CANADA

National Energy Board

Reasons for Decision

Trans Mountain Pipe Line Company Ltd.

MO-56-84

March 1985

National Energy Board

Reasons for Decision

In the Matter of

Trans Mountain Pipe Line Company Ltd.

Applications under Section 17 and Parts III and IV of the National Energy Board Act

MO-56-84

March 1985

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Abbreviations and Definitions

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AFUDC	Allowance for Funds Used During Construction
Applicant/Company/Trans Mountain	Trans Mountain Pipe Line Company Ltd.
Board/NEB	National Energy Board
the Act	National Energy Board Act
Airlines	Air Canada, Canadian Pacific Air Lines Limited and Pacific Western Airlines Ltd.
Chevron	Chevron Canada Limited
CPA	Canadian Petroleum Association
DCF	Discounted Cash Flow
Gulf	Gulf Canada Limited
Imperial	Imperial Oil Limited
Inland	Inland Natural Gas Co. Ltd.
IPL	Interprovincial Pipe Line Limited
IOCO	Imperial Oil Limited’s Vancouver Refinery
IRR	Investors’ Required Rate of Return
mm	millimetre
m^3/d	cubic metre per day
m^3/hr	cubic metre per hour
1983 Reasons for Decision	"National Energy Board Reasons for Decision in the matter of an Application under Part IV of the National Energy Board Act (Toll Application) March 1983"
1980 Reasons for Decision	"National Energy Board Reasons for Decision in the matter of an Application under Part IV of the National Energy Board Act (Toll Application) December 1980"

1978 Reasons for Decision	"National Energy Board Reasons for Decision in the matter of an Application under Part IV of the National Energy Board Act (Toll Application) January 1978"

National Energy Board

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. (hereinafter called Trans Mountain) for an order under Section 51 of the *National Energy Board Act* for new tolls; filed with the Board under File No. 1762-T4-8.

IN THE MATTER OF an application by Gulf Canada Limited (hereinafter called Gulf) for an order under Section 59 of the *National Energy Board Act*; filed with the Board under File No. 1755-G30-1.

HEARD in Ottawa, Ontario on 26, 27 and 28 November 1984, 7, 8, 9, 10, 14, 15, 16, 17, 18, 21, 22 and 23 January 1985.

BEFORE:

J.R. Hardie	Presiding Member
R.B. Horner, Q.C.	Member
W.G. Stewart	Member

APPEARANCES:

C.B. Johnson G.A. Irving M.W.P. Boyle	Trans Mountain Pipe Line Company Ltd.
R.S. O'Brien, Q.C.	Air Canada, Canadian Pacific Air Lines Limited, Pacific Western Airlines Ltd.
D. McDermott	Canadian Petroleum Association
R. Hall	Chevron Canada Limited
L.D. Horne J. Nozick	Gulf Canada Limited
J.E. Gallant H. Newton	Imperial Oil Limited
K. Sinclair	Interprovincial Pipe Line Limited
L.A. Leclerc	Petro-Canada Limited
L.E. Smith	Shell Canada Limited
G. Hayward	City of Kamloops
G. Lowes	Trans-Northern Pipelines Inc.

A.R. Macdonald	National Energy Board
D. Tremblay	

Executive Summary

(NOTE: This summary is provided solely for the convenience of the reader and does not constitute part of this Decision or reasons for it.)

The Applications

Following a public hearing, the Board on 4 December 1984 issued Order No. MO-56-84 which required Trans Mountain, commencing during January 1985, to receive, transport and deliver via its pipeline from Edmonton to Kamloops certain monthly volumes of gasoline and distillates tendered for transportation by Gulf. On 10 December 1984, Trans Mountain applied to the Board for a review of this Order.

By Application dated 14 September 1984 Trans Mountain applied to the Board under Section 51 of the Act for new tolls effective 1 January 1985 and, in the event the new tolls were not implemented by 1 January 1985, for interim relief.

The two applications were set down for a public hearing commencing 7 January 1985.

Review of Board Order No. MO-56-84: Refined Product Deliveries

In evidence Trans Mountain indicated that, for reasons of safety, the delivery via the 323.9 mm Gulf Kamloops take-off line was unacceptable. Trans Mountain, therefore, proposed that the product be delivered either into the storage tanks at its Kamloops pump station and then through Gulf's 219 mm line to the Gulf terminal, or directly through Gulf's 219 mm line. Gulf stated that both routes were unacceptable due to additional contamination and low delivery rates.

The Board found that delivery through the Gulf takeoff line with Trans Mountain's mainline valve M817 closed could result in overstressing the mainline. The Board also found that use of Gulf's 219 mm line without the use of Trans Mountain's tankage (tight-line) would keep additional contamination to a minimum. The Board therefore considered that delivery directly to the Gulf terminal from Trans Mountain's Kamloops station is acceptable. The Board notes that this delivery could be supplemented for certain periods during the delivery cycle by simultaneous delivery through the 219 mm and 323.9 mm lines with very little additional batch contamination. If this method of delivery cannot be carried out at the delivery rate and with the level of contamination promised by Trans Mountain, then the Board will consider ordering the installation of facilities that would permit safe delivery through the 323.9 mm Gulf take-off.

Trans Mountain's Toll Application

The major decisions of the Board with respect to the Company's Toll Application and other issues addressed during the hearing are summarized below:

Rate Base

The Board has approved the inclusion in rate base of the additional cost for the upgrading program and Class "C" construction and disallowed the inclusion of Imperial's Edmonton connection. The Board has also excluded from rate base Preliminary Surveys and Investigations. For working capital the Board has accepted the Company's amended determination of the net lag days.

Depreciation Study

The Board accepted the results of the Applicant's study and approved the revised depreciation rates.

Throughput

The Board was of the opinion that Trans Mountain's 1985 forecasts should be increased to provide for some export and exchange volumes. The Board has, therefore, adjusted Trans Mountain's throughput to 23 190 m^3/d.

Cost of Service

The Board has revised Trans Mountain's fuel and power costs to reflect the increase in forecasted throughput volumes. The Board has approved Trans Mountain's proposed increases to wages, salaries and benefits and accepted Trans Mountain's allocation of administrative expenses for 1985. However, the Board has disallowed, in the cost of service, $138 000 for Corporate Development and other head office department expenses; and $100 000 in hearing costs. The Board has directed Trans Mountain to defer any costs for the deactivation of the 762 mm loops for disposition by the Board at the next toll hearing. The Board has removed the $300 000 associated with deactivation from Trans Mountain's cost of service.

Rate of Return

The Board has decided that the rate of return on rate base should be 14.66 percent. This rate is derived from a debt:equity ratio of 50:50, a cost of long-term debt of 13.56 percent and a return on common equity of 15.75 percent.

Toll Design

The Board has approved the elimination of certain density differentials and found that the segregation of terminalling and transmission costs for the determination of tolls is no longer appropriate. For Refined Products, the Board considered the toll should be comprised of the crude oil toll plus a fixed monthly charge and a variable surcharge; the unrecovered refined products' variable costs are to be recovered through a lump sum charge. The Board found that there was no need to amend Clause 25 of the Tariff Rules and Regulations.

Westridge Propane Facility

With respect to the issue of the Board's jurisdiction over the propane facility, the Board will maintain the status quo.

Chapter 1
The Applications

Trans Mountain Pipe Line Company Ltd. (Trans Mountain, the Applicant, the Company), formerly Trans Mountain Oil Pipe Line Company, was incorporated in 1951 by a Special Act of Parliament and continued in 1979 under the Canadian Business Corporations Act. The Company owns and operates, as a common carrier, an oil pipeline system consisting of 1 156 kilometres of 610 mm pipeline extending from Edmonton, Alberta to Burnaby, British Columbia, and two 86-kilometre looped sections of 762 mm pipeline between Edson and Kamloops. The system includes a condensate gathering facility at Edson, Alberta and connects near Sumas, British Columbia to a pipeline owned by a wholly-owned American subsidiary, Trans Mountain Oil Pipe Line Corporation.

1.1 Review of Board Order No. MO-56-84

By Application dated 4 October 1984, Gulf Canada Limited (Gulf) requested the National Energy Board (the Board) to direct Trans Mountain to receive, transport and deliver, without delay, specified monthly volumes of refined petroleum products from Edmonton, Alberta to Kamloops, British Columbia, during the months of September 1984 to December 1985.

Following a public hearing held in Ottawa commencing on 26 November 1984, the Board on 4 December 1984 issued Order No. MO-56-84 (see Appendix 1) which required Trans Mountain, commencing during January 1985, to receive, transport and deliver via its pipeline from Edmonton to Kamloops certain monthly volumes of gasolines and distillates offered for transportation by Gulf. The Board's Reasons for Decision were released later in December.

On 10 December 1984, Trans Mountain applied to the Board for a review of and a change, alteration and variation in Order MO-56-84. The grounds upon which Trans Mountain made the application were, in part, that the Board would be in excess of its jurisdiction by reason of Trans Mountain's inability to deliver refined product volumes with due care and diligence, and that no application for construction was before the Board that would enable Trans Mountain to receive and deliver refined products safely. The evidence on the review revealed that Trans Mountain's prime concern was that, without certain additional facilities, it could not under the Board's Order deliver products safely.

By Board Order AO-3-RH-4-84, amending RH-4-84, the review application was set down for public hearing on 7 January 1985.

1.2 Toll Application

By Application dated 14 September 1984, Trans Mountain applied to the Board under Section 51 of the Act for new tolls effective 1 January 1985 and, in the event the new tolls were not implemented by 1 January 1985, an order pursuant to Sections 16.1 and 52.2 of the Act granting interim relief to Trans Mountain.

By Order No. RH-4-84 the Board set down Trans Mountain's Application together with Gulf's Section 59 Application for a hearing commencing on 26 November 1984. However, at the request of certain parties, the Board postponed the toll proceeding to 7 January 1985. The Board, by Order No. TO1-3-84 (see Appendix V), also made the existing tolls interim effective 1 January 1985.

In a letter dated 7 November 1984, the Board requested Trans Mountain, to the extent that Trans Mountain had not already done so, to serve on parties of record copies of the following previously-filed documents as these documents would be addressed at the hearing:

The Administrative Cost Allocation Study
The Depreciation Study
The Toll Design Study, and
The Westridge Propane Facilities Toll Application.

As a result of a separate Application dated 26 September 1984, by Order No. TO1-2-84 (see Appendix III) the Board authorized Trans Mountain, effective 7 November 1984, to charge an interim toll of $10.10 per cubic metre in respect of the handling of propane at the Westridge Terminal. pending further consideration at the hearing.

Chapter 2
Review of Board Order No. MO-56-84: Refined Product Deliveries

2.1 Alternate Routes

During 1983 and 1984, Trans Mountain moved five test batches of gasoline and distillates for Gulf to ascertain the degree of contamination and potential clean-up which might be required as a result of these movements. These test batches were delivered by Trans Mountain to the Gulf terminal through a 323.9 mm take-off line which connects the Trans Mountain mainline upstream of mainline valve M817 to the Gulf terminal tankage. To effect these deliveries the mainline valve was closed. This take-off line had been installed as the original delivery system for crude oil shipped from Edmonton, via Trans Mountain, to the Gulf refinery. Subsequently, the Westcoast Petroleum Ltd.'s pipeline was constructed to deliver British Columbia crude oil to Trans Mountain at its Kamloops pump station, some 4 km downstream from the Gulf take-off line. Gulf then constructed a 219 mm line paralleling the Trans Mountain line from those facilities to connect with the Gulf 323.9 mm line within a few metres of its take-off point from the Trans Mountain mainline. This line was used to supply crude to the Gulf refinery until it was closed in 1983.

Gulf proposed that all product batches for 1985 should be delivered through the 323.9 mm take-off line as was used for the test batches.

In evidence Trans Mountain indicated that, for reasons of safety, the delivery route proposed by Gulf, was unacceptable as use of the route necessitated the isolation of the system pressure relief valve during the delivery of the refined products. Trans Mountain therefore proposed that the product be delivered into Trans Mountain storage tanks at its Kamloops pump station at the mainline delivery rate, then delivered to the Gulf terminal at a lower rate through Gulf's 219 mm line which could be reconnected to Trans Mountain's facilities with a minimum of delay. To handle the number of products Gulf expects to ship in each production batch, Trans Mountain proposed to dedicate three storage tanks to refined products and to lease a tank to store any emissions from a pressure limiting valve. Should Gulf find the proposed route unacceptable, Trans Mountain offered as an alternative to deliver the products directly to the Gulf terminal through the 219 mm line. Trans Mountain noted that this "tight-line" routing would reduce contamination, as no Trans Mountain storage tanks would be used, but would limit delivery to Gulf to 680 m^3/hr.

Gulf stated that both routes and delivery methods were unacceptable. The first method was unacceptable due to additional contamination and low delivery rates which would result in additional handling costs to Gulf, the second for reasons of the safety of the 219 mm line and the low delivery rates.

2.2 System Capacity

Trans Mountain agreed that there was adequate capacity to carry the refined product volumes forecast by Gulf even with the revised throughput forecast of 22 390 m^3/d and, for reasons of pipeline safety, a reduced refined product delivery rate of 680 m^3/hour.

2.3 Safety of the Routes

The refined product test batches delivered by Trans Mountain in 1984 were accomplished by closing mainline valve M817 and transporting the product to the Gulf refinery through the 323.9 mm Gulf take-off line. These tests demonstrated that the system is capable of carrying refined products from Edmonton to Kamloops in a condition acceptable to Gulf. However, these deliveries required extraordinary care and extensive supervision.

2.3.1 Gulf Take-Off Route

Trans Mountain explained that deliveries via the Gulf take-off required the closing of the mainline block valve M817, thus isolating the pressure relief valve at the Kamloops pump station from the delivery system. Trans Mountain argued that the presence of the relief valve is required by the Board's Deregulations. Trans Mountain also explained that, with valve M817 closed, any sudden closure of the Gulf delivery line valve could result in a pressure build-up in the mainline that could exceed the allowable pipeline stress limits between valve M817 and the up-stream McMurphy pump station. Trans Mountain expressed concern that this pressure build-up could cause the pipeline to rupture because the pressure relief valve was isolated from the line and because the pipeline has been in service for approximately 30 years. This hazardous situation could only be averted if mitigative actions were taken quickly.

Gulf agreed that, with the Trans Mountain block valve closed, closure of its delivery valve M506 could result in stresses above the allowable limits developing in the mainline. Gulf maintained, however, that with the safety margin built into the allowable stress limits, and the unlikely combination of extremes of operating conditions and operating misadventure required to produce such stresses, there was no real hazard to the Trans Mountain line. Gulf noted that the test batches had been handled with valve M817 closed albeit with additional supervision. It stated that the product should be handled for the period of the Board's Order in a similar fashion, and it was prepared to pay the additional costs of such operation.

2.3.2 Trans Mountain's Alternate Routes

Gulf agreed that delivery of products to its terminal from Trans Mountain's storage tanks, as described in Section 2.1, presented no structural hazard to its 219 mm transfer line, however the route was unacceptable to Gulf due to increased contamination, low delivery rates and increased handling costs.

Gulf also rejected Trans Mountain's tight-line proposal to deliver products directly to the Gulf terminal, as outlined in Section 2.1, through the 219 mm line. Gulf contended that, although there would be no substantial increases in contamination, rapid closure of the Gulf delivery valve could result in high pressure surges developing in the 219 mm line which could stress the pipe beyond the allowable stress limits. Gulf argued that the response time of the Trans Mountain station pressure relief valve was too slow to limit the pressure surges and could therefore result in the rupture of the delivery line.

Trans Mountain indicated that due to the low delivery pressure and delivery rate of 680 m^3/hr, stresses in the delivery line from the pressure surges would be less than 50 percent of the allowable limits, and that its high-speed pressure relief valve would in any case secure the line from any over-pressure surges.

2.4 Contamination

Trans Mountain indicated that very little additional contamination would result from the relatively short additional distances that the products would travel using the Kamloops pump station route with use of Trans Mountain’s storage tanks and the 219 mm delivery line to the Gulf terminal.

Trans mountain stated that the additional contamination could be reduced using the alternative tight-line routing described In Section 2.1 to deliver products directly to Gulf through the 219 mm connecting line without using Trans Mountain’s storage tanks.

Gulf expressed great concern with the additional contamination that would result from using Trans Mountain’s storage tanks. However, Gulf agreed that delivery of products direct to its terminal through its 219 mm line would not result in any substantial additional contamination.

2.5 Decision

Following a review of the evidence presented, the Board finds that delivery of refined products to the Gulf terminal at Kamloops through the 323.9 mm ,Gulf take-off line with the Trans Mountain mainline valve M817 closed, could result in overstressing the mainline beyond the allowable stress limits, and could possibly result in the rupture of the mainline. Of particular concern is the age of the pipeline and the evidence presented by Trans Mountain of the instances of pipeline failure during testing at pressures less than the Specified Minimum Yield Strength. The Board considers this risk unacceptable on an ongoing basis. While the risk may be minimized for individual shipments through the use of special precautions and additional supervision, the Board is not prepared to rely on the effectiveness of such precautions over the course of 22 shipments.

The Board also finds that, although additional contamination could result from the use of Trans Mountain’s storage tanks, the tight-line proposal would keep additional contamination to a minimum. The Board therefore considers that Trans Mountain’s proposal to deliver products directly to the Gulf terminal from its Kamloops station, as described under Section 2.1, is acceptable. With this method of delivery, the pipeline stresses will be well below specified limits, a pressure limiting device remains in the delivery circuit and a minimal additional contamination will result.

The Board recognizes that the alternate route could limit the delivery/rate to the Gulf terminal to approximately 680 m^3/hr., however, the Board estimates that this delivery rate could drop to 550 m^3/hr. under adverse operating conditions. The Board considers the net cost to Gulf due to the extended delivery time will be small. The Board notes that, with reasonable care by Gulf, the delivery rate through the 219 mm line could be supplemented for certain periods of the delivery cycle by simultaneous delivery through the 219 mm and the 323.9 mm Gulf take-off lines with very little additional batch contamination.

The Board stresses that its decision on Trans Mountain's application for review should not be taken in any way as a prejudgment of the Board's consideration of Trans Mountain's recently filed application for the construction of a refined products terminalling facility at its Kamloops pump station site.

2.6 Board Order No. AO-I-MO-56-84

In compliance with Order No. MO 56-84 (see Appendix 1), Trans Mountain commenced shipment of the January batch of refined products from Edmonton on 9 January 1985 with an expected arrival time in Kamloops of 22 January 1985. The parties commenced this shipment in the expectation that the method of delivery would be determined by the Board before the latter date.

Accordingly, after hearing the evidence and submissions on the review application, the Board on 19 January 1985 issued Order No. AO-1-MO-56-84 (see Appendix II), which amended the original order so as to specify the manner of delivery. In view of the short time for compliance including reconnecting the 219 mm line, the Order directed that the January shipment be delivered through the Gulf take-off line manner as the test batches. For succeeding months, Trans Mountain is ordered to make deliveries using its tight-line proposal with the option of delivery through the 323.9 mm Gulf take-off line. In these months, mainline valve M817 is to be kept open, keeping the pressure relief facilities in the circuit.

However, the Board has taken this decision on the basis of Trans Mountain's evidence as to the delivery rate and level of contamination that would be achieved using the tight-line proposal. If Trans Mountain fails to achieve deliveries as promised, the Order permits Gulf to require Trans Mountain to submit to the Board the design of pressure relief facilities that, if installed on the Gulf take-off line, would permit deliveries to be made safely by that route. The Board would then decide whether Trans Mountain should be ordered under subsection 59(3) of the Act to install those facilities. In accordance with Gulf's undertaking at the hearing, Gulf would bear the cost of installation of those facilities.

Chapter 3
Rate Base

Trans Mountain's proposed rate base, as filed, was the average projected utility investment for the period 1 January to 31 December 1985. The Board's decisions regarding the determination of rate base are provided in the succeeding sections of this chapter; the resulting adjustments are summarized in Table 3-1.

3.1 Plant Additions and Retirements

Trans Mountain, in its Amended Application dated 7 January 1985, included in the Forecast Average 1985 Plant in Service, Plant Additions amounting to $9 521 700 and Plant Retirements of $816 600.

The Company testified that all 1985 proposed pipeline construction had been submitted to the Board for authorization and that the applied-for projects would be placed in service during 1985.

In view of the evidence provided during cross-examination, the Board has adjusted the 1985 plant addition forecast for the reasons noted in subsequent sections of this chapter. Plant retirements were not questioned and they are accepted in the amount submitted by the Company.

3.2 Upgrade Program

The Applicant, in its total applied-for Average Original Cost of Plant in Service, included costs incurred to 31 August 1984 amounting to $9 983 000 in respect of an upgrading program commenced in 1982, and forecasted an additional $925 000 for 1985 to complete the upgrading program. The total expenditures for the program currently estimated at $10 908 000 would result in an overrun of $2 318 000 over the costs estimated for the program at the time it was originally approved by the Board.

During cross-examination, Trans Mountain testified that the overrun resulted from: work which cost more than originally estimated; equipment planned for re-use which required replacement; additional work to facilitate future modifications or expansion to the system without the need to shut down the pipeline; and, extra work which was not planned but was identified during construction. The Company stated that the expenditures made to date and the remaining work to complete the program represented necessary expenditures for the improvement and modernization of the pipeline system.

Table 3-1

	Application[1] ($000)	Application as Amended[1] ($000)	NEB Adjustments ($000)	NEB Allowed ($000)
Average Original Cost of Plant in Service	149 964	149 545	(1 202)	148 343
Average Accumulated Depreciation and Amortization on Plant in Service	(110 763)	(111 186)	467	(110 719)
Average Net Book Value of Plant in Service	39 201	38 359	(735)	37 624
Estimated Deferred Income Tax Debits at Jan. 1, 1985	878	862	70	932
Forecast Deferred Income Tax Credits at Dec. 31, 1985	(360)	(417)	89	(28)
Average Deferred Income Tax Debits	259	223	79	302
Average Deferred Charges for Preliminary Surveys and Investigations	133	188	(188)	-
Average Working Capital Requirement	3 704	3 768	(432)	3 336
	43 297	**42 538**	**(1 276)**	**41 262**

1. Application dated 14 September 1984.
2. Application dated 14 September 1984, as amended 7 January 1985.

Trans Mountain stated that it had already spent approximately $1 850 000 for upgrading on which it has not been allowed to earn a return because the expenditures had not been approved by the Board under Part III of the Act. The Company acknowledged that it was remiss in not notifying the Board that overruns were being incurred.

The Board is satisfied that the entire upgrading program is used and useful and approves the inclusion in rate base of the $1 850 000 overrun in upgrading costs, and also approves the inclusion in rate base of the $925 000 costs forecast for the completion of the upgrading program in 1985.

3.3 Westridge Common Dock Facilities

In its Amended Application, dated 7 January 1985, Trans Mountain included in the Forecast Average 1985 Plant in Service 100 percent of the remaining book value of the Company's Westridge common dock facilities as of 31 March 1985. The Board in its 1980 Reasons for Decision directed that one-half of the common dock facility assigned to crude oil operation be amortized over two years. As a result of Trans Mountain's action and the Board's decision, only that half of the common dock capital costs assigned to propane operation was included in rate base. The Applicant stated that the inclusion of the Westridge dock facilities in the pipeline rate base was justified as a result of the termination of the Westridge Propane Terminalling Agreement anticipated to be effective 3 April 1985.

The dock was built in 1957 to provide export facilities as part of the Company's crude oil transmission system. The LPG facilities were installed on the dock in the mid-sixties and since then the dock has been used for the delivery of crude oil and propane. With the cancellation of its only propane contract Trans Mountain wished to transfer the dock back entirely to crude oil operations.

The Company testified that it is attempting to find other users for the LPG facilities, although to date nothing has materialized.

Subsequent to the close of the hearing, Trans Mountain, by letter dated 12 February 1985, advised the Board and interested parties that on further consideration of the Westridge common dock matter it withdraws its request that these facility costs be included in the pipeline utility rate base. No interested party objected to the Company's request. However, Gulf indicated that it had no objection provided that such amendment does not affect the tolls to be charged by Trans Mountain to Gulf for the handling of propane at its Westridge propane facility.

On the basis that the removal of Westridge common dock facilities from the pipeline rate base would not affect the tolls to be charged to Gulf for the handling of propane, the Board approves the Company's request and has reduced Average Original Cost of Plant in Service by $983 984 and Average Accumulated Depreciation and Amortization on Plant in Service by $465 033. (See Section 6.7 regarding Westridge Terminal Operating Expenses.)

3.4 Imperial Oil Limited's Edmonton Connection

Trans Mountain included in its Summary of Proposed 1985 Rate Base Plant Additions an amount of $150 000 for a connection at Edmonton to Imperial Oil Limited's (Imperial) product line. During the hearing the Applicant was questioned as to the appropriateness of including this item as an addition to rate base rather than recovering the amount from Imperial since the facility will be used exclusively by Imperial. The Company agreed that in an earlier similar situation the costs were recovered from the shipper. The Company also testified that, although the item had been included in a construction application submitted to the Board for approval, it was uncertain that the facility would be constructed.

The Board finds that other shippers should not be required to share the cost of a facility installed solely for the benefit of Imperial. Therefore, the Board has disallowed from the Company's 1985 rate base the plant addition of $150 000 for lmperial's Edmonton Connection.

3.5 Class "C" Construction Adjustment

Trans Mountain, in determining its proposed rate base, has included in total additions to plant in service for 1985, $9 521 700 for various construction projects. During cross-examination, the Company testified that all these projects, with the exception of Imperial's Edmonton Connection, will be completed and placed in service during 1985. In final argument, the Airlines (Air Canada, Canadian Pacific Airlines, Limited and Pacific Western Airlines Ltd.)noted that Trans Mountain's historical rate for completion of Class "C" construction projects was approximately 80 percent of the value of the projects planned, and submitted that this proportion should be applied to the 1985 proposed plant additions to be included in rate base. The Board notes, however, that Trans Mountain proposes to undertake these projects early in the year and there should be no reason why they should not be completed by year's end.

It is the Board's practice to allow in a projected rate base only authorized additions to plant in service. In respect of the Company's 1985 Application for Class "C" Construction, the Board has in its letter dated 23 January 1985 disallowed the custody metering project proposed for the Edson facilities.

The Board has adjusted plant additions to remove from rate base $150 000 for Imperial's Edmonton Connection referenced in paragraph 3.4 and $221 000 for the installation of custody metering facilities at Edson which have not been approved under Part III of the Act. The Board has also reduced the average accumulated depreciation and amortization on plant in service by $1 542 to reflect the removal of these two items.

3.6 Working Capital

In its Amended Application dated 7 January 1985, Trans Mountain included $3 768 000 for average working capital requirement. The Applicant determined the cash component of working capital by applying a factor of 24/365 to the total cash cost of service. For the inventory component of working capital, the Company assumed an average amount for test year inventories based on the estimated spare parts inventory at 31 August 1984 and included an adjustment for spare diesel engine parts. The prepaid expense amount was calculated as the 13-month average of prepaid insurance, rents, annuity plan payments and minor miscellaneous items.

In support of the 24/365 factor used to calculate the cash requirement for working capital, the Applicant submitted a lead/lag study which incorporated a number of changes from the previous studies to improve the estimate of the cash working capital requirement.

In arriving at the appropriate lag days for cash working capital allowance, the Company study identified a number of items for which allowance was provided, including "Average 'In-Transit' Time". The study defined this "In-Transit" time as the average time from the injection of a batch into the mainline to its arrival in tankage at the delivery location, and indicated the average time that the batch stays in the line as a function of the throughput level and pumping rates.

During cross-examination, the Applicant confirmed that it used throughput volumes of 18 740 m^3/d for the lead/lag study in its initial application. Trans Mountain agreed that the throughput volumes have changed and has reduced the lag days shown in the lead/lag study from 24 days to 20 days by using an updated forecast of 22 390 m^3/d.

In arriving at the net lag days for cash working capital the Company included a "provision for lumpiness" of seven days. The Applicant acknowledged that it was difficult to substantiate this provision but argued that the seven-day allowance was approved in the Board's December 1980 Reasons for Decision and the Company had no reason to change the allowance even though the current study results in an improved estimate for the cash working capital requirement.

Intervenors did not offer any comment in respect of the lead/lag study.

The Board has accepted the Company's amended determination of the net lag days and, taking into account the revised volume of throughput, has adjusted the net lag days to 19. Details of the working capital allowance are shown in Table 3-2.

3.7 Preliminary Surveys and Investigations

Trans Mountain, in its Summary of Proposed Rate Base, included $188 000 for Preliminary Surveys and Investigations. This amount is an average deferred charge and represents the costs of various studies, the majority of which will be undertaken during 1985. In Trans Mountain's view, expenses for preliminary surveys and investigations should not be paid by the shippers until projects come to fruition. During cross-examination, the Applicant agreed that study costs are included in a deferral account as incurred and carrying charges are accumulated on the costs but stated that the amounts are not expensed, capitalized, or depreciated at this time. The Company did acknowledge that it proposed to include the deferred charges in rate base for rate-making purposes. This treatment of the deferred charges would result in the Company earning both carrying charges and a return on these study costs.

In the March 1983 Reasons for Decision, the Board directed that study costs not be included in the cost of service for the test year but placed in a deferral account and accumulate carrying charges at the prime rate. The Board in its decision also stated that the disposition of the amounts would be determined at a future toll hearing.

It is the Board's view that the Applicant has presented no new evidence to justify varying the Board's previous decision, and does not accept Trans Mountain's proposal to include these costs in both a deferral account and rate base. Accordingly, the Board has excluded deferred charges for preliminary surveys and investigations from rate base, but confirms that such expenditures should continue to be included in deferred charges and accumulate carrying charges at the prime rate.

3.8 AFUDC Rate

In its Application, the Company calculated AFUDC at the originally applied-for rate of return on rate base of 15.88 percent on construction projects estimated to cost in excess of $75 000. This procedure was approved by the Board in its letter dated 10 December 1984. The AFUDC rate has been adjusted to 14.66 percent in line with the Board's approved rate of return on rate base. This results in a reduction to rate base of $26 730 and a corresponding reduction to the accumulated depreciation of $439.

Table 3-2

Summary of Working Capital Allowance
($000)

	Application Test Year 1985 Forecast	**Application As Amended Test Year 1985 Forecast**	**NEB Adjustments**	**NEB Allowed Test Year 1985 Forecast**
Operating Expenses:	27 226	27 461	(52)	27 409
Less:				
- Employee Benefit (unfunded liability re annuity plan)	(360)	(360)	-	(360)
- Insurance	(630)	(630)	-	(630)
- Taxes Other Than Income	-	(30)	-	(30)
- Account 412-2 expenses (insurance and taxes)	(14)[1]	(14)[1]	-	(14)[1]
- Rents	(405)	(437)	-	(437)
Rents paid on a monthly basis	365	393	-	393
Cash Operating Expenses	26 182	26 383	(52)	26 331
Revenue Other Than Carrier Expenses	(312)	(715)	-	(715)
	25 870	25 668	(52)	25 616
Income Taxes Payable	3 014	2 896	(740)	2 156
Cash Cost of Service	**28 884**	**28 564**	**(792)**	**27 772**
Provision for Cash Requirements	1 899[2]	1 878[2]	(432)	1 446[3]
Inventories	1 221	1 306	-	1 306
Prepaid Expenses	584	584	-	584
Allowance for Working Capital	**3 704**	**3 768**	**(432)**	**3 336**

1. Insurance only.
2. 24/365 x Cash Cost of Service.
3. 19/365 x Cash Cost of Service

Chapter 4
Depreciation Study

In its March 1983 Reasons for Decision, the Board directed Trans Mountain "to undertake a comprehensive review of its depreciation policy and rates and to submit a depreciation study to the Board..." The Applicant submitted a study which included a review of economic life and book depreciation. The economic life study determined that the remaining life of the Trans Mountain System would extend to the year 2005. The book depreciation study, which used a combination of statistical techniques, forecasts and judgment to determine the remaining physical life of the Trans Mountain System, indicated that some assets would survive beyond the year 2005. However, the book depreciation study was influenced by the economic life study to the extent that asset life was truncated at the year 2005. As a result of the depreciation study, Trans Mountain established depreciation rates for assets at the shorter of the economic and physical life.

The Applicant calculated depreciation expense for the cost of service based on assets expected to be in service during the test year and using depreciation rates developed in the depreciation study.

Although the Board's supply and demand[1] forecast became available after the preparation of the depreciation study, an expert witness confirmed during cross-examination that the estimated economic life remained at the year 2005. A second expert witness testified that, since the physical life study was influenced by the economic life study, asset lives extending beyond the year 2005 were truncated to that year.

The Board accepts the results of the Applicant's depreciation study and approves the Company's revised depreciation rates. These rates are set out in Appendix VII.

1 Canadian Energy-Supply and Demand 1985-2005 dated September 1984.

Chapter 5
Throughput

Trans Mountain submitted a throughput forecast for the test year 1985 of 18 740 m^3/d. This forecast was later revised to 21 740 m^3/d to account for Gulf refined products volumes and additional volumes of crude oil to Imperial's IOCO refinery for product exports. On 7 January 1985, the Applicant submitted another throughput forecast of 22 390 m^3/d to include additional exports and exchange volumes to Anacortes, Washington for the first quarter of 1985.

The principal issues addressed at the hearing in relation to throughput were:

- Trans Mountain's capacity to move additional crude volumes;
- additional crude movements to domestic refiners to accommodate throughput for product exports; and
- additional throughput volumes for crude oil export and exchange movements to the United States or off the Westridge dock.

These issues are discussed in the following sections.

5.1 Trans Mountain's Capacity

The Applicant indicated during the hearing that there would be capacity restrictions on the pipeline during 1985 resulting from highway construction in the Coquihalla Canyon, from the removal of the two 762 mm loops from service, and from the delivery of refined petroleum products to Kamloops. The effect of these actions could limit volumes additional to the current forecast of 22 390 m^3/d for 1985. The Applicant indicated that throughput would be at capacity in February 1985 according to its revised forecast and would be fairly close to capacity in March. The Applicant stressed that capacity restrictions throughout 1985 should be kept in mind if increases to throughput are being contemplated.

The Board has taken into account the capacity limitations in the formulation of its decision on throughput.

5.2 Additional Throughput for Product Exports

Several intervenors indicated that although crude oil movements to domestic refiners for product exports were included for Chevron Canada Limited (Chevron) and Imperial, additional crude movements to account for approved product exports for Gulf, Petro-Canada Inc. and Shell Canada Limited (Shell) had not been included in Trans Mountain's revised throughput forecast. These intervenors, Chevron, Petro-Canada and Shell, suggested that the Board should take account of those prospective exports.

Trans Mountain felt that the intervenors were not requesting the Board to include all the volumes for product export, but only some judgmental portion. The Applicant stated that there was already an allowance in its forecast for Chevron and Imperial which accounted for two-fifths of the volume of product authorized for export. In Trans Mountain's opinion, if the Board should decide to adjust the throughput it should consider all product export volumes together and apply judgment to all of them when determining what volumes are likely to move in 1985.

The Board considers that the inclusion in Trans Mountain's forecast of an allowance for two-fifths of the crude volumes for product exports is reasonable.

5.3 Additional Throughput for Crude Oil Exports and Exchanges

During the course of the hearing it was established through cross-examination that the Company's forecast for the past two years had been understated, i.e. actual deliveries were significantly greater than the original forecasts. The Company agreed that the major reason for the actual volumes exceeding forecast volumes was the additional movements for exports and exchanges. It was also established and agreed to by the Company that, considering that the 1985 throughput forecast had been increased during the current proceedings from 18 740 m^3/d to 21 740 m^3/d and then to 22 390 m^3/d, the pattern of the past two years appeared to be continuing for 1985.

Trans Mountain, when asked why it had not included volumes for exports and exchanges in other than the first quarter of 1985, stated that it does not wish to add speculative volumes to the forecast. The Company indicated that in the past, even though shippers appeared interested in moving additional volumes and export licences had been granted for these movements, the additional volumes have often failed to materialize. The Company further stated that if there was a degree of certainty with regard to additional movements it would not hesitate to adjust its forecast.

The Airlines argued that a method of forecasting which almost refuses to acknowledge the probability of any volumes until the oil starts moving can hardly be called forecasting.

The Board acknowledges the difficulty in predicting throughput volumes and recognizes that volumes can fluctuate significantly over a short period of time. However, the Board does not agree with the Company that no allowance should be made for additional throughput for export and exchange movements throughout 1985. The Board is of the opinion that the 1985 forecasts should be increased to provide for some export and exchange volumes in the third and fourth quarters considering the differential between actual export and exchange movements and those forecast for the past two years, and that Trans Mountain included no export and exchange movements in its forecast beyond the first quarter of 1985. The Board estimates that an additional 1 600 m^3/d of light crude oil from Edmonton to Anacortes, Washington via Sumas in both the third and fourth quarters of 1985 is reasonable. This would amount to an average additional 800 m^3/d of throughput for the year 1985.

5.4 NEB Forecast

The Board has adjusted Trans Mountain's throughput forecast in accordance with its decisions and has determined tolls based on the forecast in Table 5-1.

Table 5-1
Petroleum Deliveries 1985
(m^3 Per Day)

	Application as Amended	**NEB Adjustment**	**NEB Approved Forecast**
From Edmonton			
To Kamloops	1 500	-	1 500
To Sumas	990	800	1 790
To Vancouver	16 200	-	16 200
From Edson			
To Sumas	-	-	-
To Vancouver	790	-	790
From Kamloops			
To Sumas	-	-	-
To Vancouver	2 910	-	2 910
Total	**22 390**	**800**	**23 190**
Edson Condensate Gathering Line	90	-	90

Chapter 6
Cost of Service

The Board's decisions regarding the determination of the Cost of Service are provided in the succeeding sections of this chapter. The resulting adjustments to Operating Expenses and Revenue Requirement are summarized in Tables 6-1 and 6-2 respectively.

6.1 Fuel and Power Costs

In its Application, Trans Mountain included fuel and power costs estimates of $1 935 000 corresponding to a forecasted throughput volume of 18 740 m^3/d; however, these estimates did not take account of refined products volumes tendered by Gulf for shipment in the 1985 test year.

As requested by the Board during the hearing, Trans Mountain submitted a revised throughput estimate of 22 390 m^3/d, together with a corresponding revised Fuel and Power cost estimate of $2 187 000. The estimates included the forecasted Gulf refined products throughput volumes and a Trans Alta Utilities power cost adjustment for the 1985 test year.

Table 6-1
Operating Expenses

	Application[1] as Amended	**NEB Adjustment**	**NEB Allowed**
Operating Expenses			
Salaries and Wages	7 815	-	7 815
Fuel and Power	2 187	70	2 257
Material and Supplies	723[2]	-	723
Outside Services	3 378[2]	-	3 378
Oil Losses	-	-	-
Law Expenses	39	-	39
Rents	405	-	405
Employee Benefits	2 090	-	2 090
Insurance	630	-	630
Other Expenses	2 238	-	2 238
Insurance and Taxes on Specially Classified Assets	164	-	164
Taxes Other Than Income Taxes	7 932[2]	-	7 932
Total Operating Expenses	**27 601**	**70**	**27 671**
Less:			
Allocation of Adminstration Costs to			
- Capital Projects	99	-	99
- Westridge LPG Operations	25	-	25
- Corporate Development Expenses	-	138	138
Total Jurisdictional Operating Expenses	**27 477**	**(68)**	**27 409**

1. Figures as filed per Exhibit B-57.
2. Figure adjusted to remove costs associated with the operation of the common dock facilities at Westridge.

Table 6-2
Trans Mountains's
Revenue Requirment
($000)

	Application[1] as Amended	**NEB Adjustment**	**NEB Allowed**
Crude Oil Revenue Requirement			
Operating Expenses	27 477	(68)	27 409
Depreciation and Amortization	2 218[2]	(4)	2 214
Amortization of Rate Hearing Costs	200	(55)	145
Amortization of West/East Pipeline	263	-	263
Amortization of Inventory Loss	118	(118)	-
Corporate Income Taxes	3 976[2]	(697)	3 279
Return on Rate Base	6 682[2]	(633)	6 049
	40 934	(1 575)	39 359
Less:			
Revenue Other Than Carrier	715	-	715
Westridge Petroleum Loading Revenue	-	-	-
Revenue Requirement	40 219	(1 575)	38 644
Crude Oil Pipeline			
Incremental Operating Costs	243	-	243
Amortization of Temporary Delivery Facilities	75	-	75
Amortization of Temporary Deactivation of 762 mm Loops	300	(300)	-
Hearing Costs		10	10
Revenue Requirement - Gulf Refined Products	618	(290)	328
Total Revenue Requirement	**40837**	**(1 865)**	**38 972**

1 Figures as filed per Exhibit B-57.
2 Figures are adjusted to remove costs associated with the operation of the common dock facilities at Westridge

The Board forecasts that Trans Mountain's throughput for the test year will be 23 190 m^3/d and has consequently increased the estimated fuel and power costs estimates for the 1985 test year to $2 257 000 dollars.

6.2 Oil Loss Allowance

In its evidence, Trans Mountain indicated that no claim for an oil loss allowance was included in its application due to the Board's rejection of its oil loss allowance in the Board's 1983 Reasons for Decision. However, during cross-examination, the Company indicated that it had experienced a net gain of $410 000 for the first 11 months of 1984.

The Board is concerned at the magnitude of this net gain and notes Trans Mountain's intention to undertake, during 1985, a study of the current measurement and accuracy practices. The Board requires Trans Mountain to submit this study for review at its next toll hearing.

6.3 Wages, Salaries, Benefits and Inflation Rates

Trans Mountain requested a 4 percent increase for salaries and wages inclusive of allowances for economic, merit, promotion and progression. The Company stated this was in recognition of the current economic climate throughout Canada and particularly in British Columbia and Alberta. It also covers the implementation in some staff categories of salary increases based on merit rather than progression and the resulting expected improvements in productivity.

For 1985, the Company indicated a requirement of 184 permanent staff to undertake regulated activities compared to 181 in 1984. This net increase includes a staff departure from the Company and a request for four additional permanent employees, three at the senior engineering level and one for analytical work. The latter, a Project Analyst, is required for the development of projects, including market analysis, design of facilities and evaluation. The additional engineering staff are required to provide experienced replacements for Senior Engineers approaching retirement age. Specifically, two Division Engineers are proposed to plan and supervise major maintenance and capital projects in each of the Western and Eastern Divisions. In addition, a Senior Mechanical Engineer is required to replace the services of a consultant.

Adjustments for employee benefits from the base to the test year are mainly due to the increased salary base and higher premiums. The benefits for 1985 amount to 27 percent of wages and salaries. This percentage is in line with previous years after an allowance is made for the minor accounting changes carried out by Trans Mountain in 1984.

The Board, having reviewed the current Canadian economic environment and the trends in salaries and wages, considers the proposed 4 percent increase reasonable. This increase is similar to other recent salary and wage awards, most of which are presently tending to coincide with forecasted inflation rates for 1985. Furthermore, the Board also accepts the staffing levels requested by Trans Mountain.

The Applicant originally forecasted a 5.5 percent cost increase for materials and services. This was subsequently amended by the Company to 4 percent in the light of more recent information. This 4 percent increase is in line with recent economic indicators, such as the Consumer Price Index, and with recent predictions made by a number of authoritative institutions, including the Department of Finance, the Conference Board of Canada and the Economic Council of Canada.

In reviewing the matter, the Board discerns a moderating trend to the recent downward changes in inflation rates and perceives a degree of stability for 1985. The Board therefore concludes that a 4 percent projected increase is an appropriate inflation factor.

6.4 Inventory of Diesel Parts

The Applicant included $118 000 in its revenue requirement for the test year, for the "unrecovered" loss on the disposal of diesel engine spare parts which are no longer required since the diesel engines have been replaced by electric motors. The Company expensed $180 000 in 1983 and included this amount in the 1984 cost of service. The Company recovered $60 000 in its tolls before the Board disallowed the balance in September 1984. In its Application, the Company restated the outstanding balance from $120 000 to $118 000.

The Company testified that the outstanding balance is a proper cost of service that has not been recovered in previous years' tolls. The Company noted that the Board had disallowed the outstanding balance without providing the Company with an opportunity to explain its position. No intervenors objected to Trans Mountain's position.

The Board notes that the Company expensed the inventory loss in its 1983 accounting records. The Board agrees that this was the proper accounting treatment and a proper charge to Trans Mountain's 1983 cost of service. The Board does not accept the view that an amount expensed in 1983 is a proper charge to 1985 cost of service. The Board, therefore, has disallowed the $118 000 inventory loss.

6.5 Allocation of Administrative and Corporate Development Expenses

6.5.1 Administrative Expenses

At the direction of the Board in its 1983 Reasons for Decision, the Company performed a cost allocation study to develop an appropriate methodology for allocating administrative expenses to its non-jurisdictional activities. The methodology was reviewed and, with some modifications, it was approved by the Board.

Although the Company implemented this methodology in 1984, it has not been used to allocate the common expenses among its activities for the test year. The time actually reported by employees for non-jurisdictional activities was significantly different from the Company management's expectations and this discrepancy is thought to be due to the employees' misunderstanding of the instructions. The Company stated that it will implement more stringent instructions to ensure that the time reported on each activity reflects the time actually spent on that activity. The allocation of costs for the test year was made on the same basis as estimated for 1984, but adjusted by a 4 percent inflation factor. In response to questions, the Company submitted the cost allocation which would have resulted from the cost allocation methodology.

The Company allocates part of its administrative costs to two subsidiary companies and the propane operation which is separate from its pipeline operations. As a result of acquiring shares of Inland Natural Gas Co. Ltd. (Inland), three separate companies were incorporated for the management of this investment. Trans Mountain was questioned as to why no administrative costs have been allocated to these three companies. The Company indicated that the reorganization of the companies was completed in June 1983 and these companies are a shell to hold the Inland investments. There is no activity and no costs are involved for their administration.

The Board accepts the cost allocation proposed by the Applicant for the purpose of determining the appropriate cost of service for 1985. However, the Board would expect that the experience gained from the record of actual time spent by employees will permit a more appropriate allocation basis in the future.

6.5.2 Corporate Development Expenses

The Company agreed that under the present method of regulation, project development costs should not be included in the cost of service until such time as the project came to fruition and is determined by the Board to be of benefit to existing users. The Company provided estimates of the costs of the Corporate Development department and that of other head office departments for projects which are not directly related to current pipeline operations. The costs for these activities are listed in Table 6-3 below.

In argument, the Company took the position that these costs are properly included in the cost of service since the Kamloops facility will be part of the present pipeline system and if the other projects materialize the tolls for all shippers will be reduced.

Gulf took the position that costs for projects which are not related to current pipeline operation should not be included in the cost of service until deemed of benefit to users. Shell suggested, based on past Board practice, that the cost of these projects should be included in a deferral account until such time as they come to fruition and are proved of benefit to shippers. In addition, Shell argued that the estimated cost of $66 000 for the proposed Kamloops Terminal facility is too low. However, Shell did not provide an alternative estimate of the cost.

The Board finds that the total Corporate Development and other head office costs for the proposed Kamloops product terminal, methanol movement, and coal/water slurries are of no immediate benefit to present shippers. The Board has reduced the cost of service by the estimated costs of these projects. The Company may include costs incurred in connection with these projects in deferral accounts and accrue carrying charges at the prime rate. The disposition of these costs and the accrued carrying charges will be determined at a future hearing.

6.6 Hearing Costs

The Company proposed that one-half of its estimated hearing costs of $400 000 be amortized in 1985 and the other half in 1986. During cross-examination, the Company stated that the hearing costs pertaining to the portion of the hearing dealing with Gulf's Application were approximately $110 000.

In argument, the Airlines took the position that these costs were incurred because of Trans Mountain's refusal to carry Gulf's refined products, which refusal would have resulted in a throughput reduction in the test year. It was argued that hearing costs incurred for resolution of that dispute would not be for the benefit of all or any shippers and that the amount of $110 000 should be removed from the cost of service.

The Board feels that, as a common carrier, Trans Mountain should have agreed to carry refined products and should not have made it necessary for Gulf to make application to the Board to require Trans Mountain to carry products. Then a hearing would not have been necessary. The hearing costs, therefore, are reduced by $110 000 to remove from the cost of service the hearing costs associated with that part of the hearing. However, since part of the hearing was devoted to the Tariff Rules and Regulations for refined products and the refined products toll, which would have had to be settled in any event, the Board will allow $10 000 of this amount to be included in the cost of service for the calculation of the refined product surcharge.

Of the remainder of the proposed hearing costs applicable to the toll application, $145 000 is to be amortized in 1985 and the balance of the costs actually incurred is to be amortized in 1986.

6.7 Westridge Terminal Operating Expenses

Section 3.3 of these Reasons for Decision provides the background to the Westridge common dock facilities. The Board approves the Company's request to remove from the cost of service those costs which are related to Westridge common dock facilities and attributable to propane. As a result, the cost of service has been reduced by $140 000.

Table 6-3

	Kamloops Product Terminal	Methanol Movement	Coal/Water Slurries	Total
Corporate Development Group	$4 000	$55 000	$13 000	$72 000
Other Head Office Departments	62 000	-	4 000	66 000
Total	**$66 000**	**$55 000**	**$17 000**	**$138 000**

6.8 Deactivation of the 762 mm Loops

The Company testified that it would be necessary to remove the two 762 mm loops from service temporarily to move refined products because it is impractical to deliver refined products simultaneously through the 610 mm mainline and the 762 mm loops since the different flow rates would produce unacceptable contamination. For that reason all test batch deliveries were made with the 762 mm loops out of service.

The Company stated that although the level of the 1984 throughput did not require the use of the 762 mm loops, these were periodically placed in service in 1984 as the settling out of salt water from the static oil in the unused loops and its accumulation at low spots in the loops could lead to serious corrosion. However, if no refined products shipments were scheduled for 1985 the loops could be used in order to reduce energy costs.

The Company stated that removal from service of the 762 mm loops would result in the reduction of pipeline capacity from 30 000 m^3/d to 27 930 m^3/d, and elimination of the requirement for shippers to provide approximately 74 000 m^3 of linefill with an estimated value of $13 million. The Company estimated the cost of temporarily removing the loops from service at $300 000 and proposed to charge the costs of removal to the refined products shipper, Gulf.

The Applicant, when asked if the problem of contamination could be avoided through isolating the loops by closing the valve during refined products deliveries, advised that to leave the loops out of service for that length of time in an unprotected condition would produce a serious risk of damage from corrosion.

Gulf took the position that the loops were put in service to serve crude oil shippers, and the closing of the loops would reduce linefill and result in savings to all shippers. In Gulf’s opinion, it is not necessary to disconnect the loops to permit refined product shipments. The loops can be isolated while the refined products are delivered.

In argument, Trans Mountain maintained the position that the deactivation of the 762 mm loops is required as a result of the movement of Gulf refined products. However, the Company argued that if oil shippers are prepared to share in the payment of these costs, then the cost to deactivate the loops should be included in the crude oil pipeline cost of service.

Gulf, in argument, maintained its position that the deactivation would result in benefits to all shippers, and any necessary costs should be shared by those shippers. This position was supported by Shell and Imperial.

The Board agrees with Trans Mountain that the loops could be removed from service. The Board finds that the loops were built for the benefit of all shippers, but with the present low throughput the loops may not be required. The Board is of the view that, in light of the linefill savings, it is more equitable for all shippers to pay the costs of removing the loops from service. However, the Board notes that deactivation of these loops for a period greater than one year requires Board approval. If Trans Mountain applies for and receives Board approval, the Company is directed to defer any costs incurred for deactivation and accumulate carrying charges on the deferred costs at the prime rate. The disposition of these amounts will be determined at the next toll hearing.

6.9 Income Taxes

6.9.1 Normalized Income Taxes

Trans Mountain has used the normalized method of calculating its income tax provision in the test year, which is consistent with the method used in the past.

Under the present circumstances, the Board considers the continued use of the normalized method appropriate. The Board has calculated the income tax provision using an income tax rate of 50.5 percent. The amount to be included in the cost of service is calculated on a basis consistent with the after-tax return on equity implicit in the allowed deemed capital structure. Since taxes payable are included in working capital, an iterative process is required to compute rate base, return and income taxes. These calculations are shown in Appendix VIII.

6.9.2 Income Tax Rate

The Applicant used an overall tax rate of 50.5 percent.

The calculation of this rate, which the Board accepts, is shown in Table 6-4 below.

Table 6-4
Authorized Income Tax Rate

	Percent
Federal Corporate Tax	36.0
Composite Provincial Tax	14.5
Total Tax Rate	**50.5**

6.9.3 Accumulated Deferred Tax Debit

Trans Mountain has included the average accumulated deferred tax debit balance in the calculation of rate base. This treatment is consistent with that approved by the Board in its March 1983 Reasons for Decision.

Table 6-5 shows the calculation of the average accumulated deferred tax debit.

Table 6-5

Accumulated Deferred Tax Debit
($000)

Beginning Deferred Tax Balance			(932)[1]
Deferred Taxes for the Period		1,279	
Adjustments			
(a) Reduction of Depreciation Reference Section 3.5	(4)		
Reference Response to the Board's Information Request Dated 6 March 1985. 38 x 9/12 =	(28)		
(b) Reduction of Capital Cost Allowance Reference Section 3.5	16		
Reference Response to the Board's Information Request Dated 6 March 1985. 32 x 9/12 =	24[2]		
(c) Reduction of Hearing Costs Amortized Reference Section 6.6	30		
Total Adjustments	38		
Deduct Income Tax Effect 38 x 50.5%		(19)[1]	
Revised Deferred Taxes for the Period			1,260
Ending Deferred Tax Balance			328
Average Deferred Tax Balance $\frac{(932) + 328}{2} =$			(302)[1]

1. Bracketed figures denote debit balances.
2. Adjustments for Delivery Facilities are as indicated in the Application, as amended on 7 January 1985, Page 2.4-8.

Chapter 7
Rate of Return

Trans Mountain applied for a rate of return on rate base of 15.74 percent for the 1985 test year, as compared to the 14.38 percent rate approved in the Board's March 1983 Reasons for Decision. The applied-for rate of return was based on a deemed capital structure consisting of 45 percent debt and 55 percent equity applied to a capitalization equal to average test year utility rate base.

The applied-for capitalization, as revised, and corresponding deemed capital structure and cost rates are shown below.

7.1 Capital Structure

Trans Mountain submitted that the applied-for deemed capital structure was consistent with the Board's March 1983 Reasons for Decision and that there had been no significant change in its utility business risks since that time. For that reason the Company was of the view that there should be no change in the deemed debt and equity components of the capital structure. The Applicant based its submission on the testimony of its expert witness who examined the business risks of the Company.

The Company's expert witness presented a discussion of business risks related to the following elements: physical risks, customer composition and diversification risks, competitive risks, risks associated with general economic volatility, and finally regulatory risks. He concluded that Trans Mountain is exposed to significantly greater business risks than gas pipelines generally, and other major Canadian crude oil pipelines. He indicated that this conclusion is consistent with the BBB (low) bond rating conferred on Trans Mountain by the Dominion Bond Rating Service.

The Canadian Petroleum Association (CPA) was the sole intervenor to express concern regarding the appropriateness of the proposed capital structure. Its expert witness contended that Trans Mountain's overall level of business risk had declined since the Company's previous toll hearing as a result of the extension of the estimated economic life of the pipeline system from 1990 to 2005. He also viewed the increase in the types of products that the Company carries and its new and innovative management as being positive factors affecting Trans Mountain.

CPA's expert witness submitted that the proposed common equity ratio was more than adequate to maintain Trans Mountain's financial integrity. In this regard, he noted that each dollar of common equity return to the Company requires the collection of slightly more than two dollars from the shippers because of corporate income taxes. Accordingly, he was of the view that the proposed common equity ratio would result in additional tax-related charges to shippers that would make little contribution to the financial health of Trans Mountain.

The CPA witness concluded that the capital structure should be deemed to be comprised of 50 percent debt and 50 percent equity capital. He was of the view that such a structure, together with his recommended cost rates (discussed in the following sections) for debt and equity would provide adequate coverage of fixed charges, even in the event of the actual return on common equity failing significantly short of the allowed return.

Table 7-1
Requested Rate of Return on Rate Base

	Capitalization ($000)	Capital Structure (percent)	Cost Rate (percent)	Cost Component (percent)
Long-Term Debt	19 142	45.0	14.51	6.53
Common Equity	23 396	55.0	16.75	9.21
Total	**42 538**	**100.0**		
Rate of Return on Rate Base				**15.74**

The Board is of the view that it remains appropriate to equate Trans Mountain's capitalization to its projected test year average utility rate base. The Board also considers it appropriate to deem the debt and equity components of the capital structure. In this regard, the Board agrees that on balance, Trans Mountain is exposed to greater business risks than gas pipelines generally, and other major Canadian crude oil pipelines. However, the Board believes that the extension of the estimated economic life of the system provides a degree of comfort to Trans Mountain's investors. The Board notes that the evidence presented in the Company's 1983 toll hearing indicated that Trans Mountain had a borrowing capacity which supported imputing a 45 percent debt component in its capital structure. However, the evidence in the present hearing suggests that Trans Mountain could accommodate a 50 percent deemed debt component in its utility capital structure without bringing about significant adverse impact vis-à-vis the Company's financial integrity.

Accordingly, after giving consideration to the business risks to which the Company's regulated operations are exposed, and to evidence presented regarding Trans Mountain's ability to maintain financial integrity based on adequate coverage ratios, the Board has decided that a capital structure in the proportions of 50 percent debt and 50 percent common equity is appropriate for the purposes of establishing a just and reasonable rate of return on rate base.

7.2 Cost of Debt

Trans Mountain applied for a cost rate of 14.51 percent on its deemed debt component. This rate was based on the actual cost of funds which it had previously borrowed. In July of 1984 the Company acquired $20 million of fixed-rate, fixed-term funds comprised of two term notes, one in the amount of $12 million at a cost rate of 14.45 percent due in July 1989, and a second in the amount of $8 million at a cost rate of 14.60 percent due in August 1990. Together, the average cost rate is 14.51 percent.

The Company submitted that the debt had been raised at favourable rates for regulated purposes in advance of the funds being required to finance additions to rate base. As a result, the $20 million proceeds had been applied, on a temporary basis, to the loan obtained to purchase shares of Inland. However, the Company anticipates that the $20 million proceeds will eventually be applied to regulated operations since it is not the Company's intention to hold the Inland shares on a long-term basis.

Trans Mountain submitted that as the utility capital expenditure program progresses, it would be normal practice to generate funds through short-term bridge financing, and when the program is complete, to replace such funds with long-term debt. In this connection, cross-examination revealed that 1985 utility capital expenditures are expected to reach $8 million by August of 1985, at which time the Company intends to apply $8 million of the $20 million to the regulated debt.

During argument, the Applicant noted that both outside expert financial witnesses supported costing Trans Mountain's debt at a long-term rate. The Company agreed with this general principle, and further suggested that its actual cost of outstanding debt of 14.51 percent was an appropriate long-term rate.

CPA rejected the Applicant's position that a July 1984 actual debt rate, namely 14.51 percent, should be applied to notional 1985 debt. It submitted that an examination of the record illustrates that none of Trans Mountain's outstanding debt was borrowed for rate base purposes. As a result, CPA indicated that the $20 million borrowed in July 1984 should be treated as relating to the purchase of the Inland shares, and that the notion that "off-the-shelf" money was borrowed for regulated activities should be abandoned.

CPA's expert financial witness suggested that the Board might consider approving a blended rate incorporating both the July 1984 rate and Trans Mountain's current 1985 cost of long-term debt. He suggested the average actual test year regulated debt[1] could be considered to be financed out of the Company's outstanding debt, with the balance of its deemed debt requirement considered to be financed at current long-term costs.

During cross-examination, CPA's witness acknowledged a second alternative. He indicated that a more logical approach would be for the Board to adopt the view that none of the Company's outstanding debt is related to its regulated operations. In that event, he suggested the appropriate rate to be applied to Trans Mountain's entire deemed debt balance would be its current cost of debt. In this regard, the witness indicated that he viewed the Company's current cost of mid-term and long-term debt to be 12.75 and 13.25 percent respectively. The Board notes that the Company's expert witness concurred with the estimated long-term rate.

The Board is of the view that there is conflicting evidence regarding the Company's original anticipated use of the $20 million of fixed-rate, fixed-term funds raised in July 1984. Company officials submitted that the debt had been raised at favourable rates for regulatory purposes in advance of the funds being required to finance additions to rate base. However, Trans Mountain's 1983 Annual Report indicates that the Company intended to refinance a large portion of its 31 December 1983 balance of short-term debt on a long-term basis. In this regard, the Board notes that Trans Mountain had no actual regulated debt outstanding as of that date.

The Board has decided that it will consider the funds to have been raised for general corporate purposes, and finds it appropriate to allocate this debt between regulated and non-regulated operations as at the approximate time the funds were borrowed. A regulated utility allocation factor was derived by dividing the deemed regulated debt[2] as of 30 June 1984 by the consolidated deemed debt[3] at the same date. The product obtained

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[1] The forecast average balance of debt funds required to finance test year additions to rate base.

[2] Deemed regulated debt is the amount equal to 45 percent of the Company's rate base as at 30 June 1984 ($38 096 000 x .45 = $17 143 200).

[3] Consolidated deemed debt is the amount equal to the sum of the deemed regulated debt and the consolidated long-term debt as at 30 June 1984 ($17 143 200 + $49 855 000 = $66 998 200).

by multiplying the regulated utility factor by the $20 million represents the amount of that debt which the Board will fix as applying to Trans Mountain's utility operations. This is calculated as follows:

$$\text{Regulated Utility Allocation Factor} = \frac{\text{Deemed Regulated Debt}}{\text{Consolidated Deemed Debt}}$$

$$= \frac{\$\ 17\ 143\ 200}{\$\ 66\ 998\ 200}$$

$$= .2559 \text{ or } 25.59 \text{ percent}$$

Therefore: Utility Portion of $20 million

$$= \$\ 20\ 000\ 000 \text{ x } 25.59 \text{ percent}$$

$$= \$\ 5\ 118\ 000$$

The Board would cost this debt at its actual cost, that is 14.51 percent.

The balance of Trans Mountain's deemed debt component is computed as the difference between 50 percent of its total average test year capitalization and that portion of its outstanding debt which has been allocated to regulated operations. This is calculated as follows:

Balance of Deemed Debt	=	(Average) Capitalization x .5)	-	(Regulated Portion of Outstanding Debt)
	=	($ 41 262 000 x .5)	-	$ 5 118 000
	=	$ 15 513 000		

The Board finds it appropriate to cost this balance at 13.25 percent, the Company's current estimated cost of long-term debt.

The above-noted decisions result in a blended cost for Trans Mountain's deemed debt component of 13.56 percent, calculated in the following manner:

$$\text{Deemed Interest} = (\$\ 5\ 118\ 000 \text{ x } 14.51\%) + (\$\ 15\ 513\ 000 \text{ x } 13.25\%)$$

$$= \$\ 742\ 622 + \$2\ 055\ 473$$

$$= \$\ 2\ 798\ 095$$

$$\text{Cost of Deemed Debt} = \frac{\text{Deemed Interest}}{\text{Deemed Debt}}$$

$$= \frac{\$\ 2\ 798\ 095}{\$\ 20\ 631\ 000}$$

$$= 13.56\%$$

7.3 Rate of Return on Equity

Trans Mountain applied for a rate of return on common equity of 17.0 percent. However, during the hearing the requested rate was revised downwards to 16.75 percent, based on the recommendations of its expert witness. This represents an increase of 1.25 percentage points over the currently approved rate.

In his filed direct testimony, Trans Mountain's expert witness recommended a rate of return at the upper end of a 16.5 to 17.0 percent reasonable range, based on his consideration of the comparable earnings, discounted cash flow (DCF) and equity risk premium approaches to estimating the cost of equity capital. His comparable earnings approach was founded on what he viewed to be an approximately comparable-risk sample of investment grade industrial companies. His analysis of their book equity returns indicated that these companies had achieved rates of return approximating 17.3 to 18.0 percent over the most recent business cycle. He subsequently adjusted this range to reflect his expectations for reduced future inflation and adopted a range of 16.5 to 17.0 percent. With respect to his DCF and equity risk premium analyses, the witness adopted estimates of Trans Mountain investors' required rate of return (IRR) of 15.75 to 16.0 percent.

Restating these IRR results to reflect what he viewed to be an acceptable market-to-book ratio of 1.1 to 1.2, he concluded that these tests supported a 17.0 percent rate of return on equity.

During the hearing the witness noted that there had been recent declines in inflation expectations and in long-term interest rate prospects. He further noted that the Company had amended its proposed toll design. Accordingly, based on these three factors he reduced his recommended rate of return on equity to 16.75 percent.

In final argument, the Airlines indicated opposition to any increase in the rate of return on common equity, and suggested that the rate should instead be reduced from the currently approved level of 15.5 percent. In support of this view they indicated that the extension of the estimated useful life of the pipeline system and the commencement of regular refined products shipments were positive factors promoting stability.

CPA suggested that an appropriate equity rate of return would be in the range of 15.0 to 15.25 percent, and that the lower end of the range would be appropriate if the Board were to approve the proposed toll design methodology. Its recommendations were based on the testimony of its expert witness. The witness derived his rate of return recommendation by applying the DCF technique to a sample of 20 low-risk non-utility companies. Based on his analysis, he found that the IRR of his sample group is currently in the range of 13 to 14 percent. Having regard to the risk of Trans Mountain relative to other companies regulated by the Board, the volatility of interest rates and the minimal need for a margin of safety to minimize the likelihood of dilution, the witness subsequently recommended a common equity rate of return within the range of 15 to 15.25 percent. During cross-examination he indicated the lower end of the range would be appropriate if the amended toll design methodology was approved.

During final argument, Trans Mountain and CPA each commented on the appropriateness of the equity rate of return recommendations made by the other's expert witness. Trans Mountain suggested that there were certain inconsistencies in the CPA's application of the DCF test, and that the DCF method of analysis is flawed and, therefore, not the best method. On the other hand, CPA disputed the emphasis which Trans Mountain placed on the comparable earnings test. It contended that this test placed significant emphasis on historical data, which it viewed as unacceptable due to distortions of such data caused by inflation and different accounting treatments of assets. In addition, CPA was of the view that the Company may not have fully incorporated the lower prospects for inflation in deriving its applied-for rate of return on equity.

The Board notes that there was significant disagreement between the witnesses regarding the appropriateness of market return versus book return cost of capital estimation techniques. The Board is also of the view that the determination of an appropriate rate of return on equity involves the use of methods that are subject to the exercise of judgment. Accordingly, based on all of the evidence presented, and having regard to the prospects for future inflation, and its decisions in respect of capital structure and the proposed toll design, the Board finds a rate of 15.75 percent to be a fair and reasonable rate of return on the allowed 50 percent deemed common equity ratio.

7.4 Rate of Return on Rate Base

Based on its findings with respect to the deemed financing of the rate base, the Board has decided that the rate of return on rate base should be 14.66 percent. The derivation of this rate of return is presented in Table 7-2:

Table 7-2
Approved Rate of Return on Rate Base

	Capitalization ($000)	Capital Structure (percent)	Cost Rate (percent)	Cost Component (percent)
Long-Term Debt	20 631.0	50.0	13.56	6.78
Common Equity	20 632.0	50.0	15.75	7.88
Total	**41 262.0**	**100.0**		
Rate of Return on Rate Base				**14.66**

Chapter 8
Toll Design

8.1 Toll Design Proposal

Trans Mountain proposed a toll design methodology providing for two classes of service: Class I to include only domestic transportation provided on a forecasted and scheduled basis; and Class II to cover export deliveries, loading charges over the Westridge dock, and intermittent domestic deliveries. In addition, Trans Mountain proposed a special charge for the movement of products requiring additional facilities or additional costs.

The most distinctive aspect of this toll design proposal was the establishment of a fixed cost component of tolls. To achieve this goal, the cost of service would be separated into fixed and variable components with return on rate base, income tax expense, and fuel and power costs being the variable elements. The fixed costs would be allocated to Class I shippers on the basis of each customer's average of the prior year's actual domestic throughput and test year forecast throughput, taking into account the distances between each receipt and delivery point.

The variable unit toll would be determined by dividing the variable costs by the total annualized cubic metre-kilometres for all domestic shipments and multiplying the resulting unit charge by the distance from the receipt to the delivery point. The Class II toll would be determined by dividing the total cost of service by the total annualized cubic metre-kilometres for all shipments and multiplying the resulting charge by the distance from the receipt to the delivery points. In addition, the toll design would include a special service charge designed to recover incremental costs for the movement of products which require dedicated facilities or special handling.

Class I shippers would pay monthly fixed tolls based on volumes forecast and variable tolls based on volumes shipped. