, Day 1 at 129.

The pipeline storage retirement is not included in the current PA petition. *Id.* Therefore the Company's IRP projection for additional capacity need can be stated as 57,000 Dth. *Id*. To account for recent new growth (which was not included in the IRP projection) a reasonable amount of additional capacity can be added. Specifically, the difference between the Design Day IRP projections and the Revised Total Updated Design Day is about 16,000 Dth/day. Hearing Transcript of July 21, 2015, Day 1 at 138. Therefore, even with an updated allowance of 16,000 Dth for new growth, the Company's realistic projection of need is 57,000 Dth plus 16,000 Dth or about 75,000 Dth per day.

By December 2014, when the Company filed its petition for the Northeast Direct pipeline PA, the Company's estimated need for new pipeline capacity had changed to 115,000 Dth per day. Exh. 3 at 1. This massive increase in projected need for new capacity over so short a time between the IRP and the PA filings is highly questionable. It is not founded upon a rigorous Resource Mix Optimization analysis. It overstates the need for capacity for the purpose of supporting a 115,000 Dth PA, instead of having the Resource Mix Optimization process determine the reasonable amount of new capacity needed.

To be sure, it is difficult to directly compare the Company's IRP methodology to that being used for the NED PA. Despite statements that the two are related, (Exh. 9 at 23), much of the methodology applied to the IRP was not used by the Company to support its PA petition. The Company does away with the low, base and high case comparisons of the IRP. The Company also collapses the distinction between a planning horizon for new capacity and a contract term.

Exh. 15 at 19-20. With this PA the Company is preparing to meet design day capacity in year 20 (Exh. 3 at 9) at the end of the PA when it should be contracting for a design day determined by the Resource Mix Optimization process. Dr. Chattopadhyay's examination of the Company's analysis of the PA contract as well as the most recent IRP filing indicates that the Company should be contracting for a design day requirement for a year that is significantly before 20 years into the future. In choosing the contract term as its planning horizon, the Company gives too much weight to future reliability at the expense of high financial risk to ratepayers of excess capacity.

Planning for a design day requirement for the 20th year further inflates the Company's projection of future need. Exh. 17 at 19. A 10 year planning horizon is a prudent approach to forecasting. *Id*. The Massachusetts members of Energy North's LDC consortium – Boston Gas, Berkshire Gas and Bay State Gas all use a 5 to 10 year planning horizon. *Id* at 20; Hearing Transcript of August 6, 2015 at _93.__.

The Company also changed its sources of data from what was used in the IRP to the data used to support the PA. Exh. 12 at 31-38. For the Company's IRP it used historical econometric data. "By using historical economic, demographic and energy price data… as the independent variables, the Company estimated statistically valid econometric equations for each class." Hearing Transcript of July 21, 2015, Day 1 at 120. For the PA, the years beyond the initial five-year forecast "do not make use of econometric models, meaning the forecast does not include consideration of long-term changes in customer count or use per customer…" Exh. 12 at 17-18. The difference between the IRP forecast and the PA design day forecast is "due not to increased economic activity across the Company's service territory but rather to simple projections for reverse migration of existing C&I capacity-exempt customer demand and estimated sales for a new customer iNATGAS…" *Id.* at 25.

In Rebuttal testimony the Company continued to add estimates for potential new customers from Keene, Concord Steam and new franchise territories, all of which are speculative. Exh. 9; Exh. 11. The Company is going far beyond the requirement to prudently prepare for future growth. It is making largely unsupportable projections for need 24 years into the future to support a 115,000 Dth contract. This does not represent a robust economically efficient process for determining the least cost means of satisfying customer need for future capacity. If this were purely a competitive enterprise, a company would be free to speculate on future growth at its own financial risk. However, where ratepayers are on the hook for the entire financial investment, moderation, prudency and conservative financial risk is required.

VI. Conclusion

For the reasons set forth above, the OCA respectfully requests that the Commission reject the partial settlement agreement, and direct the Company to undertake a thorough analysis of capacity needs or adopt the terms of the Company's IRP, adjusted for reasonable growth.