

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Portland Natural Gas Transmission System

Docket No. RP08-_____

**Prepared Direct Testimony
of
John J. Reed**

1 **Q.1 Please state your name and business address.**

2 A.1 My name is John J. Reed. My business address is 293 Boston Post Road West, Suite 500,
3 Marlborough, Massachusetts 01752.

4 **Q.2 By whom and in what capacity are you employed?**

5 A.2 I am Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc.
6 ("Concentric"). Concentric is a management consulting firm specializing in financial and
7 economic services to the energy industry.

8 **Q.3 Please describe your professional background and experience.**

9 A.3 I have thirty years of experience in the North American energy industry. Prior to my
10 current position with Concentric, I have served in executive positions with various
11 consulting firms and as Chief Economist with Southern California Gas Company. I have
12 provided expert testimony on financial and economic matters on more than 150
13 occasions, including numerous proceedings regarding natural gas local distribution
14 company ("LDC") and pipeline cost allocation and toll design matters, before the Federal
15 Energy Regulatory Commission ("FERC"), various Canadian regulatory agencies
16 including the National Energy Board ("NEB" or "Board"), state utility regulatory
17 agencies, various state and federal courts, and before arbitration panels in the United

States and Canada. A copy of my résumé and listing of the testimony I have sponsored previously is included as Attachment A.

Q.4 On whose behalf are you sponsoring testimony in this proceeding?

A.4 I am sponsoring testimony on behalf of Portland Natural Gas Transmission System (“PNGTS”).

Q.5 What is the purpose of your testimony?

A.5 I have been asked by PNGTS to provide an assessment of the market for natural gas transportation service on PNGTS. Specifically, I will provide an analysis of the demand for natural gas in the markets that PNGTS serves (New England), and the competing infrastructure available, or soon to be available, to serve that demand. I will also address natural gas supplies available to serve the New England market and how changes in historical supply sources are likely to affect the demand for transportation service on PNGTS.

Executive Summary

Q.6 Please summarize your principal conclusions.

A.6 My principal conclusions are:

1. PNGTS, located so far east, is one of the least economic paths available to bring Canadian-sourced gas to the New England market. There are several cheaper alternatives.
2. The value of capacity and therefore the demand for transportation service on PNGTS will likely decline, or disappear, over the next several years. The siting of additional Liquefied Natural Gas (“LNG”) import terminals in Eastern Canada and/or the Northeast and Mid-Atlantic U.S. will likely increase future natural gas delivery

1 capability to New England and add to volumes on Maritimes and Northeast Pipeline
2 (“M&NP”) and other pipelines (but not PNGTS). This will reduce the price at Dracut,
3 Massachusetts (“Dracut”), reducing the basis differential between Pittsburg, New
4 Hampshire (“Pittsburg”) and Dracut, thereby reducing the value of capacity on
5 PNGTS. The addition of new pipeline capacity serving peak day needs in PNGTS’
6 New England market will also reduce constraints that would otherwise have caused
7 price spikes during periods of peak demand, which have historically provided a short-
8 term market for the sale of PNGTS’ capacity.

- 9 3. PNGTS can expect reduced demand for its services due to projected declines in
10 exports to the U.S. of Western Canada Sedimentary Basin (“WCSB”) gas supplies.
11 This is a result of reduced production profiles and more rapid decline rates of newer
12 wells, increased demand for gas supplies from oil sands projects in Alberta, and
13 additional gas-fired generation planned in Ontario. (Ontario is phasing out all coal
14 generation and a large portion of it is expected to be replaced by natural gas.) This
15 will result in higher prices at Pittsburg, further reducing, or eliminating altogether, the
16 capacity value for PNGTS.

17 **Overview of the PNGTS Pipeline**

18 **Q.7 Please describe the PNGTS pipeline.**

19 A.7 PNGTS, a partnership between TransCanada (61.71% owner via its TCPL Portland Inc.
20 subsidiary), and Gaz Metro (a 38.29% owner via its Northern New England Investment
21 subsidiary) is an interstate natural gas pipeline serving New England. The pipeline
22 connects the Trans Quebec and Maritimes Pipeline (“TQM”) at the Canadian border and

1 M&NP in Westbrook, Maine with the Tennessee Gas Pipeline (“Tennessee”) in Dracut,
2 Massachusetts. There are two main components of the PNGTS system:

- 3 1. The northern segment which runs from the Canadian border (TQM connection at
4 Pittsburg, New Hampshire) to Westbrook, Maine, along with appurtenant laterals,
5 all of which PNGTS owns and operates; and
- 6 2. The southern portion of the pipeline running from Westbrook, Maine to Dracut,
7 Massachusetts (known as the “Jointly Owned Facilities”), jointly owned by
8 PNGTS and M&NP (approximately one-third and two-thirds, respectively)
9 including appurtenant laterals.

