CANADA

National Energy Board

Reasons for Decision

Trans Québec & Maritimes Pipeline Inc.

RH-2-88

December 1988

Tolls

National Energy Board

Reasons for Decision

In the Matter of

Trans Québec & Maritimes Pipeline Inc.

Application dated 7 July 1988, as amended,
for new tolls effective 1 January 1989 and
1 January 1990

RH-2-88

December 1988

Cat. No. NE 22-1/1988-12E
ISBN 0-662-16783-X

This report is published separately in both official languages.

Ce rapport est publié séparément dans les deux langues officielles.

Copies are available on request from:
Regulatory Support Office
National Energy Board
473 Albert Street
Ottawa, Canada
K1A 0E5
(613) 998-7204

Exemplaires disponibles auprès du:
Bureau du soutien de la réglementation
Office national de l'énergie
473, rue Albert
Ottawa (Canada)
K1A 0E5
(613) 998-7204

Printed in Canada

Imprimé au Canada

Table of Contents

Appendices

Abbreviations

Act	*National Energy Board Act*
Base Year	1 April 1987 to 30 March 1988
CICA	Canadian Institute of Chartered Accountants
CPA	Canadian Petroleum Association
CPI	Consumer Price Index
DCF	Discounted Cash Flow
GMi	Gaz Métropolitain, inc.
GPUAR	Gas Pipeline Uniform Accounting Regulations
Long-Canada	Long-Term Government of Canada Bond
NEB or the Board	National Energy Board
O&M	Operating and Maintenance
Test Years	1 January 1989 to 31 December 1989, and 1 January 1990 to 31 December 1990
TQM or the Company	Trans Québec & Maritimes Pipeline Inc.
TransCanada	TransCanada PipeLines Limited
Westcoast	Westcoast Energy Inc.
March 1984 TQM Reasons for Decision	National Energy Board Reasons for Decision in the Matter of an application by Trans Québec & Maritimes Pipeline Inc. under Part IV of the *National Energy Board A*ct - March 1984
August 1986 TQM Reasons for Decision	National Energy Board Reasons for Decision in the Matter of an application by Trans Québec & Maritimes Pipeline Inc. under Part IV of the *National Energy Board Act* - August 1986
November 1987 TQM Reasons for Decision	National Energy Board Reasons for Decision in the Matter of an application by Trans Québec & Maritimes Pipeline Inc. under Part IV of the *National Energy Board Act* - November 1987

13-Point Average	An average determined by aggregating the balance at the opening of a year and the balances at the end of each month of the year, and dividing by thirteen. Over the years, the Board and others have referred to an average determined in this fashion as a 13-month average.

Recital, Appearances and Intervenors

IN THE MATTER OF the *National Energy Board Act* and the Regulations made thereunder; and

IN THE MATTER OF an application by Trans Québec & Maritimes Pipeline Inc. for certain orders respecting tolls under Part IV of the *National Energy Board Act*, filed with the Board under File No. 1562-T28-8.

Examined by way of written submission and a public hearing held in Ottawa, Ontario on 21, 22, 23 and 24 November 1988.

BEFORE:

A.B. Gilmour	Presiding Member
J.G. Fredette	Member
R.B. Horner, Q.C.	Member

APPEARANCES AT THE PUBLIC HEARING:

Trans Québec & Maritimes Pipeline Inc.	L.-A. Leclerc B. Courtois
Alberta Petroleum Marketing Commission	P. McCunn-Miller
Canadian Petroleum Association	C.K. Yates
Consumers' Gas Company Ltd., The	J.H. Farrell
Foothills Pipe Lines (Yukon) Ltd.	H.N.E. Hobbs
Gaz Métropolitain, inc.	L.C. Lalonde
Minister of Energy for Ontario	P.D. Morris
Procureur général du Québec	J. Robitaille
Société d'Électrolyse et de Chimie Alcan Limitée	A.M. Bigué
TransCanada PipeLines Limited	S. Koskie
National Energy Board	D. Tremblay-Lamer

INTERVENORS TO HEARING ORDER RH-2-88:

Alberta Petroleum Marketing Commission

Canadian Petroleum Association

Consumers' Gas Company Ltd., The

Foothills Pipe Lines (Yukon) Ltd.

Gaz Métropolitain, inc.

Industrial Gas Users Association

NOVA Corporation of Alberta

Minister of Energy for Ontario

Pan-Alberta Gas Ltd.

Procureur général du Québec

Société d'Électrolyse et de Chimie Alcan Limitée

TransCanada PipeLines Limited

Union Gas Limited

Westcoast Energy Inc.

Overview

(NOTE: This overview is provided solely for the convenience of the reader and does not constitute part of this Decision or the Reasons, to which readers are referred for the detailed text and tables.)

The Application

On 7 July 1988, TQM applied to the Board for new tolls to be effective 1 January 1989 and 1 January 1990. The Company requested approval of tolls that would decrease by 1.54 percent for 1989 and by a further 1.46 percent for 1990.

While asking for a continuation of its existing deemed common equity ratio of 25 percent for 1989, the Company requested a ratio of 30 percent to begin at the time of its proposed debt refinancing in November 1990, giving an average ratio of 25.77 percent for the whole of 1990.

TQM requested an increase in its rate of return on equity from 13.75 percent to 14.50 percent in 1989 and to 14.75 percent in 1990.

Board Procedure

Rate of return issues were heard in an oral hearing that ran from 21 to 24 November 1988. Parties addressed all other issues by written submission.

Revenue Requirement

TQM forecasted a decrease in revenue requirement for 1989 of about $1.1 million or 1.54 percent from the $72.5 million previously approved by the Board for 1988, and a further $1.0 million or 1.46 percent for 1990. The major cause of these decreases was a reduction in return resulting primarily from depreciation deductions from rate base.

The Board reduced the requested revenue requirements by approximately $0.7 million for 1989 and by $1.0 million for 1990, primarily as a result of reductions in the requested rate of return on equity.

The requested and approved revenue requirements are summarized as follows:

	Requested	**Approved**
	($million)	
1988		72.5
1989	71.3	70.6
1990	70.3	69.3

Capital Structure and Return on Equity

TQM requested the approval of the Board for a proposal to increase the equity component of the capital structure from 25 percent to 30 percent with effect from November 1990. The Board denied this request.

The Company further requested increases in its rate of return on equity from the approved 1988 level of 13.75 percent to 14.50 percent for 1989 and to 14.75 percent for 1990. The Board responded by allowing a rate of 13.75 percent for both test years.

Toll

The Board's adjustments to the revenue requirements reduced TQM's requested monthly toll by $0.059 million for 1989 to $5.9 million, and by $0.082 million to $5.8 million for 1990. The approved monthly toll for 1988 had been $6.0 million.

Chapter 1
Background and Application

1.1 Background

Trans Québec & Maritimes Pipeline Inc. (TQM, the Company), as mandatary for a partnership consisting of TransCanada PipeLines Limited (TransCanada) and NOVA Corporation of Alberta, operates a pipeline for the transmission of natural gas. The pipeline extends from the point of interconnection with the TransCanada system at St. Lazare, Quebec to a point just west of Québec city, a distance of approximately 298 kilometres.

Natural gas is transmitted by TQM for TransCanada, although not all such gas is owned by TransCanada. Some of the gas owned by TransCanada is sold to TQM at the points of interconnection between TQM and the facilities of Gaz Métropolitain, inc. (GMi), a distributor of natural gas in the province of Quebec. TQM immediately sells the gas to the distributor at the same points. The balance of the gas owned by TransCanada is sold directly to GMi at the distributor's points of interconnection with TQM. The remainder of the gas transmitted by TQM is owned by GMi.

TransCanada is charged the entire toll determined by the National Energy Board (the Board, NEB) to be just and reasonable in respect of transmission services rendered by TQM. Charges to TransCanada by TQM are, upon approval by the Board, included in TransCanada's cost of service as a component of "Transmission by Others". Thus, TQM's toll becomes an integral part of the tolls paid by TransCanada's customers.

Since 1 January 1988, TQM has been charging TransCanada a monthly toll of $6,038,000 in accordance with the requirements of Board Order No. TG-8-87.

1.2 Application

On 7 July 1988, TQM applied under Part IV of the *National Energy Board Act* (the Act) for orders to be effective on 1 January 1989 and 1 January 1990 fixing just and reasonable tolls that TQM might charge for or in respect of the transmission of natural gas through its pipeline facilities and disallowing any existing tolls that would be inconsistent with tolls so fixed.

TQM proposed that the Board deal with the application in a manner similar to that adopted in the proceeding pursuant to Order No. RH-4-87, in which all issues other than rate of return were dealt with by written submission.

TQM proposed tolls that conformed with the fixed-toll method of regulation set by the Board in the Company's first toll case pursuant to Order No. TG-2-83 and reaffirmed by orders arising out of subsequent toll cases.

As part of its application, the Company filed a depreciation study in response to requests of the Board in its two preceding Reasons for Decision.

1.3 Board Procedure

By Order No. RH-2-88 dated 12 August 1988, the Board decided to hold an oral hearing on rate of return issues, to deal with all other issues by written submission and to conclude the hearing with oral argument and reply on all issues.

The hearing took place in Ottawa from 21 to 24 November 1988.

Chapter 2
Revenue Requirement

TQM requested approval of revenue requirements of $71,340,000 for 1989 and $70,298,000 for 1990. The authorized revenue requirement for 1988 was $72,456,000. The decrease of $1,116,000 in 1989 and the further decrease of $1,042,000 in 1990 resulted primarily from a decrease in return caused by the reduction of rate base due to normal depreciation.

Summaries of the approved revenue requirements for the test years ending 31 December 1989 and 31 December 1990, showing the Board's adjustments, are shown in Tables 2-1 and 2-2, respectively. Details of the Board's adjustments to the revenue requirements for the test years are provided in Chapters 3 to 6.

Table 2-1
Revenue Requirememt for the 1989 Test Year
($000)

	Application	**NEB Adjustments**	**Authorized By NEB**
Operating Costs			
Operating and Maintenance	6,892	(70)	6,822
Municipal and Other Taxes	2,199	(10)	2,189
Depreciation and			
Amoritzation	13,015	96	13,111
	22,106	16	22,122
Return on Rate Base	49,304	(729)	48,575
Total Revenue Requirement	71,410	(713)	70,697
Storage Revenue	(70)	1	(69)
Net Revenue Requirement	**71,340**	**(712)**	**70,628**

Table 2-2
Revenue Requirememt for the 1990 Test Year
($000)

	Application	**NEB Adjustments**	**Authorized By NEB**
Operating Costs			
Operating and Maintenance	7,322	(107)	7,215
Municipal and Other Taxes	2,268	(20)	2,248
Depreciation and Amoritzation	13,013	96	13,109
	22,603	(31)	22,572
Return on Rate Base	47,768	(953)	46,815
Total Revenue Requirement	70,371	(984)	69,387
Storage Revenue	(73)	1	(72)
Net Revenue Requirement	**70,298**	**(983)**	**69,315**

Chapter 3
Rate Base

The Board's adjustments to rate base for the 1989 and 1990 test years are summarized in Tables 3-1 and 3-2, respectively. The details of the adjustments are explained in succeeding sections of this chapter.

Table 3-1
Rate Base for the 1989 Test Year
($000)

	Application	**NEB Adjustments**	**Authorized by NEB**
Gas Plant in Service			
Gross Plant	469,696	-	469,696
Accumulated Depreciation	(90,234)	(192)	(90,426)
Net Plant	379,462	(192)	379,270
Working Capital	2,037	(6)	2,031
Tax Benefit on Sponsors' Development Costs	(12,946)	-	(12,946)
Unamortized Debt Issuance Costs	1,318	-	1,318
Total Rate Base	**369,871**	**(198)**	**369,673**

Table 3-2
Rate Base for the 1990 Test Year
($000)

	Application	NEB Adjustments	Authorized by NEB
Gas Plant in Service			
Gross Plant	469,777	-	469,777
Accumulated Depreciation	(103,160)	(192)	(103,352)
Net Plant	366,617	(192)	366,425
Working Capital	2,108	(9)	2,099
Tax Benefit on Sponsors' Development Costs	(12,511)	-	(12,511)
Unamortized Debt Issuance Costs	1,066	19[1]	1,085
Total Rate Base	**357,280**	**(182)**	**357,098**

1 Adjusted to reflect an expected debt re-financing of $55 million (see Section 5.2.1 and Exhibit B-22).

3.1 Gross Plant

TQM forecast its average gross plant in service for the test year ending 31 December 1989 to be $469,696,000, and for the test year ending 31 December 1990 to be $469,777,000.

Decision

The Board has reviewed the projected plant additions for the 1989 and 1990 test years of $350,000 and $76,000, respectively, and finds them reasonable for inclusion in rate base for those test years.

3.2 Accumulated Depreciation

On 26 September 1988 TQM filed an application under Part III of the Act for an amendment to Board Order No. XGM-10-87 whereby the Company requested approval of the leasehold improvement changes resulting from its head office relocation. The Board approved this application by Order No. XGM-16-88 on 26 October 1988 and TQM consequently amended its toll application to reflect the resultant projected changes in certain plant accounts.

As a result of these changes, a difference of $192,000 between the net asset value of the existing leasehold improvements and the proceeds from the disposal of those improvements was left in rate base where it would continue to earn a return.

For Gas Pipeline Uniform Accounting Regulations (GPUAR) purposes, this difference would be treated as an extraordinary retirement and the loss on disposition would be transferred to Account 341 - Extraordinary Income Deductions. Subsection 40(3) of the GPUAR allows for the transfer of all or part of this difference to Account 171 - Extraordinary Plant Losses for amortization at a rate approved by the Board.

Decision

The Board considers the $192,000 difference to result from an extraordinary retirement and requires TQM to amortize this amount equally over the two test years 1989-90 without any return on the unamortized balance. Accumulated depreciation is increased by $192,000 to reflect the removal of this difference from rate base.

3.3 Working Capital

TQM calculated its working capital in accordance with the methodology previously approved by the Board.

The adjustments to cash working capital shown in Tables 3-1 and 3-2 result from the Board's adjustments of TQM's operating and maintenance (O&M) expenses, as detailed in Chapter 6.

Chapter 4
Depreciation and Amortization

4.1 Depreciation Rates

In the August 1986 TQM Reasons for Decision, TQM was directed to file a depreciation study with the Board by 30 June 1989. The Company filed this depreciation study in July 1988 as part of its application for new tolls in 1989-90. For the most part, TQM's existing depreciation rates had been in effect from 1 July 1983.

TQM's existing and applied-for depreciation rates are summarized in Table 4-1.

In determining its depreciation rates, TQM considered the factors prescribed by the Board in its March 1984 TQM Reasons for Decision. These factors included (i) an appropriate statistical analysis, (ii) a determination of service value and (iii) a determination of estimated service life of plant. Both the physical and economic life of the pipeline as well as the Company's history and experience were considered. TQM's depreciation study consultant tied the Company's estimated service life to its estimated economic life of 31.50 years from 31 December 1987. NEB Accounts 461, 463, 464 and 465, accounting for 96.77 percent of TQM's total estimated service value of plant, were deemed to have this estimated remaining life of 31.50 years. The Company determined that the applied-for depreciation rates would increase the cost of service for 1989 and 1990 by about $50,000 and $66,000, respectively.

