

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

Portland Natural Gas Transmission System

Docket No. RP08-_____

**Prepared Direct Testimony
of
David J. Haag**

1 **Q.1 Please state your name, position, employer, and business address.**

2 A.1 My name is David J. Haag. I am employed as Manger, Rates and Regulatory Affairs for
3 Portland Natural Gas Transmission System (“PNGTS”). My business address is One
4 Harbour Place, Suite 375, Portsmouth, New Hampshire 03801.

5 **Q.2 Please provide a brief summary of your experience in the gas industry.**

6 A.2 Prior to beginning my current role at PNGTS in 2005, I have been employed in a variety
7 of capacities of increasing responsibility within the TransCanada family since 1997.

8 **Q.3 Please explain your educational background.**

9 A.3 I graduated with Honors from the University of Calgary (Canada) in 1998, receiving a
10 B.A in Economics with a Minor in Management.

11 **Q.4 Why has PNGTS filed this Section 4 rate case before the FERC?**

12 A.4 PNGTS is filing this rate case as required by the Commission’s order approving the
13 settlement of PNGTS’ last rate case (Docket No. RP02-13) which stated that “PNGTS
14 will file a rate case under Section 4 of the Natural Gas Act no sooner than and no later
15 than April 1, 2008.”

1 **Q.5 What is the purpose of your testimony in this proceeding?**

2 A.5 I am appearing on behalf of PNGTS to: (1) provide an overview of the system; (2)
3 address the "at risk" condition applicable to the PNGTS system; (3) sponsor Statements G
4 and J and their related schedules, as well as Schedule I-5 and Statement O; (4) address
5 certain business risks and determine the appropriate rate of return within the calculated
6 discounted cash flow ("DCF") range; (5) propose new short term transportation rates; and
7 (6) sponsor tariff sheets.

8 **Q.6 What exhibits are you sponsoring?**

9 A.6 I am sponsoring the following exhibits, which were prepared by me or under my
10 supervision:

- | | | |
|----|--------------------|--|
| 11 | Exhibit No. PNG-01 | Prepared Direct Testimony of David J. Haag |
| 12 | Exhibit No. PNG-02 | PNGTS System Map |
| 13 | Exhibit No. PNG-03 | PNGTS Transportation Values |
| 14 | Exhibit No. PNG-04 | PNGTS Primary Tariff Sheets |
| 15 | | Statement G and related Schedules |
| 16 | | Statement J and related Schedules |
| 17 | | Schedule I-5 |
| 18 | | Schedule O |
| 19 | | Schedule J-2 (Pro-Forma) |
| 20 | | |
| 21 | Exhibit No. PNG-05 | PNGTS Pro-Forma Tariff Sheets |

22 **Q.7 Please identify the witnesses filing direct testimony in this case on behalf of**
23 **PNGTS.**

24 A.7 The following witnesses present evidence regarding topics identified below:

1	David J. Haag	System Overview; Business Risks and Resulting Equity Return; At
2		Risk Conditions; Short Term Transportation Rates; Tariff Sheets
3	Paul R. Moul	Rate of Return on Equity
4	Scott Sieppert	Overall Cost of Service (except as otherwise noted); Rate Base
5	Al Lovinger	Rate Model; Levelization
6	James Taylor	Negative Salvage Costs
7	Barry Sullivan	Rate Design; Depreciation; Pipeline Industry Risks
8	John Reed	PNGTS Market Circumstances

9 **Overview Of PNGTS System and Shippers**

10 **Q.8 Please provide a brief overview of the PNGTS system.**

11 A.8 The approximately 290 mile PNGTS system was initially placed into service on March
12 10, 1999. As shown on the map (Exhibit No. PNG-02), the approximately 190-mile, 24”
13 diameter northern system stretches from a point of interconnection with TransQuebec &
14 Maritimes Pipeline, Inc. ("TQM") on the Canadian / USA border near Pittsburg, New
15 Hampshire, diagonally southeast to Westbrook, Maine, where it interconnects with
16 Maritimes & Northeast Pipeline, L.L.C. ("Maritimes"). At that point, the approximately
17 100 mile jointly owned, 30” diameter southern system (“Joint Facilities”) shifts to a
18 south-westerly direction traversing southern Maine, the New Hampshire Seacoast region
19 and northern Massachusetts, where it interconnects with Tennessee Gas Pipeline
20 Company's ("Tennessee") system at Dracut, Massachusetts. PNGTS is the minority
21 interest owner of the southern system, while Maritimes is the majority interest owner. A
22 series of agreements between Maritimes, an affiliate thereof, and PNGTS (the “Definitive
23 Agreements”), which were approved by the Commission, establishes rights and
24 obligations of the respective parties.

1 **Q.9 What is the ownership structure of PNGTS?**

2 A.9 PNGTS is organized as a Maine general partnership, with two partners, both of which
3 are corporations, holding the following ownership interests:

Partner Company	Ownership Interest	Parent Company
TCPL Portland, Inc.	61.71 %	TransCanada Corporation
Northern New England Investment Co.	38.29%	Gaz Metropolitan, Inc.

4 **Q.10 Who are the FT Shippers on PNGTS?**

5 A.10 When PNGTS commenced operations there were ten FT Shippers on the system. Each
6 initially signed a long-term (20 year) firm transportation agreement as follows:

Contract Number	FT Shipper	Summer Contract Quantity (Dth)	Winter Contract Quantity (Dth)
FT-1996-001	Androscoggin Energy	18,000	18,000
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-1998-001	Rumford Power	44,000	44,000
FT-1998-002	Mead Corporation	5,000	5,000
FT-1999-001	EnergyNorth	1,000	1,000
FT-1999-002	HydroQuebec	15,000	15,000
	TOTAL:	138,600	212,200

7 However, both the Androscoggin Energy and the Rumford Power FT contracts were
8 rejected and terminated through bankruptcy in 2005 and 2006 respectively. These two
9 FT contracts represented approximately 29% of the total long term winter FT contracts on
10 the System.

1 PNGTS is also actively marketing its available capacity, subject to the contract
2 limitations described below. The following additional FT contract is in place as of April
3 1, 2008:

Contract Number	FT Shipper	Contract Quantity (Dth)	Contract End Date
FT-2006-009	Constellation	20,000	Oct 31, 2008

4 The level of 2008 revenues attributable to this discounted FT contract is \$3.65 million.
5 As outlined in and supported by the testimony of PNGTS witness Reed, under the
6 changing market conditions in New England, PNGTS does not expect significant revenue
7 from any additional FT contracts beyond this currently effective agreement.
8 Upon the expiry of this FT contract, the only contracts in the PNGTS FT contract
9 portfolio that continue in effect will be the remaining long term FT contracts.

10 **Q.11 Please describe the PNGTS “at-risk” condition.**

11 A.11 In its preliminary determination regarding PNGTS’ initial certificate application (see
12 Docket No. CP96-249), the Commission determined that the annualized capacity of the
13 PNGTS system would be 178,000 Mcf/day, and placed PNGTS at-risk for this level of
14 service.

15 Subsequently, in a preliminary determination issued on July 31, 1997, the Commission
16 indicated that PNGTS should design rates after the first year of operation to reflect billing
17 determinants estimated at 210,000 Mcf/day, placing PNGTS at-risk thereafter based on
18 this increased level of imputed service.

19 PNGTS sought rehearing of this at-risk condition, which the Commission granted.¹
20 Furthermore, it was not until this Order on Rehearing that PNGTS received certificate

¹ See Order on Rehearing, 80 FERC ¶ 61,345 at Ordering Paragraph O.

1 authority to construct and operate its system; prior PNGTS proposals were dismissed
2 because they were “superseded by the authorizations [issued] herein.”² Accordingly, the
3 Commission’s 178,000 Mcf/day at-risk condition was the final determination of this
4 matter in the certificate proceedings.

5 **Q.12 Should PNGTS now be placed "at risk" for current capacity levels above 178,000**
6 **Mcf/day?**

7 A.12 No. Initial FT contract levels on PNGTS exceeded 178,000 Mcf / day, which represented
8 an upper cap, for rate making purposes, on the risk that the PNGTS owners could be
9 exposed to.

10 Nevertheless, the PNGTS recourse rate in this proceeding has been calculated based upon
11 the current firm system capacity of 210,000 Mcf/day, which means that the proposed unit
12 rates isolate the PNGTS Shippers from billing determinant adjustments which result from
13 both discount adjustments that otherwise would have been made, and the contract
14 terminations referenced above.

15 **PNGTS Business Risks**

16 **Q.13 What are the overall business risks currently facing PNGTS?**

17 A.13 PNGTS faces numerous significant business risks, including:

² *Id.* at 62,158-59.

1 1. Highly Seasonal Market

2 Demand for transportation on PNGTS has been historically low except during the
3 peak winter and summer months, providing limited opportunity for the sale of
4 discretionary services in non-peak periods.

5 2. PNGTS Market Changes

6 There have been many recent changes to the markets served by PNGTS,
7 particularly on its northern segment. For example, both the Groveton and Wausau
8 Paper mills have been closed. Additionally, the owners of both power generation
9 facilities on PNGTS' northern segment have declared bankruptcy.

10 The northern segment of PNGTS serves the only demand which arises from
11 customers who are solely dependent upon PNGTS for natural gas deliveries. In
12 fact, just 10,600 Dth/d of current firm contracted service must use PNGTS to
13 obtain physical deliveries of natural gas, which constitutes a mere 5% of the
14 current total billing determinants.

15 3. Significant Increase in Natural Gas Delivery Capacity in the PNGTS Market Area

16 Maritimes is currently expanding the Joint Facilities by approximately 400,000
17 Dth to facilitate the arrival of additional natural gas supplies from Canada.
18 However, as PNGTS witness Reed testifies, market demand in New England has
19 not grown to a point where both the quantity of existing volumes (including
20 PNGTS) and this new Maritimes expanded capacity can be absorbed at
21 compensatory transportation rates on even an average day (much less on a
22 shoulder seasonal basis), creating significant downward pressure on natural gas
23 commodity prices in New England. As such, the market value of PNGTS
24 transportation has significantly decreased on a prospective basis, making remote

1 the possibility of incremental revenues from additional capacity sales. Lastly, this
2 over-supply situation is further exacerbated on PNGTS by continuing increased
3 prices for both supply and transportation of gas supplies from western Canada,
4 which is the primary supply source for PNGTS deliveries.

5 4. Long-term FT Contract Limitations

6 There are three unique provisions incorporated into the long-term FT contracts
7 that restrict PNGTS' ability to market its pipeline capacity.

8 i. Most Favored Nations - PNGTS is unable to offer discounted firm
9 transportation services for terms of greater than two years without severe
10 economic consequences resulting from the "Most Favored Nations"
11 provision ("MFN") found in all of its long-term firm shipper contracts. As
12 a result of the MFN provision, PNGTS is only able to market discounted
13 FT capacity for a term of two years or less. For any term greater than two
14 years, the MFN clause requires PNGTS to offer the equivalent unit
15 discount to all long term FT shippers, effectively prohibiting PNGTS from
16 marketing any capacity on a long term basis at prevailing market
17 transportation rates.

18 ii. Decontracting – Shippers have the opportunity to request a reduction in
19 their contract demand levels when PNGTS is potentially in a position to
20 over-collect its cost of service, as detailed in the contracts.

21 iii. Off-Peak Transportation - PNGTS must provide any available off-peak
22 (May through October) capacity to firm annual shippers at no incremental
23 cost.

1 5. Joint Facilities Risks

2 Most of PNGTS' active markets are located on the Joint Facilities - facilities
3 which are partially owned with, and also operated by, our primary competitor.
4 Unlike the case of a wholly-owned facility, PNGTS (and Maritimes) operational
5 flexibility on the Joint Facilities is continuously restricted by the terms and
6 conditions of the Joint Facilities Ownership and Operating Agreements.

7 Additionally, the consultative requirements of the Joint Facilities
8 Definitive Agreements provide our primary competitor with advance notice of
9 business development initiatives that involve changes in the operations or
10 configuration of the Joint Facilities. The sole owner of a pipeline competing with
11 other separately owned systems serving a market does not have this burden.
12 Furthermore, the unit rate associated with Maritimes' capacity on the Joint
13 Facilities is lower than PNGTS' rate, placing PNGTS at a competitive
14 disadvantage, particularly in light of the contract limitations noted above.

15 6. Supply Risk

16 PNGTS' primary supply source, the Western Canadian Sedimentary Basin
17 ("WCSB"), faces serious challenges in maintaining export volumes, as detailed in
18 the testimony of PNGTS witnesses Reed and Sullivan. The WCSB supply is at a
19 considerable distance from PNGTS, which, when combined with other factors
20 (e.g., stacked total transportation charges), places PNGTS at a relative
21 disadvantage. This problem has been further exacerbated by the proposed increase
22 in the tolls for transport on the mainline of TransCanada, which is the essential
23 link between PNGTS and Canadian supplies.

1 Given that no PNGTS shipper has contracted for primary receipt at any point other
2 than Pittsburg, New Hampshire, all primary firm supply is delivered to PNGTS
3 from Canada via TQM. As PNGTS witnesses Sullivan and Reed have further
4 described, competition for supplies from the WCSB continues to increase because
5 of growing demand for natural gas throughout Canada, leaving less economically
6 priced gas available for export to PNGTS. With continued upward pressure on
7 supply prices in Canada, incremental PNGTS firm delivered supply can be
8 expected to either be priced substantially higher than its competition or,
9 alternatively, not available.

10 PNGTS witness Reed has estimated that projects presently completed, under
11 construction, and in one instance planned in PNGTS' market, will further diminish
12 the value of PNGTS' capacity by approximately \$0.35/Mmbtu from current levels.
13 Exhibit No. PNG-03 shows on a current basis PNGTS capacity only rarely attains
14 an implied total value of \$0.35/Mmbtu in the marketplace, and thus an additional
15 \$0.35Mmbtu reduction in value presents serious economic issues for PNGTS.

16 **Q.14 How do the business risks confronting PNGTS affect your conclusion regarding the**
17 **appropriate return that should be granted for PNGTS?**

18 A.14 In addition to the circumstances outlined above, and after considering the testimony of
19 PNGTS witnesses Sullivan, Reed, and Moul, it seems inescapable that PNGTS faces an
20 extraordinary level of commercial jeopardy. Collectively, the testimonies describe a
21 pipeline that has critical challenges in the marketplace, which are greater in degree and in
22 breadth than the risks generally experienced by natural gas pipelines. As such, PNGTS is
23 certainly not an "average-risk" pipeline. In fact, given the multiple, unusual and severe
24 nature of the risks PNGTS confronts, it is assuredly much closer to the top of the risk

1 range than to the average or median risk typically experienced by other natural gas
2 pipelines.

3 As outlined in PNGTS witness Moul's testimony, PNGTS has calculated that the range of
4 reasonable equity returns is 13% - 15%. Accordingly, I believe that it is appropriate and
5 necessary to place PNGTS in the upper end of the equity return range, at 14.75 %.

6 **Short Term Transportation Rates**

7 **Q.15 Please describe PNGTS' proposal to implement new short-term transportation** 8 **rates.**

9 A.15 As outlined on the Tariff Sheets in Exhibit PNG-04, PNGTS is proposing to implement
10 new short-term transportation rates which are capped at 250% of the long-term firm
11 recourse unit rate plus any applicable commodity rates. This short term transportation
12 rate will apply to rate schedules IT (Interruptible Service), PAL (Park and Loan), and also
13 to Rate Schedule FT for FT contracts with a primary term of less than one year ("Short
14 Term FT" or "STFT"), collectively the "Short Term Services".

15 In the unlikely event that PNGTS would over-recover its approved cost of service by
16 virtue of providing Short Term Services, PNGTS will credit to its long term FT shippers
17 75% of the portion of Short Term Service revenues which exceeds the approved cost of
18 service calculated over a two year period, as outlined on First Revised Tariff Sheet Nos.
19 204 and 205 contained in Exhibit PNG-04.

20 **Q.16 Why are these new short tem transportation rates necessary?**

21 A.16 Given the anticipated reduction in the value of PNGTS transportation discussed by
22 PNGTS witnesses Reed and Sullivan, PNGTS does not expect material future revenues
23 from its Short Term Services. However, PNGTS has designed its unit recourse rates
24 based on its total current firm system capacity of 210,000 Mcf, making PNGTS

1 responsible for marketing a significant amount of unsubscribed capacity. In light of this
2 fact, PNGTS needs the appropriate tools to provide it with a reasonable opportunity to
3 earn its approved cost of service. The proposed short term transportation rates provide
4 PNGTS with a tool to potentially capture transportation values above the firm recourse
5 rate during those fleeting episodes when market conditions warrant.

6 **Q.17 How do historical transportation values on PNGTS compare to the proposed short**
7 **term transportation rates?**

8 A.17 Exhibit No. PNG-03 demonstrates that the average transportation value on PNGTS since
9 January 1, 2006 through the end of the base period in this case, compared to deliveries at
10 Waddington, New York, is \$0.128 / Dth. Waddington is the nearest major upstream
11 export point accessed from the TransCanada Mainline and therefore is an important
12 illustrative location for comparison purposes. The calculated PNGTS transportation
13 value during the 730 day survey period only exceeded the proposed short term
14 transportation rate for 12 days, although the PNGTS transportation value was *negative* on
15 309 days. Accordingly, Exhibit No. PNG-03 clearly demonstrates that it is highly
16 unlikely that PNGTS will over collect its approved cost of service by providing short
17 term service, and also shows that the proposed short term transportation rates will provide
18 PNGTS with some minor assistance in its efforts to have a reasonable opportunity to earn
19 its approved cost of service.

20 **Q.18 Are these historical PNGTS transportation values expected to improve?**

21 A.18 No. A new firm contract for 730,000 Dth that utilizes delivery points on Maritimes'
22 portion of the Joint Facilities, which will be served by a capacity expansion currently
23 under construction by Maritimes, as well as newly completed LNG facilities off the coast
24 of Massachusetts, and another planned expansion of the Maritimes facilities, will have a

1 devastating impact on the value of PNGTS transportation. PNGTS witness Reed
2 calculates that just these new market realities, much less the very substantial number of
3 additional projects he also identifies, will depress the value of PNGTS capacity by an
4 additional approximately \$0.35/Mmbtu.

5 **Revenue and Related Matters**

6 **Q.19 Are you sponsoring Statement G and J and their related Schedules, as well as**
7 **Schedule I-5 and Statement O?**

8 A.19 Yes.

9 **Q.20 Please explain Statement G and its related schedules.**

10 A.20 Statement G and its schedules provide a summary of revenues, credits, and billing
11 determinants for the base period and as projected for the test period.

12 **Q.21 Please explain Statement J and its related schedules.**

13 A.21 Statement J and its schedules show the reconciliation of billing determinants to the total
14 revenue requirement and unit rate derivation.

15 **Q.22 Please further explain Schedule J-2.**

16 A.22 Schedule J-2 shows how the proposed rates were derived from the classified costs. The
17 firm recourse rates were derived by applying the total current firm system capacity of
18 210,000 Mcf/day to the total cost of service.

19 The PNGTS recourse rate in this proceeding has been calculated based upon the current
20 firm system capacity of 210,000 Mcf/day, which means that the proposed unit rates
21 isolate the PNGTS Shippers from billing determinant adjustments which result from both

1 discount adjustments that otherwise would have been made, and the contract terminations
2 referenced above.

3 The maximum interruptible rate (“IT”), Short Term Firm Rate (as defined in First
4 Revised Tariff Sheet No. 306 contained in Exhibit PNG-04), and Park and Loan rate
5 (“PAL”) are daily rates based on the short term firm rate, which is a 250% derivative of
6 PNGTS’ FT rate in accordance with PNGTS’ proposal to design short term services
7 based on its short-term rate methodology discussed above. Maximum rates for Rate
8 Schedules HRS and FT-Flex are derived on a 100% load factor basis from Rate Schedule
9 FT rate. These rates are set forth in the Revised Tariff Sheet Nos. 100 - 102 contained in
10 Exhibit No. PNG-04.

11 **Q.23 Please explain Schedule J-2 - Pro Forma.**

12 A.23 Schedule J-2-Pro Forma shows the effective rates that would result from using a 3.59 %
13 depreciation rate presented by PNGTS witness Sullivan, in recognition of the appropriate
14 remaining service life of PNGTS. These resulting transportation rates are also contained
15 in Pro Forma Tariff Sheet Nos. 100 -102 contained in Exhibit PNG-05.

16 **Q.24 Does this conclude your Prepared Direct Testimony?**

17 A.24 Yes.