10 Customers can procure Firm Transportation service (“FT”), Interruptible Transportation
11 service (“IT”), and Capacity Release service (“CR”) from PNGTS.¹ There are no gas
12 storage facilities directly connected at any point to the PNGTS pipeline.

13 **Q.8 What is the make-up of PNGTS’ FT Service Customer Base?**

14 A.8 PNGTS’ customer base consists of a combination of short and long-term FT service
15 customers. These customers are Local Distribution Companies (“LDCs”), gas-fired
16 power plants, industrial end-use customers, and energy marketers. As of November 1,
17 2008 (after several short-term FT contracts expire), contracted FT service on PNGTS will
18 consist of the following:

¹ PNGTS also offers FT-Flex/HRS/PAL Service.

Figure 1

Contract Number	FT Shipper	Summer Contract Quantity (Dth)	Winter Contract Quantity (Dth)
FT-1997-001	Bay State Gas	4,900	4,900
FT-1997-002	Bay State Gas	0	40,600
FT-1997-003	Northern Utilities	1,100	1,100
FT-1997-004	Northern Utilities	0	33,000
FT-1997-005	DTE Energy Trading	30,000	30,000
FT-1997-006	TransCanada Gas Services	15,000	15,000
FT-1997-007	Wausau Papers	4,600	4,600
FT-1998-002	Mead Corporation	5,000	5,000
FT-1999-001	EnergyNorth	1,000	1,000
FT-1999-002	HydroQuébec	15,000	15,000
	TOTAL:	76,600	150,200

Q.9 What factors determine the demand for transportation service on PNGTS?

A.9 There are two main factors that drive demand for transportation service on PNGTS. The first is the level of end-use demand in the market which PNGTS serves (the New England market). Higher demand for natural gas by these end-use customers (as well as the addition of new end-use customers) increases the price of gas in that region, all else being equal. Shippers (pipeline customers) will use the pipeline to access gas at a lower priced hub and deliver it to the end-use customers where the price is higher. To that end, the greater the basis differential between Pittsburg and other delivery points along PNGTS is, the greater the value of transportation service on PNGTS. Higher value of transportation service typically translates into greater demand for that service. It is important to note, in addition, that the underlying commodity price of natural gas and alternative fuels will affect demand regardless of the relationship of basis differentials.

1 The other main factor that drives demand for transportation service on PNGTS is the
2 availability of alternative or competing infrastructure to deliver gas to the same end-use
3 customers. Demand for natural gas in New England is met with supplies from several
4 sources, including gas transported on other interstate pipelines, gas withdrawn from
5 storage facilities along various pipelines, and gas received from LNG import terminals.
6 The basis differentials on the other pipelines, the cost of storing gas at storage facilities,
7 and the delivered cost of re-gasified LNG from LNG import terminals all contribute
8 towards determining the competitiveness of PNGTS' services.
9 Going forward the value for PNGTS's capacity is likely to be substantially reduced
10 because of forces that affect prices at Pittsburg and Dracut. Anything that causes the price
11 at Pittsburg to go up without a corresponding downstream increase in price, or prices at
12 Dracut to go down without a corresponding upstream decrease in price, decreases the
13 value of capacity on PNGTS.