Intervenors did not comment on TQM's depreciation study.

Decision

The Board, having reviewed TQM's depreciation study, finds the depreciation rates reasonable and is satisfied that consideration has been given to the necessary factors in determining depreciation rates. Accordingly, the Board approves the Company's applied-for depreciation rates effective I January 1989.

Table 4-1
Depreciation Rates
(%)

NEB Account		TQM Existing Depreciation Rate	TQM Applied-For Depreciation Rate
461	Land Rights	2.75	2.75
463	Measuring & Regulating Structures	3.50	2.80
464	Other Structures & Improvements	3.50	2.95
465	Mains	2.75	2.75
467	Measuring & Regulating Equipment	3.50	5.15
468	Communication Structures	10.00	10.00
482	Structures and Improvements	10.00	10.00
483	Office Furniture	7.00	7.00
484	Transportation	20.00	16.00
485	Heavy Duty Work Equipment	10.00	6.75
486	Tools and Work Equipment	7.00	7.00
489	Other Equipment	10.00	11.00

4.1.1 Negative Reserve

In its review of depreciation rates, TQM's consultant arrived at a negative depreciation reserve of $77,272 for NEB Account 484 - Transportation Equipment. This resulted when the Company, during a period of downsizing, was unable to realize the expected positive salvage contemplated in the approved depreciation rates on disposal of some equipment. The Company's approach to correcting this deficit reserve was to include it in the reallocation of the total book reserve among all accounts in the same ratio to the total as each account's calculated reserve was to the total Company's calculated reserve. In deriving its calculated depreciation reserve, TQM's consultant used the following equation:

$$\frac{\text{Average Service Life - Remaining Life}}{\text{Average Service Life}}$$

$$\times \ \text{Estimated Service Value}$$

The procedure employed by TQM did not change the total book reserve but adjusted each of the reserve accounts to more accurately reflect what they would have been if currently estimated service lives, salvage amounts and mortality dispersions had been experienced since the inception of the Company's operations. Since the reallocation among the reserve accounts involved material adjustments, TQM requested Board approval under subsection 56(2) of the GPUAR.

Decision

The Board has reviewed TQM's accounting treatment for the negative depreciation reserve of $77,272. Although the Board finds the negative reserve by itself not to be material for GPUAR purposes, it considers the proposed reallocation among the reserve accounts as material adjustments subject to Board approval under the GPUAR. The Board is satisfied with TQM's proposed accounting treatment for the negative depreciation reserve and approves the reallocation of the total book reserve as applied for.

4.2 Unamortized Leasehold Improvements

In Section 3.2 of these Reasons, the Board adjusted TQM's rate base and required the Company to amortize $192,000 of leasehold improvements equally over the test years 1989-90 without any return on the unamortized balance. The result of this decision was to add $96,000 to amortization expense for the two test years, 1989 and 1990.

Chapter 5
Cost of Capital

In its application, TQM applied for rates of return on equity of 14.50 percent for 1989 and 14.75 percent for 1990. Details of the applied-for capital structures and requested rates of return are shown in Tables 5-1 and 5-2, and discussed in detail in succeeding sections of this chapter.

Table 5-1
Applied-For Deemed Average
Capital Structure and Rates of Return
for the 1989 Test Year

	Amount ($000)	**Capital Structure (%)**	**Cost Rate (%)**	**Cost Component (%)**
Debt - Funded	280,692	75.89	12.89	9.78
- Prefunded	(3,289)	(.89)	9.50	(.08)
Total Debt Capital	277,403	75.00		9.70
Equity	92,468	**25.00**	**14.50**	3.63
Total Capitalization	**369,871**	**100.00**		**13.33**

Table 5-2
Applied-For Deemed Average
Capital Structure and Rates of Return
for the 1990 Test Year

	Amount ($000)	**Capital Structure (%)**	**Cost Rate (%)**	**Cost Component (%)**
Debt - Funded	269,769	75.51	12.82	9.68
- Prefunded	(4,560)	(1.28)	8.50	(.11)
Total Debt Capital	265,209	74.23		9.57
Equity	92,071	**25.77**	**14.75**	3.80
Total Capitalization	**357,280**	**100.00**		**13.37**

5.1 Capital Structure

TQM's approved capital structure has been deemed at 75 percent debt and 25 percent equity since the Board's first TQM toll decision in June 1983. In the current proceeding, TQM proposed that the common equity component be permitted to increase to 30 percent at the time of its required debt re-financing in late 1990. The Company's request would result in deemed capital structures of 75 percent debt and 25 percent equity in 1989 and 74.23 percent debt and 25.77 percent equity[1] in 1990. TQM's expert witness suggested that an equity ratio of at least 30 percent is necessary for the following reasons: (i) the need for increased flexibility in accessing capital markets; (ii) to improve the Company's low interest coverage ratios; (iii) a 25 percent equity ratio placed TQM at the lowest level of a sample of utilities; and (iv) an increase in the equity ratio would improve the possibility of a quality upgrade on TQM's bonds.

On the latter point, TQM argued that, while there was no assurance of a bond rating upgrade, both rating agencies and financial markets would recognize the improvement in its capital structure. TQM's expert witness stated that, based on the proposed equity ratio increase, an increased bond rating of more than one category would be difficult to achieve.

TQM was asked to provide calculations to show the effect of the proposed increase in the equity component on the cost of service. Under the assumption that the proposed increase would raise the bond rating and reduce the cost of debt, the Company's calculations showed that, under a 30 percent

[1] The deemed equity ratio of 25.77 percent was determined on a 13-point average basis (i.e. the average of 11 monthly balances of 25 percent, and month-end balances of 30 percent for November and December).

equity scenario, the cost of service would be higher than under the currently approved 25 percent equity scenario. In its calculations, TQM had assumed a 25 basis point spread between bond ratings.

The Company's expert witness argued that such an assessment of a company's borrowing capacity should be performed under an "adversity-type" scenario. As an example of such a scenario, he cited maximum spreads of almost 100 basis points which had occurred in the early 1980s.

TQM's witness believed that the Company's short-run business risks have remained relatively unchanged since the last toll hearing; however, it was his view that TQM's long-term risks have increased as a result of recent changes to the energy sector and the uncertain responses of regulators to such changes.

The Canadian Petroleum Association (CPA) took the position that the equity ratio should be maintained at its current level of 25 percent. CPA argued that such an equity ratio was reasonable, cost-effective and would not affect TQM's ability to re-finance at reasonable rates.

CPA's expert witness noted that, since TQM's rate base is expected to decline, any future debt refinancing would be smaller than the maturing issues, and should enhance the Company's access to funding sources. Further, he believed that because TQM's cost of service is included in TCPL's cost of service, this served to reduce TQM's financial exposure and thus its risk. The witness took the position that there had been no change in TQM's longer-term business risks since the Company's last toll hearing.

On the question of cost-effectiveness, CPA's witness concluded that any reduction in the cost of debt would be substantially outweighed by the increase to the cost of equity. The witness did not believe that it was necessary, at this point in time, to consider possible adverse market conditions in assessing TQM's request. In his opinion, even a 100 basis point reduction in the cost of debt would not make an increased equity ratio cost-effective.

Decision

In reaching its decision in this matter, the Board was guided by the following:

- **considerations relating to the inherent business risks faced by TQM's utility operations;**

- **the need to maintain an appropriate balance between the debt and equity elements of a company's capital structure; and**

- **the historical evolution of a company's capital structure.**

The Board finds that neither the Company's short-term nor longer-term business risks have increased since last year.

The evidence presented in this proceeding did not convince the Board that an increase in TQM's equity ratio was required for the Company to access capital markets at reasonable terms. Nor was the Board persuaded that such an increase would be cost-effective from the perspective of the tollpayer.

With respect to historical considerations, the Board notes that TQM's approved capital structure for toll-making purposes has been at its present level since 1983, and that there has been apparent market acceptance of TQM's capital structure. Bond rating agencies do not appear to be overly concerned about TQM's capital structure and coverage ratios.

Based on the evidence presented in this case, the Board denies the Company's application to increase the deemed common equity component to 30 percent in November 1990. The Board approves a deemed common equity ratio of 25 percent for the 1989 and 1990 test years.

5.2 Cost of Debt

5.2.1 Funded Debt

TQM applied for cost rates for funded debt of 12.89 percent for 1989 and 12.82 percent for 1990. These rates were determined in a manner consistent with that approved in the Board's November 1987 TQM Reasons for Decision. The methodology used to determine these cost rates was not at issue during the proceeding.

The applied-for cost rate for 1989 reflects the Company's currently-outstanding long-term debt and, as such, was not examined extensively during the hearing. There was some discussion of TQM's proposed debt re-financing, expected to take place in November 1990. Based on its request to increase the deemed equity ratio to a level of 30 percent at that time, the Company stated its intention was to issue $40 million in debt, at an estimated cost rate of 11.70 percent. TQM also indicated that, if the equity ratio were maintained at 25 percent, the debt issue would be $55 million.

The estimated cost rate of 11.70 percent was supported by a long-term Government of Canada bond (long-Canada) rate of 10 percent, a spread of 150 basis points for bonds rated B++ and the advice of the Company's expert witness that investors are expecting capital costs to rise by 25 basis points in 1990.

Decision

With respect to 1989, the Board approves the applied-for funded debt balance and associated cost rate of $280,692,000 and 12.89 percent, respectively.

In the case of 1990, the proposed debt issue will take place late in the year and any difference between the actual rate and the forecast rate of 11.70 percent would result in only a minor impact on TQM's 1990 cost of service. The Board accepts as reasonable a cost rate of 11.70 percent for the proposed debt issue. As to the funded debt balance, consistent with the Board's decision in Section 5.1 of these Reasons, TQM's debt balance has been increased to reflect an expected debt issue of $55 million, increasing the amount of funded debt to $272,077,000. In addition, the Board has adjusted the balance of unamortized debt issuance costs to be included in 1990's rate base (Table 3-2), and the amortization of such costs for that test year.

As a result of these decisions, there was no change in the funded debt cost rate applicable to 1990 and the Board approves the applied for rate of 12.82 percent. (See Appendix III for a derivation of the approved funded debt balances and associated cost rates for the test years.)

5.2.2 Prefunded Debt

Prefunded debt represents the portion of funded debt that has been raised in advance of the Company's actual cash requirements. TQM has costed its forecast prefunded debt balances at rates of 9.50 percent for 1989 and 8.50 percent for 1990. These rates are equal to the interest rate that the Company expects to receive on its bank balances during the test years, based on a formula of prime less 2.50 percent. In support of the test-year forecasts of the prime rate, TQM presented recent forecasts made by a number of financial institutions. CPA's expert witness was willing to accept the cost rates of prefunded debt applied for by the Company.

Decision

The Board finds the Company's approach to costing its forecast prefunded debt balances to be reasonable. The Board accepts the applied-for cost rates of 9.50 percent for 1989 and 8.50 percent for 1990.

5.3 Rate of Return on Equity

TQM applied for rates of return on equity of 14.50 percent for 1989 and 14.75 percent for 1990, as compared to the currently-approved rate of 13.75 percent for 1988. TQM relied on the recommendations of its expert witness, whose advice was based primarily on the use of the discounted cash flow (DCF), comparable earnings and equity risk premium cost estimation techniques. The witness recommended a higher rate for 1990 to reflect his view that capital costs in that year would be higher than in 1989.

In arriving at his recommendation, TQM's witness employed seven estimates using the DCF approach, three relating to equity risk premium and one for comparable earnings, which was an indication of the amount of weight to be accorded to each of the techniques. In this regard, he noted that the DCF and risk premium approaches are market-based tests and should, in his view, be given more weight.

In his DCF analysis, TQM's witness relied on 10-year data to arrive at the growth component of the DCF approach. In assessing long-term growth potential, he suggested that investors would consider many types of economic periods, including periods of both high and low levels of inflation. While agreeing that historical growth rates could possibly be distorted by past high and volatile inflation rate levels, the witness did not adjust his DCF results, citing the potential for double counting if such an adjustment were made.

TQM's witness performed two risk premium analyses relative to small utility samples, and a third based on his assessment of the risk premium required for TQM relative to the market as a whole. In his utility analyses, he focussed on the risk premiums for his sample companies for the years 1984-1987, suggesting that the risk premium results for that period are more representative of current conditions. For the market as a whole, the witness utilized a risk premium of 7.4 percentage points; in reaching this conclusion, he ignored the realized risk premiums measured over short time periods given their great dependence on short-term market developments.

CPA recommended a rate of return on equity for the test years in the range of 12.75 to 13 percent based on the recommendations of its expert witness. The witness relied on the results of his DCF and equity risk premium analyses.

In his DCF analysis, CPA’s expert witness included an allowance of 25 basis points to account for his perception of the different risks faced by TQM relative to TCPL. Unlike TQM s expert witness, CPA’s witness placed greatest emphasis on the observed five-year growth data for his sample companies, believing that future growth rates will more closely mirror those achieved in the past five years.

It was suggested by TQM that, because of the manner in which the sample data were weighted, the growth rates used by CPA’s witness in his DCF analysis contained a severe downward bias. The witness agreed that there was a systematic relationship in his growth rate data. However, be argued that the averaging process be used to determine his growth rate estimates served to avoid any potential bias.

In his risk premium analysis, CPA’s witness utilized a risk premium for the market as a whole of 5 percentage points, consistent with his evidence in TQM’s last toll hearing. In developing his current risk premium estimate, the witness utilized a long-Canada rate of 10 percent. This compares to a rate of 9.75 percent which be utilized in last year’s proceeding. It was noted in argument that the witness’ risk premium result of 12.75 percent was 25 basis points above his risk premium result in last year’s proceeding.

CPA’s witness recommended the same rate of return on equity for both test years, stating that he had no basis for thinking investors perceive 1990 to be any riskier than 1989. He noted that, if anything, rates in 1990 will be lower than in 1989. The witness stated that there has been almost no change in investors’ assessments of long-term market relationships in the last year.

Decision

With regard to the evidence of the expert witnesses, the Board has relied primarily on the DCF and equity risk premium results. In the circumstances of this case, the Board has placed less reliance on the results of the comparable earning approach. In so doing, the Board recognizes that only TQM’s witness employs this technique and that he gave it considerably less weight in arriving at his recommended rates of return on equity.

Concerning the witnesses’ DCF analysis, the Board notes that the main area of disagreement relates to the growth components used by the witnesses. In the Board’s view, there is some merit to the argument that investors’ future growth rate expectations would likely be closer to the growth rates experienced in the most recent five-year period.

With regard to the equity risk premium results, the Board notes that the risk premium used by the Company’s witness for the market as a whole is quite

divergent from that used by Company witnesses in past proceedings and the one employed by CPA's witness during this hearing. The Board has doubts that the risk premium currently required by investors in an average-risk stock is around 7.4 percentage points.

The Board recognizes that forecast long-term interest rates are slightly higher than at the time of the last TQM toll hearing. The Board notes that despite this slight increase, the parties are recommending rates of return on equity that are the same or lower than the rates recommended last year. Given the modest change in economic conditions, and the similarity of the test results to those presented in the last proceeding, the Board finds that no change in the approved rate of return on equity is warranted. As well, the Board was not persuaded that the potential for interest rate volatility will be any greater in 1990 as compared to 1989. Accordingly, the Board approves a rate of return on equity of 13.75 percent for both test years.

5.4 Rate of Return on Rate Base

Based on its findings in this case, the Board approves rates of return on rate base of 13.14 percent for 1989 and 13.11 percent for 1990. The approved capital structures and overall rates of return are summarized in Tables 5-3 and 5-4.

5.5 Income Taxes

5.5.1 Income Tax Losses Carried Forward

In its November 1987 TQM Reasons for Decision, the Board provided a schedule of TQM's income tax losses carried forward for toll-making purposes. The Board also directed TQM to use the equity portion of the return on rate base as the utility income after tax in deriving its income tax provision for toll-making purposes. TQM has accordingly revised its reporting methodology. Table 5-5 shows the Company's income tax losses carried forward for toll-making purposes for the period 1983-1990.

Table 5-3
Applied-For Deemed Average
Capital Structure and Rates of Return
for the 1989 Test Year

	Amount ($000)	Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt - Funded	280,692	75.93	12.89	9.79
- Prefunded	(3,437)	(.93)	9.50	(.09)
Total Debt Capital	277,255	75.00		9.70
Equity	92,418	**25.00**	**13.75**	3.44
Total Capitalization	**369,673**[1]	**100.00**		**13.14**

1 Capitalization set equal to rate base (see Chapter 3).

Table 5-4
Applied-For Deemed Average
Capital Structure and Rates of Return
for the 1990 Test Year

	Amount ($000)	Capital Structure (%)	Cost Rate (%)	Cost Component (%)
Debt - Funded	272,077	76.19	12.82	9.77
- Prefunded	(4,254)	(1.19)	8.50	(.10)
Total Debt Capital	267,823	75.00		9.67
Equity	89,275	**25.00**	**13.75**	3.44
Total Capitalization	**357,098**[1]	**100.00**		**13.11**

1 Capitalization set equal to rate base (see Chapter 3).

Table 5-5
Income Tax Losses Carried Forward for Toll-Making Purposes
1983-1990
($000)

	1983	1984	1985	1986	1987	1988	1989	1990
Losses Carried Forward (Opening Balance)	(40,615)	(80,645)	(74,224)	(60,707)	(47,023)	(35,479)	(25,990)	(16,438)
Taxable Income/ (Loss)[1]	(8,403)	6,421	13,517	13,684	11,544	9,489	9,552	10,411
Sponsors' Development Costs	(31,627)	-	-	-	-	-	-	-
Losses Carried Forward (Closing Balance)	**(80,645)**	**(74,224)**	**(60,707)**	**(47,023)**	**(35,479)**	**(25,990)**	**(16,438)**	**(6,027)**

1 Utility income after tax, as adjusted, prior to adjusting for income tax losses carried forward.

Chapter 6
Operating Costs

6.1 Operating and Maintenance Expenses

6.1.1 Inflation Escalation

In estimating the majority of its O&M expenses for the 1989 and 1990 test years, TQM escalated the base-year amounts by 8.7 percent for 1989 (composed of 3.7 percent for the last three quarters of 1988 - an annual rate of 4.9 percent, and 5 percent for 1989), and 5.5 percent for 1990. These escalation adjustments were based on the Company's estimates of the projected rate of inflation. For its estimates of the rate of inflation, the Company relied on Consumer Price Index (CPI) forecasts made by the Conference Board of Canada and Data Resources Inc. in April and May of 1988.

Decision

The Board notes that, for the period January to October 1988, the actual increase in the CPI reported by Statistics Canada for the Province of Quebec and for Montreal are significantly lower than the national average. As well, after reviewing the third-quarter forecasts of inflation for 1988, 1989 and 1990 currently available to it, the Board has concluded that the escalation adjustments made by TQM are somewhat high.

Accordingly, for the purposes of escalating O&M expenses, the Board approves an escalation adjustment factor of 7.5 percent for the 1989 test year (comprised of 3 percent for the last three quarters of 1988 and 4.5 percent for 1989), and 4.5 percent for the 1990 test year. As a result of the Board's decisions, the O&M expenses will be adjusted downward by $19,000 in the 1989 test year and by $19,000 in the 1990 test year.

6.1.2 Forecast of Operating and Maintenance Expenses

In previous toll applications TQM used a zero-based budgeting process to forecast O&M expenses because of its downscaling program. With this program effectively terminated, TQM forecasted its 1989-90 O&M expenses by adjusting the actual twelve-month base-period expenses ended 31 March 1988 to reflect inflation, forecast activity changes and known commitments. The Company asserted that, with downscaling completed, the base-period expenses provided a reasonable basis for projecting future O&M costs. Excluding salaries and employee benefits, TQM applied for O&M expenses of $3,652,000 for 1989 followed by $3,882,000 for 1990.

Decision

For the years 1986-87, TQM's actual O&M expenses, excluding salaries and employee benefits, have averaged about 8 percent less than the cost of service amounts approved by the Board. However, with downscaling terminated, the Board is satisfied that the use of actual base-year expenses by TQM will help the Company to more accurately forecast its O&M expenses. The Board accepts

TQM's forecast of 1989-90 O&M expenses as adjusted for inflation in Section 6.1.1, but will continue to monitor the accuracy of the Company's projections.

6.1.3 Salary Rate Increase

The Company provided evidence that an independent survey performed by a consultant showed that TQM's 1987 job rates were within 10 percent of the survey standard and therefore considered to be competitive in the marketplace. For 1988, the Company had increased its salary structure by 4 percent and its overall salary budget by 4.9 percent.

TQM's estimate of its permanent staff salaries for the 1989 test year reflected an escalation rate of 9.2 percent. This was comprised of 3.7 percent for the last three quarters of 1988, that is, an annual rate of 4.9 percent, and 5.5 percent overall for 1989, including 0.5 percent for promotion and merit. For the 1990 test year, TQM provided for a salary increase of 6 percent overall, including 0.5 percent for promotion and merit. For temporary employees, it proposed an increase of 5 percent for 1989 and 5.5 percent for 1990. TQM's proposed salary increases were based on its inflation rate forecasts and the belief that salaries would keep pace with inflation.

TQM's estimates of salary expense for the 1989 and 1990 test years also took into account a modest reduction in person-years.

Decision

The Board notes that the proposed year-over-year salary increases exceed current forecasts of the rates of inflation for 1988 and the two test years. After considering all the information available to it, the Board has decided to approve overall salary rate increases of 7.5 percent for the 1989 test year (comprised of 3 percent for the last three quarters of 1988 and 4.5 percent for 1989), and 4.5 percent for the 1990 test year. The Board's decisions causes a reduction in forecast salaries expense of $41,250 in the 1989 test year and $81,350 in the 1990 test year.

6.1.4 Pension Plan Accounting Treatment

TQM reflected pension costs in its application that had been forecasted based upon a cash-flow accounting methodology that it believed to be consistent with the income tax flow-through methodology under which it is regulated. However, accounting for pension costs in this manner departs from the method that is recommended by the Canadian Institute of Chartered Accountants (CICA). For the 1989-90 test years the Company estimated pension costs under each methodology as follows:

Methodology	**1989**	**1990**
Cash-Flow Basis	$153,100	$162,300
CICA Basis	143,100	155,300
Difference	**10,000**	**7,000**

TQM stated that while the method of determining pension plan premiums did not have to be consistent with the method of income tax calculation, it felt there was some merit in being consistent with the "cash-basis" principle usually favoured by the Board.

In its November 1987 Reasons for Decision for Westcoast Energy Inc. (Westcoast), the Board examined the proposed treatment of pension costs where Westcoast, in following a cash basis, flowed through the benefit of deferred charges by treating pension expenses in the same manner as income taxes. The Board found that the cash or flow-through basis did not provide a proper matching of pension costs with the incurrence of the obligation and thus directed Westcoast to conform with the CICA pension accounting recommendations for its 1987-88 test-year costs of service.

Intervenors did not comment on TQM's accounting treatment of pension costs.

Decision

The Board notes that the flow-through methodology used by TQM in accounting for pension costs is consistent with its treatment of income taxes. However, the Board agrees with the CICA recommendations on accounting for pension costs because they provide for a proper allocation of the cost of the pension plan to the year in which the related employee services are rendered. Accordingly, the Board has decided to adjust the 1989 and 1990 O&M expenses to reflect the pension accounting recommendations of the CICA. The Board directs TQM to follow those accounting recommendations in presenting subsequent test-year costs of service.

6.2 Municipal and Other Taxes

TQM projected the municipal taxes portion of this operating cost for the two test years by applying its estimate of the applicable inflation rates to the cost actually incurred in the base year. The rates used are as described in Section 6.1.1.

The Board decided to revise these rates, also as described in Section 6.1.1. Accordingly, the projection of municipal taxes has been adjusted to reflect this decision, resulting in reductions of $10,000 and $20,000, respectively, for the 1989 and 1990 test years.

Chapter 7
Tariff Matters

TQM applied for tolls for 1989 and 1990 determined in conformity with the fixed-toll method of regulation established by the Board in TQM's first toll case in 1983. The monthly toll proposed by TQM is one-twelfth of the requested revenue requirements for the test years. The requested and approved revenue requirements for the 1989 and 1990 test years are shown in these Reasons for Decision in Tables 2-1 and 2-2, respectively.

Decision

As in previous decisions the Board considers the fixed-toll methodology to be appropriate for TQM. The Board has adjusted various components of the Company's requested revenue requirements, as described in preceding chapters of these Reasons for Decision. Total approved revenue requirements of $70,628,000 for 1989 and $69,315,000 for 1990 have resulted from these proceedings. Accordingly, the Board approves monthly tolls of $5,886,000 for 1989 and $5,776,000 for 1990.

Chapter 8
Disposition

The foregoing chapters, together with Board Order No. TG-10-88, constitute our Reasons for Decision and our Decision on this matter.

A.B. Gilmour
Presiding Member

J.-G. Fredette
Member

R.B. Horner, Q.C.
Member

Ottawa, Canada
December 1988

Appendix I
Hearing Order RH-2-88

Direction on Procedures

File: 1562-T28-8

12 August 1988

Trans Québec & Maritimes Pipeline Inc.
Application for Tolls Effective 1 January 1989 and 1 January 1990

By application dated 7 July 1988 Trans Québec Maritimes Pipeline Inc. ("TQM" or "the Applicant") applied to the National Energy Board ("the Board") for certain orders respecting tolls under Part IV of the *National Energy Board Act*.

In its application, TQM proposed that the application be dealt with in a manner similar to that adopted for TQM's last toll hearing. In those proceedings, all issues other than rate of return were dealt with in writing.

On 22 July 1988, the Board declared its intention to deal with certain specific issues such as rate of return by way of an oral hearing, and to deal with the remainder of the issues by written submission. In this regard, interested parties were invited to identify other issues that they wished to address by way of the oral bearing.

Having considered the application and the submissions of interested parties, the Board decided on 12 August 1988 to proceed as follows:

(a) The Board will hold an oral hearing on the specific issue of rate of return as identified in Appendix IV to this Order;

(b) other issues to be dealt with by written submission are also identified in Appendix IV; and

(c) the hearing will conclude with oral argument and reply on all issues.

Accordingly, the Board directs as follows:

PUBLIC VIEWING

1.The Applicant shall deposit and keep on file, for public inspection during normal business hours, a copy of the application in its offices at:

870, boulevard de Maisonneuve est,
Montréal, Québec, H2L 1Y6.

A copy of the application is also available for viewing during normal business hours in the Board's offices at the following locations:

Library,
Room 962,
473 Albert Street,
Ottawa, Ontario,
K1A 0E5

and at

4500-16th Avenue, N.W.,
Calgary, Alberta,
T3B OM6.

INTERVENTIONS

2. Interventions are required to be filed with the Secretary and served on the Applicant by 9 September 1988. Interventions should include all the information set out in subsection 32(l) of the Board's revised *Draft NEB Rules of Practice and Procedure* dated 21 April 1987.

3. Intervenors wishing to raise matters not addressed in TQM's application should so indicate at the time of filing their intervention.

4. The Secretary will issue a list of intervenors shortly after 9 September 1988.

APPLICANTS' WRITTEN SUBMISSIONS AND WRITTEN EVIDENCE

5. Any additional written evidence that the Applicant wishes to present, including its written submission on all issues not being considered in the oral portion of the hearing, shall be filed with the Secretary and served on all other parties to the proceeding by 16 September 1988.

INFORMATION REQUESTS TO THE APPLICANT

6. Information requests addressed to the Applicant are required to be filed with the Secretary and served on all other parties by 27 September 1988.

7. The Applicant's response to information requests received within the specified time limit shall be filed with the Secretary and served on all parties to the proceeding by 4 October 1988.

LETTERS OF COMMENT

8. Letters of comment are required to be filed with the Secretary and served on the Applicant by 14 October 1988.

INTERVENOR'S WRITTEN SUBMISSIONS AND WRITTEN EVIDENCE

9. Intervenor written evidence, including written submissions on all issues not being considered in the oral portion of the hearing, is required to be filed with the Secretary and served on all other parties to the proceeding by 14 October 1988.

INFORMATION REQUESTS TO INTERVENORS

10. Information requests to intervenors are required to be filed with the Secretary and served on all other parties by 21 October 1988.

11. Intervenors' responses to information requests received within the specified time limit shall be filed with the Secretary and served on all other parties by 1 November 1988.

HEARING

12. The oral portion of the public hearing will commence in the Board's hearing room, 473 Albert Street, Ottawa, Ontario, on Monday, 21 November 1988 at 1:00 p.m., local time.

SERVICE TO PARTIES

13. The Applicant shall serve a copy of these Directions on Procedure and the Notice of Public Hearing, attached as Appendix I, forthwith on all parties identified in Appendix II.

NOTICE OF HEARING

14. The publications in which the Applicant is required to publish the Notice of Public Hearing on or before 23 August 1988 are listed in Appendix III.

LIST OF ISSUES

15. The issues to be addressed at the oral hearing and by written submission are identified in Appendix IV.

FILING AND SERVICE REQUIREMENTS

16. Where parties are directed by these Directions on Procedure or by the revised *Draft NEB Rules of Practice and Procedure* to file or serve documents on other parties, the following number of copies shall be served or filed:

    (i) for documents to be filed with the Board, provide 30 copies;

    (ii) for documents to be served on the Applicant, provide 3 copies; and

    (iii) for documents to be served on intervenors, provide 1 copy.

17. Parties filing or serving documents at the hearing shall file or serve the number of copies specified in the preceding paragraph.

18. Persons filing letters of comment should serve one copy on the Applicant and file one copy with the Board, which in turn will provide copies for all other parties.

19. Parties filing or serving documents less than four business days prior to the commencement of the hearing shall also bring to the hearing a sufficient number of copies of the documents for use by the Board and other parties present at the bearing.

SIMULTANEOUS INTERPRETATION

20. The proceeding will be conducted in either of the two official languages and simultaneous interpretation will be provided.

GENERAL

21. All parties are asked to quote Hearing Order No. RH-2-88 and File No. 1562-T28-8 when corresponding with the Board in this matter.

22. These directions supplement the revised *Draft NEB Rules of Practice and Procedure* dated 21 April 1987.

23. Appendix V is a timetable of pre-hearing due dates in these proceedings.

24. For information on this hearing or the procedures governing the hearing contact Mr. Gar McDonnell, Regulatory Support Officer, at (613) 998-7196.

J.S. Klenavic
Secretary

Attachments

APPENDIX I to Order RH-2-88

NATIONAL ENERGY BOARD
NOTICE OF PUBLIC HEARING

Trans Québec & Maritimes Pipeline Inc.
Application for Tolls Effective I January 1989
and 1 January 1990

The National Energy Board ("the Board") will conduct a hearing into an application dated 7 July 1988 by Trans Québec & Maritimes Pipeline Inc. ("the Applicant") pursuant to Part IV of the *National Energy Board Act* for, among other things, orders respecting the tolls which the Applicant may charge for the transmission of natural gas as of 1 January 1989 and 1 January 1990.

The Board has decided to deal with rate of return issues by means of an oral hearing. All other issues will be examined by way of written submission. The oral portion of the hearing will commence on Monday, 21 November 1988 at 1:00 p.m. in the Board's hearing room, 473 Albert Street, Ottawa, Ontario. The hearing will conclude with oral argument and reply on all issues.

The hearing will be public and will be held to obtain the evidence and views of interested parties on the application.

Anyone wishing to intervene in the hearing must file a written intervention with the Secretary of the Board and serve a copy on the Applicant at the following address:

> Trans Québec & Maritimes Pipeline Inc.
> 870, boulevard de Maisonneuve est,
> Montréal, Québec, H2L 1Y6

The Applicant will provide a copy of the application to each intervenor.

The deadline for receipt of written interventions is 9 September 1988. The Secretary will then issue a list of intervenors.

Anyone wishing only to comment on the application should write to the Secretary of the Board and send a copy to the Applicant by 14 October 1988.

Information on the procedures for this hearing (Hearing Order RH-2-88) or the revised *Draft NEB Rules of Practice and Procedure* dated 21 April 1987 governing all hearings (both documents available in English and French) may be obtained by writing to the Secretary or telephoning the Board's Regulatory Support Office at (613) 998-7204.

John S. Klenavic
Secretary
National Energy Board
473 Albert Street
Ottawa, Ontario
K1A 0E5
Telecopier No. 990-7900
Telex No. 053-3791

12 August 1988.

APPENDIX II to Order RH-2-88

LIST OF PARTIES

All parties pursuant to Order No. RH-4-87;

All other parties who have expressed an interest to the Applicant in the matters raised in the application; and

Assistant Deputy Minister for Energy
Ministry of Energy, Mines and Petroleum Resources
Parliament Buildings
Victoria, B.C.
V8V 1X4

Senior Solicitor
Department of Energy and Natural Resources
10th Floor, South Tower
Petroleum Plaza
9915 - 108th Street
Edmonton, Alberta
T5K 2C9

Attention: Mr. Geoffrey Ho

Attorney General for the Province of
Saskatchewan
Department of Justice
8th Floor, 1874 Scarth Street
Regina, Saskatchewan
S4P 3V7

Attention: Mr. Greg Blue

Attorney General for the Province of Manitoba
Legislative Buildings
Winnipeg, Manitoba
R3C OV8

Director
Legal Branch, 12th Floor
Ministry of Energy
56 Wellesley Street West
Toronto, Ontario
M7A 2B7

Attorney General of the Province of Quebec
Edifice Delta
1200 route de l'église
Ste Foy, Quebec
GlR 4X7

Me. Jean Giroux
Service juridique du Ministère de l'énergie et des ressources
200B, chemin Ste Foy, 6e étage
Quebec, Quebec
GlR 4X7

Attorney General for the Province of New Brunswick
Legislative Buildings
Fredericton, New Brunswick
E3B 5H1

Office of the Deputy Minister
Nova Scotia Department of Mines and Energy
P.O. Box 1087
1690 Hollis Street
Halifax, N.S.
B3J 2X1

Minister of Justice and Attorney General
Province of Prince Edward Island
Province House
Charlottetown, P.E.I.
C1A 7N8

Attorney General for the Province of Newfoundland
Confederation Building
St. John's, Newfoundland
A1C 5T7

Commission Secretary
British Columbia Utilities Commission
4th Floor
800 Smithe St.
Vancouver, B.C.
V6Z 2E1

General Manager
British Columbia Petroleum Corporation
6th Floor
1199 West Hastings Street
Vancouver, B.C.
V6E 3T5

Vice-President, Corporate Secretary
Canadian Gas Association
55 Scarsdale Road
Don Mills, Ontario
M5B 2R3

APPENDIX III to Order RH-2-88

LIST OF PUBLICATIONS

Publications	City
"Herald"	Calgary, Alberta
"The Edmonton Journal" & "Le Franco-Albertain"	Edmonton, Alberta
"The Leader-Post" & "Journal l'eau-vive"	Regina, Saskatchewan
"The Winnipeg Free Press"	Winnipeg, Manitoba
"La Liberté"	St. Boniface, Manitoba
"The Globe and Mail (national edition)", "Toronto Star", "Financial Times of Canada", "The Financial Post" & "L'Express"	Toronto, Ontario
"The Ottawa Citizen" & "Le Droit"	Ottawa, Ontario
"The Gazette", "Le Devoir" & "La Presse"	Montreal, Quebec
"Le Soleil" & "The Chronicle Telegraph"	Quebec, Quebec
"Le Matin"	Moncton, N.B.
"Canada Gazette"	Ottawa, Ontario

APPENDIX IV to Order RH-2-88

LIST OF ISSUES

A. The following issues will be considered in the oral portion of the hearing:

1. Rate of return
   - rate of return on equity
   - cost of debt
   - capital structure.

B. The following issues will be considered by written submission:

1. Wages, salaries and employee benefits,
2. Person-years,
3. Cost escalation factors employed by TQM,
4. Forecasts of operating and maintenance expenses,
5. Depreciation rates and the TQM study dated 21 July 1988,
6. Income taxes,
7. Miscellaneous gas plant in service, and
8. Other issues identified in the interventions.

Appendix II
Order No. TG-10-88

IN THE MATTER OF the *National Energy Board Act* ("the Act") and the Regulations made thereunder;

AND IN THE MATTER OF an application by Trans Québec & Maritimes Pipeline Inc. ("TQM") made under Part IV of the Act for certain orders respecting tolls and tariffs, filed with the Board under File No. 1562-T28-8.

BEFORE:

A.B. Gilmour
Presiding Member

J.G. Fredette
Member

On Monday, the 12th
day of Delcember 1988

R.B. Horner, Q.C.
Member

WHEREAS by application dated 7 July 1988, as revised, TQM sought approval by the Board, effective 1 January 1989 and 1 January 1990, of fixed transportation tolls for transmission of natural gas through its pipeline facilities;

AND WHEREAS by the said application TQM requested approval of certain revised depreciation rates;

AND WHEREAS by the said application, TQM requested Board approval of the Company's proposal to reallocate the negative accumulated depreciation book reserve for NEB Account 484 - Transportation Equipment amongst other book reserves in the manner set forth in the said application;

AND WHEREAS TQM has incurred a loss of $192,000 on the retirement of leasehold improvements;

AND WHEREAS the Board considers the $192,000 loss incurred to have resulted from an extraordinary retirement of plant;

AND WHEREAS TQM has been accounting for pension costs on a cash-flow basis;

AND WHEREAS the Board has decided that accounting for pension costs should provide for a proper allocation of pension plan costs to the year in which the related employee services are rendered, in accordance with the recommendation of the Canadian Institute of Chartered Accountants;

AND WHEREAS by Order No. TG-8-87, dated 12 November 1987, the Board ordered TQM to charge, in respect of the transportation service provided to TransCanada PipeLines Limited, a monthly toll for the 1987 test year of $6.392 million and for the 1988 test year of $6.038 million;
AND WHEREAS the amount of the refund provided for in paragraph 3 of Order No. TG-8-87 was inaccurately calculated;

AND WHEREAS by Order No. AO-1-TG-8-87 the Board amended paragraph 3 of Order No. TG-8-87 and ordered TQM to make a further refund of $0.110 million to TransCanada PipeLines Limited;

AND WHEREAS pursuant to Order No. RH-2-88 the Board examined and heard the written and oral evidence of TQM and all interested parties with respect to the said application;

AND WHEREAS the Board has determined a just and reasonable monthly toll for the 1989 test year of $5.886 million and for the 1990 test year of $5.776 million, based upon, amongst other things, a deemed capital structure of 75 percent debt and 25 percent equity, and a rate of return on equity of 13.75 percent for each of the two test years;

IT IS ORDERED THAT:

1. TQM shall for accounting, toll-making and tariff purposes, implement procedures conforming to the Board's decisions outlined in the Reasons for Decision to be issued following the issue of this toll order.

2. TQM shall charge, in respect of its transportation service provided to TransCanada PipeLines Limited, a monthly toll of $5.886 million commencing 1 January 1989 and a monthly toll of $5.776 million commencing 1 January 1990.

3. TQM shall charge Gaz Métropolitain, inc., in respect of storage services, a toll based upon the TS-GMi tariff attached to the Transportation and Storage Service Contract filed with the Board under covering letter dated 10 April 1987.

4. TQM shall, in determining its revenue for 1989, include an adjustment to dispose of the balance calculated at 31 December 1988 in the deferral account related to storage and approved in Section 4.2 of the Reasons for Decision dated November 1987.

5. TQM shall use the following depreciation rates from 1 January 1989 to determine depreciation expense for accounting and toll purposes:

Land Rights	2.75%
Measuring and Regulating Station Structures	2.80%
Other Structures and Improvements	2.95%
Mains	2.75%
Measuring and Regulating Station Equipment	5.15%
Communication Structures and Equipment	10.00%
Structures and Improvements	10.00%
Office Furniture and Equipment	7.00%
Transportation Equipment	16.00%
Heavy Duty Work Equipment	6.75%
Tools and Work Equipment	7.00%
Other Equipment	11.00%

6. TQM shall reallocate the negative accumulated depreciation book reserve for NEB Account 484 - Transportation Equipment amongst the other book reserves in the manner set forth in the said application.

7. TQM shall amortize the $192,000 loss incurred on retirement of leasehold improvements equally over the two test years beginning 1 January 1989.

8. TQM shall, effective 1 January 1989, follow the recommendations of the Canadian Institute of Chartered Accountants in accounting for its pension costs.

9. TQM shall file with the Board and serve upon all interested parties to the proceedings held pursuant to Board Order No. RH-2-88, gas transportation tariffs incorporating the toll set out in paragraph 2 within 20 days after issuance of this Order.

10. Those provisions of TQM's tariffs which specify a toll other than the toll specified in paragraph 2 are hereby disallowed, such disallowance to be effective on 31 December 1988.

NATIONAL ENERGY BOARD

Louise Meagher
Secretary

Appendix III
Determination of Approved Funded Debt Balances and Associated Cost Rates for the Test Years

Table a3-1
Determination of Approved Funded Debt Balances for the 1989 Test Year ($000)

	Series A[1]	Series B[1]	Series C[1]
January 1	100,000	96,000	85,000
January 31	100,000	96,000	85,000
February 28	100,000	96,000	85,000
March 31	100,000	96,000	85,000
April 30	100,000	96,000	85,000
May 31	100,000	96,000	85,000
June 30	100,000	96,000	85,000
July 31	100,000	96,000	85,000
August 31	100,000	96,000	85,000
September 30	100,000	96,000	85,000
October 31	100,000	96,000	85,000
November 30	100,000	96,000	85,000
December 31	100,000	92,000	85,000
Total	1,300,000	1,244,000	1,105,00
13-Point Average[2]	**100,000**	**95,692**	**85,000**

1 Source: Exhibit B-1, Part V Requirements, Section 4(n), Page 4 of 10.
2 Calculated in a manner consistent with the Company’s rate base determination.

Table a3-2
Determination of Approved Funded Debt Cost Rate for the 1989 Test Year

	Average Gross Proceeds ($000)	Financial Charges ($000)	Cost Rate (%)
13.10% Series A[1]	100,000	13,100	
13.20% Series B[1]	95,692	12,631	
11.70% Series C[1]	85,000	9,945	
	280,692	35,676	12.71
Amortization of Debt Issuance Costs		513	.18
Total	**280,692**	**36,189**	**12.89**

1 Source: Exhibit B-1, Part V Requirements, Section 4(n), Page 3 of 10.

Table a3-3
Determination of Approved Funded Debt Balances for the 1990 Test Year ($000)

	Series A[1]	Series B[1]	Series C[1]	Series D[2]
January 1	100,000	92,000	85,000	-
January 31	100,000	92,000	85,000	-
Feburary 28	100,000	92,000	85,000	-
March 31	100,000	92,000	85,000	-
April 30	100,000	92,000	85,000	-
May 31	100,000	92,000	85,000	-
June 30	100,000	92,000	85,000	-
July 31	100,000	92,000	85,000	-
August 31	100,000	92,000	85,000	-
September 30	100,000	92,000	85,000	-
October 31	100,000	92,000	85,000	-
November 30	100,000	92,000	-	55,000
December 31	100,000	88,000	-	55,000
Total	1,300,000	1,192,000	935,000	110,000
13-Point Average [3]	**100,000**	**91,692**	**71,923**	**8,462**

1 Source: Exhibit B-1, Part V Requirements, Section 4(n), Page 8 of 10.
2 Adjusted to reflect the Board's decisions re common equity ratio and funded debt (see Sections 5.1 and 5.2.1).
3 Calculated in a manner consistent with the Company's rate base determination.

Table a3-4
Determination of Approved Funded Debt Cost Rate for the 1990 Test Year

	Average Gross Proceeds ($000)	Financial Charges ($000)	Cost Rate (%)
13.10% Series A[1]	100,000	13,100	
13.20% Series B[1]	91,692	12,103	
11.70% Series C[1]	71,923	8,415	
11.70 Series D[2]	8,462	990	
	272,077	34,608	12.72
Amortization of Debt Issuance Costs		230[3]	.10
Total	**272,077**	**34,868**	**12.82**

1 Source: Exhibit B-1, Part V Requirements, Section 4(n), Page 3 of 10.
2 Adjusted to reflect the Board's decisions re common equity ratio and funded debt (see Sections 5.1 and 5.2.1).
3 Adjusted to reflect estimated issuance costs related to a $55 million debt re-financing (see Exhibit B-22).