14 **Receipt-End Market Dynamics**

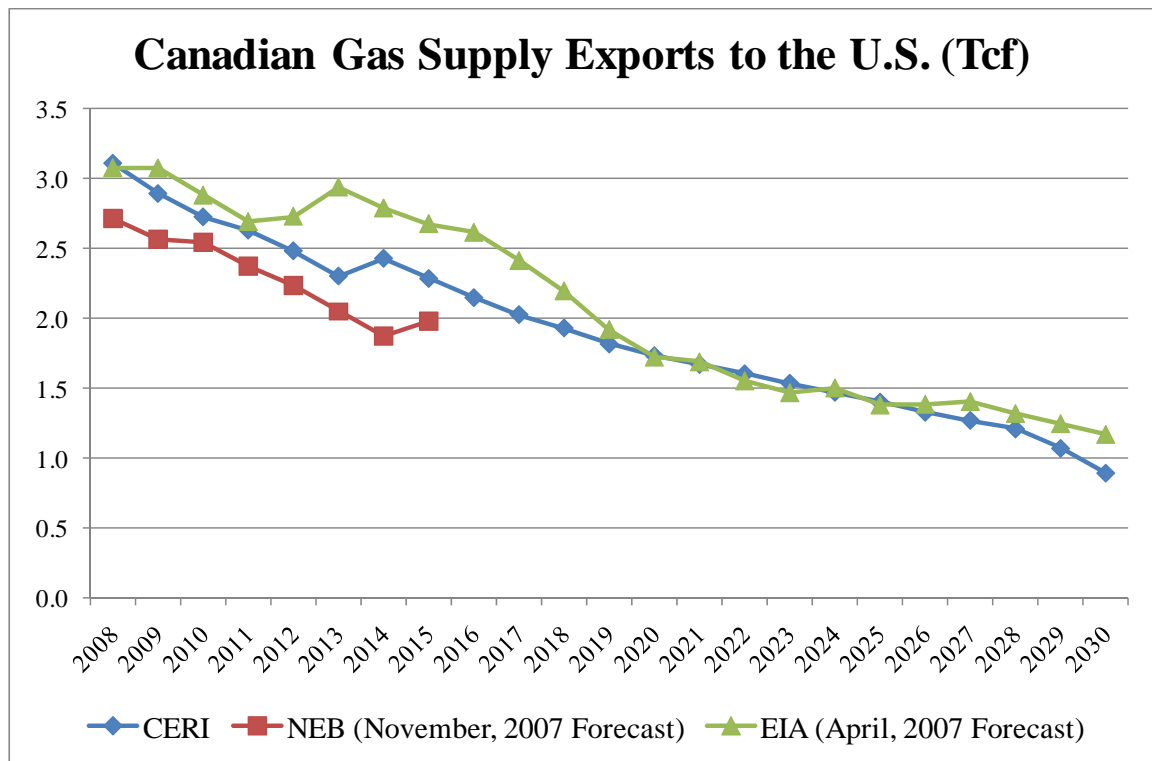
15 **Q.10 Please discuss the market forces you believe will impact prices at Pittsburg going**
16 **forward.**

17 A.10 There are four major natural gas production areas in North America that have a realistic
18 potential to serve demand located on PNGTS: the Western Canada Sedimentary Basin
19 ("WCSB") in Western Canada, the Rocky Mountain region, the Gulf Coast producing
20 areas (on-shore and off-shore), and Atlantic Canada (specifically the Sable Island Off-
21 shore Project). In addition to these four major production areas, there are significant
22 natural gas supplies in the Appalachian Basin. As discussed, PNGTS connects to the
23 TQM pipeline at Pittsburg, New Hampshire (East Hereford, Quebec) on the Canadian

1 border. It also connects with M&NP in Westbrook, Maine. The level of demand for
2 transportation service on PNGTS depends largely on the natural gas supplies that can be
3 accessed at Pittsburg. Because MN&P has postage stamp rates, access to supplies at
4 Westbrook, Maine are only relevant in the case of a “reversal of flow scenario” which
5 would send supplies north from Westbrook, Maine to Pittsburg, which is not likely to be
6 economic, as detailed further below.

7 Supplies available at Pittsburg are currently determined by the level of production in the
8 WCSB, Canadian demand for those supplies, and supplies available at the Dawn market
9 hub (“Dawn”). WCSB supplies are shipped east on TransCanada’s pipeline system (the
10 “Canadian Mainline”). Decreased production out of the WCSB coupled with increased
11 Canadian demand will significantly reduce Canadian exports to the U.S. The biggest
12 drivers of the increased demand are oil sands projects in Alberta, followed by increases in
13 gas-fired electric generation in Canada. Figure 2 shows three different forecasts of
14 Canadian supply exports to the U.S (the April, 2007 EIA Annual Energy Outlook, the
15 NEB’s November, 2007 report titled “Canada’s Energy Future”, and the Canadian
16 Energy Research Institute). As shown in Figure 2, a significant decline in WCSB
17 production combined with increasing domestic demand is expected to lead to substantial
18 reductions in exports to the U.S. over the next several years.

Figure 2



There are multiple pipeline interconnects located in close proximity to Dawn, primarily the pipeline systems of ANR, MichCon, and Great Lakes. Additionally, the interconnection with the Vector pipeline system ties Dawn to the Chicago area markets (and prices) primarily served by Alliance and Northern Border. Therefore, PNGTS Shippers may also use Dawn as a source of supply for their PNGTS deliveries.

Q.11 What other factors could affect the delivery of natural gas supplies at Pittsburg?

A.11 While speculative at this point, there are two LNG import terminals proposed to be sited in Quebec along the St. Lawrence River. If completed, Cacouna Energy LNG (“Cacouna”) and the Rabaska LNG project (“Rabaska”) could have a send-out capacity of 1.0 Bcf/day or more. It is conceivable that Shippers could send some portion of Quebec LNG supplies to the New England market via PNGTS. The likelihood of this

1 happening is small given challenges affecting the supplies available to Rabaska and
2 Cacouna. In addition, if these two projects go forward, they are likely to focus on markets
3 that would not utilize PNGTS such as Dawn. For example, in its December, 2006 Gros
4 Cacouna Receipt Point Application, TransCanada Pipelines Ltd. reported the requests for
5 service that the Cacouna owners had made. Specifically, of the 525,000GJ/day of firm
6 transportation service requests from the Cacouna plant, only 20,000 GJ/day (or 3.8%)
7 was expected to be shipped to East Hereford (the Canadian export point associated with
8 PNGTS).²

9 On February 7, 2008, Russian energy company AOA Gazprom announced that it was
10 canceling its \$3.5 billion Baltic LNG plant. The partners in the Cacouna LNG Project,
11 Petro-Canada and TransCanada Corp., viewed Gazprom's Baltic plant as the best source
12 to provide supplies to Cacouna Energy LNG. The cancellation of Gazprom's LNG plant,
13 combined with an almost 100% increase over the last four years in the estimated cost to
14 build the Cacouna LNG Project are disappointing to the sponsors, who are reviewing the
15 Cacouna project.³

16 The AOA Gazprom Baltic LNG plant cancellation is also likely to affect Rabaska's
17 ability to procure supplies. In addition, Rabaska is behind Cacouna in terms of its
18 regulatory approval process as it has not received approval for a receipt point from the
19 NEB.

20 A more detailed description of these projects and other proposed infrastructure projects is
21 provided in Appendix A.

² See TransCanada PipeLines Limited Gros Cacouna Receipt Point Application, Appendix 2, p. 4-5.

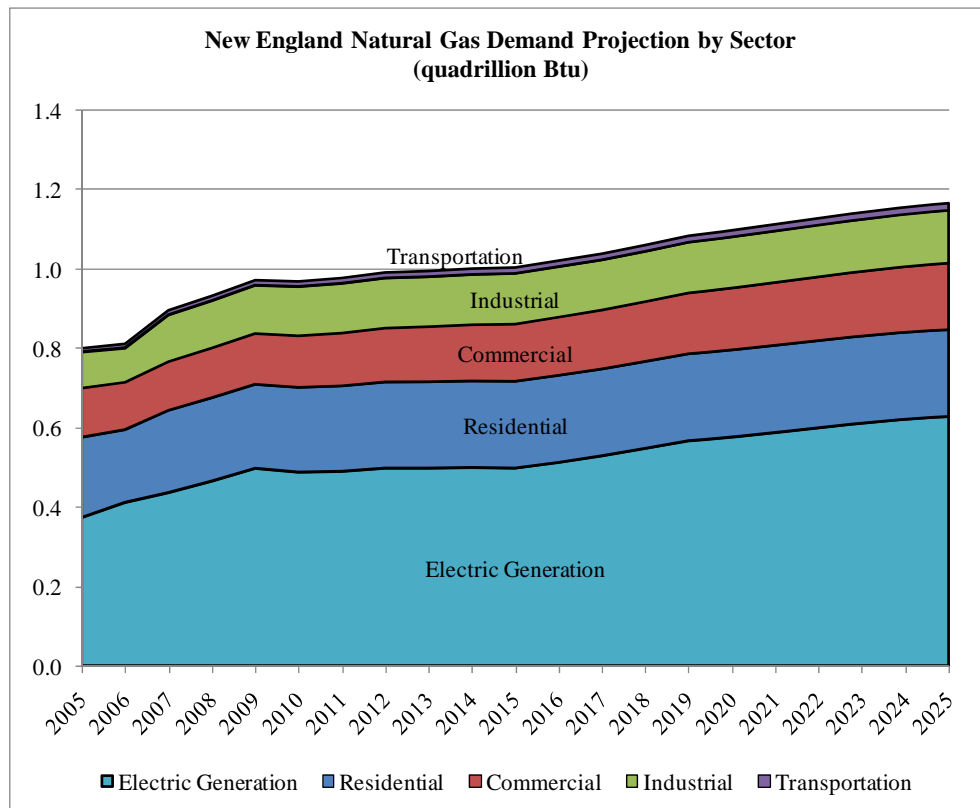
³ See "Gazprom Move Puts Petro-Can's LNG Plant in Doubt" Financial Post, February 7, 2008 and www.energiecacouna.ca/en/, Press Release, February 7, 2008, "Project Update."

Delivery-End Market Dynamics

Q.12 How would you characterize the New England market for natural gas?

A.12 The New England market for natural gas is becoming increasingly competitive. It is interesting to note that there are several natural gas infrastructure projects underway or recently completed which will all compete to serve natural gas demand in New England. In its 2007 Annual Energy Outlook, the US Energy Information Administration (“EIA”) projected aggregate New England natural gas demand to increase by 1.91% annually between 2005 and 2025. Figure 3 shows the EIA’s natural gas demand projection by sector.

Figure 3⁴



⁴ Source: EIA 2007 Annual Energy Outlook

1 While aggregate annual demand is projected to increase by 1.91% from 2005-2030, EIA
2 projects end-use demand (which excludes power generation) to increase by 1.18%. This
3 bodes poorly for PNGTS which suffers from a geographical disadvantage in terms of
4 serving new power generation facilities.

5 **Q.13 What alternative or competing infrastructure is currently available to serve this**
6 **demand?**

7 A.13 In addition to PNGTS, there are currently seven major interstate pipelines that either
8 directly or indirectly serve the New England market. The pipelines with direct access to
9 the New England market are: Algonquin, Tennessee, Iroquois Pipeline, and M&NP. The
10 pipelines with indirect access to the New England market are: Texas Eastern
11 Transmission Corp. ("TETCO"), Transcontinental Gas Pipeline ("Transco"), Dominion
12 Transmission, Inc. ("DTI"), and Columbia Gas Transmission ("Columbia"). In addition
13 to these pipelines, there are two, third-party LNG facilities; the Distrigas of
14 Massachusetts Corp. ("DOMAC") import facility in Everett, Massachusetts and the
15 National Grid (formerly KeySpan) LNG facility in Providence, Rhode Island. DOMAC
16 currently has a maximum vaporization capability of 1.0 Bcf/day (approximately 750
17 MMcf/day on a sustained basis), with an additional sendout capability via truck of 100
18 MMcf/day. The National Grid LNG facility is currently supplied via truck from DOMAC
19 and has an existing storage capacity of 2.2 Bcf and a maximum vaporization capability of
20 150 MMcf/day.

21 Many LDCs throughout the region also have on-system LNG and propane air facilities to
22 meet their peak day needs. Specifically, in New England, there is approximately 16.2
23 Bcf of on-system LNG storage capacity at over 40 facilities, with a combined

1 vaporization capability of 1.4 Bcf/day.⁵ These capacity and vaporization figures for New
2 England include the November 2007 commencement of Yankee Gas Services' new LNG
3 facility in Waterbury, Connecticut that has 1.2 Bcf of storage and 60 MMcf/day of
4 vaporization capability.⁶ It is important to note that PNGTS has no on-system LNG,
5 storage or propane air facilities.

6 **Q.14 Please describe PNGTS' competitive position in serving demand in the Boston area.**

7 A.14 There are several routes that can be used to deliver gas to the Boston market. PNGTS'
8 location makes it one of the least cost competitive paths to bring gas to the Boston area.
9 Specifically, I looked at four pipeline routes, each path originating at Dawn, to bring gas
10 to Boston. Figure 4 summarizes the results of my analysis. The details of this analysis are
11 provided in Appendix B. As shown in Figure 4, as of 2/29/2008, it is \$0.74 (or 110%)
12 more expensive to utilize PNGTS than the cheapest available alternative transportation
13 path.

⁵ Northeast Gas Association, 2007 Statistical Guide.

⁶ Waterbury Republican-American, "Yankee Gas Officially Opens LNG Facility in Waterbury," November 14, 2007.

Figure 4⁷

Delivered Cost Analysis

<u>Route</u>	<u>Cost to Transport</u>	
	\$	Premium
Path 1 A) TransCanada (Dawn to Niagara) B) Tennessee (Niagara (Zone 5) to Boston area (Zone 6))	\$0.68	0%
Path 2 A) TransCanada (Dawn to Waddington) B) IGT (Waddington (Zone 1) to Wright (Zone 1)) C) Tennessee (Wright (Zone 5) to Boston area (Zone 6))	\$1.18	74%
Path 3 A) TransCanada (Dawn to Waddington) B) IGT (Waddington (Zone 1) to Brookfield (Zone 2)) C) Algonquin (Brookfield to Boston area)	\$1.20	77%
Path 4 A) TransCanada (Dawn to East Hereford) B) PNGTS (East Hereford to Boston area)	\$1.42	110%

Source: Currently effective rates from respective pipeline tariffs as of 2/29/2008

What Figure 4 does not show is that for new sources of natural gas supply made available at points other than Dawn, such as Leidy, Shippers will be able to select transportation paths to the Boston market that put PNGTS at even more of a disadvantage. This disadvantage indicates that incremental supplies from the Rockies or the Chicago market are not likely to provide any incremental demand for service on PNGTS.

Future Natural Gas Infrastructure Designed to Serve the New England Market

Q.15 Please describe the MN&P Phase IV and Phase V Expansion Projects.

A.15 In February 2007, the FERC approved M&NP's proposed Phase IV expansion project that will increase the capacity from 421,000 Dth/day to 833,000 Dth/day in order to

⁷ Figure 4 assumes gas at Dawn costs \$9.67, which is the average of the monthly NYMEX Henry Hub futures (as of 2/29/08) for the next 24 months (\$9.531) plus the average basis differential between Henry Hub and Dawn over the last two calendar years (\$0.135). "Premium" column refers to the % premium relative to Path 1.

1 transport additional supplies to New England that are redelivered from Brunswick
2 Pipeline and have been sourced at the Canaport LNG terminal in Saint John, New
3 Brunswick. Phase IV includes the construction of five new compressor stations in Maine
4 (in Woodchopping Ridge, Brewer, Searsmont, Westbrook, and Eliot). The facilities are
5 scheduled to become operational on November 1, 2008, consistent with the timing of the
6 upstream facilities, i.e., Brunswick Pipeline and the Canaport LNG facility. Repsol
7 Energy North America (75% owner of Canaport) has entered into a long-term firm
8 capacity contract with M&NP for approximately 730,000 Dth/day that will allow it to
9 make firm deliveries of gas to Tennessee Gas Pipeline at Dracut, Massachusetts
10 (approximately 330,000 Dth/day) and to Algonquin Gas Transmission at Beverly,
11 Massachusetts (approximately 400,000 Dth/day).
12 M&NP is currently holding a binding open season for its proposed Phase V expansion.
13 Based on a non-binding open season held in June 2007, M&NP expects to increase the
14 capacity of its existing system in the U.S. by 170,000 Dth/day, and would utilize an
15 additional 30,000 Dth/day of existing unsubscribed winter capacity. The project is
16 anticipated to commence operation in late 2010.

17 **Q.16 What effect are MN&P Phases IV and V likely to have on the price at Dracut?**

18 A.16 While it is difficult to determine the exact impact MN&P Phases IV and V will have on
19 Dracut prices, one can use history as a guide to inform the direction and relative
20 magnitude of the effect. MN&P came on-line in December 1999, with the ability to
21 deliver approximately 420,000 Dth/day to Dracut. As shown in Figure 5, for the five
22 years prior to MN&P coming on-line (1995-1999), Boston city gate supplies sold at an
23 average premium to Transco Zone 6-NY of \$0.06/Dth. Since MN&P came on line

(2000-2007), Boston city gate supply has sold at an average discount to Transco Zone 6-NY of \$0.10/Dth. This represents a loss of approximately \$0.16/Dth of pipeline basis value for pipelines serving New England, as a result of 420,000 Dth/day of new supplies coming into the market.

Figure 5⁸

Average Annual Basis Differential (\$/Dth)

BCG-Z6NY	
1995	0.07
1996	0.12
1997	0.07
1998	0.04
1999	-0.02
2000	-0.39
2001	-0.03
2002	-0.05
2003	0.15
2004	-0.01
2005	-0.19
2006	0.04
2007	-0.31
Avg. 95-99	0.06
Avg. 00-07	-0.10
Change	-0.16

If the additional 730,000 Dth/day of supplies from MN&P Phase IV along with the likely 200,000 Dth/day of MN&P Phase V supplies produce the same proportional effect on the basis differential between Boston and New York as the addition of MN&P in 1999, prices in Boston would likely drop to a level which would wipe out an additional \$0.35/Dth of basis value for pipelines serving New England, making PNGTS almost worthless. The impact of this \$0.35/Dth drop in basis value is discussed further in the testimony of Mr. David Haag.

⁸ Pricing points are: BCG = Algonquin City Gate, NY = Transco Zone 6-NY.

Q.17 What other projects could significantly alter the balance of supply in the short term thereby decreasing prices in the Boston market?

A.17 Construction is complete on the Northeast Gateway LNG project sponsored by Excelerate Energy. As of March 2008 it is available to receive LNG cargoes. Northeast Gateway has the capability to deliver 800 MMcf/day to the Boston market via Algonquin's Hubline pipeline. This is another significant source of supplies that will compete directly with those supplies delivered on PNGTS. In addition, supplies from Northeast Gateway will reduce Boston-area gas prices during periods of peak demand. Once adequate alternative capacity exists to serve coastal New England loads on a peak day, PNGTS' competitive position deteriorates even further. It is the peak days that could justify shippers acquiring otherwise "out-of-the-money" PNGTS capacity. For example, one peak day with \$50/MMbtu gas can justify holding firm capacity on PNGTS for several lower priced days if that is the only way to profit from peak day pricing. Furthermore, this additional capacity will make it difficult, if not impossible, for PNGTS to sell capacity even at highly discounted rates.

Dominion Transmission, Inc. ("DTI") has received approval from FERC for its Cove Point Expansion Project. The project will increase the daily output capacity of the Cove Point LNG import terminal (located at Cove Point, Maryland) from 1 Bcf/day to 1.8 Bcf/day. Storage capacity at the terminal will increase from 7.8 Bcf to about 14.5 Bcf. The project also expands the DTI pipeline system in Maryland and Pennsylvania allowing the incremental capacity to deliver natural gas to existing market hubs that serve customers located throughout the Northeast. The introduction of incremental volumes of competitively priced, re-gasified LNG into pipelines that directly connect with DTI, like

1 Tennessee and Columbia, will offset the need for supplies to be transported on PNGTS.
2 Construction is well underway on the DTI project with an expected in-service date of
3 August 2008.

4 **Q.18 What other new natural gas infrastructure has been proposed that would serve the**
5 **New England market?**

6 A.18 There has been a flurry of proposed pipeline projects that could increase future natural
7 gas delivery capability to New England, and thus further impair the competitive position
8 of PNGTS in this market. These projects would compete directly with PNGTS to serve
9 existing and incremental demand in the New England market. Many of these projects are
10 planning to deliver gas from the terminus of the proposed Rockies Express (“REX”) -
11 East pipeline at Clarington, Ohio to various northeastern markets.⁹
12 Kinder Morgan Energy Partners, Sempra Pipelines & Storage and ConocoPhillips, the
13 consortium of companies constructing the REX pipeline, have been successful marketing
14 the transportation capacity of the original project. Industry experts expect Rocky
15 Mountains natural gas production to remain constrained upon the completion of the initial
16 REX project and that the pipeline capacity will likely be expanded to increase the volume
17 of competitively priced supply delivered to eastern markets. This result would be
18 expected to further decrease the utilization of PNGTS.
19 In addition to new pipeline capacity, there are numerous LNG import terminals in various
20 stages of approval and development which could provide additional supplies to the New
21 England market. While no one expects all of these projects to be constructed and placed
22 into production, it is important to note that almost all of the proposed LNG projects are

⁹ The REX-East project has received a draft environmental statement from FERC, and the sponsors are awaiting final regulatory approval. Construction is scheduled to begin on REX-East in the summer of 2008, with a target in-service date of June 2009.

1 sited in locations that would utilize pipelines other than PNGTS in its current north-south
2 flow configuration.

3 Finally, there are several natural gas storage projects in process, mostly in New York and
4 Pennsylvania, which also increase the capacity and reliability of pipelines that compete
5 with PNGTS to serve the New England market. I provide a description of these
6 aforementioned pipeline, LNG and storage projects in Appendix A.

7 **Q.19 How will newly proposed natural gas infrastructure affect PNGTS' competitive**
8 **position in serving the New England market?**

9 A.19 Additional pipeline capacity and LNG supplies serving the New England market will
10 only further degrade PNGTS' competitive position. As noted previously, located so far
11 east, PNGTS is one of the least economic paths to bring gas to the Northeast U.S. There
12 are several cheaper alternatives, as described above. The number of competing
13 alternatives will only increase as pipelines expand from the REX terminus in Clarington,
14 Ohio to bring Rockies gas to the Northeast U.S., and as competing pipelines contract to
15 provide transportation service from new LNG terminals to serve the New England
16 market. While there are several proposed pipeline and LNG projects that could serve the
17 New England market, only a fraction need to be built in order for the value of PNGTS
18 capacity to drop precipitously.

19 **Q.20 Have you considered the scenario of a reversal of flow on PNGTS?**

20 A.20 Yes, I have. That scenario is extremely unlikely in my opinion. Natural gas prices have
21 never been lower in Eastern Canada than in the U.S., and the U.S. has never exported any
22 significant net volumes of gas to Canada. If prices in the Boston market fall below prices
23 in Eastern Canada, the market would likely respond by signaling the need for fewer LNG

1 cargoes to be brought to serve New England, and instead diverted to other, more
2 profitable markets. The North American gas market is highly integrated and
3 economically efficient. Quite simply, the conditions necessary for PNGTS being able to
4 derive substantial profitability from flow reversal are not likely to occur.

5 **Conclusions About the Future Value of PNGTS**

6 **Q.21 Please summarize your views on the value of capacity on PNGTS going forward.**

7 A.21 SUMMARY

- 8 1. There are at least three paths through which gas from Dawn can serve existing
9 demand in the New England market more cheaply than by utilizing PNGTS.
- 10 2. Once MN&P Phases IV and V and Northeast Gateway come on-line, the ensuing
11 price reduction in Boston will likely severely diminish demand for acquisition of
12 capacity on PNGTS. The previous analysis of the price reduction as a result of
13 MN&P coming on line in 1999 supports this.
- 14 3. In addition to MN&P Phases IV and V, there is a massive expansion of capacity
15 already being constructed into the heart of PNGTS' market, and more is likely on the
16 way. This is described in more detail in Appendix A. When compared to New
17 England's projected demand growth discussed earlier, any combination of new
18 construction is likely to depress commodity prices and severely reduce the value of
19 installed capacity into the market, especially that of PNGTS.
- 20 4. Production out of Western Canada available for export to the U.S. is projected to
21 decline. For purposes of serving the New England market, these supplies will likely
22 be replaced by supplies accessible from existing pipeline infrastructure, supplies from
23 Canaport which will utilize MN&P Phase IV, supplies from Northeast Gateway via

1 Algonquin's Hubline and by supplies soon to be accessible by new pipeline
2 infrastructure being built. These market forces, applied to both the delivery and
3 receipt end of PNGTS, will likely eliminate or severely depress the value of PNGTS
4 transportation capacity.

5 **Q.22 Does this conclude your prepared direct testimony?**

6 A.22 Yes it does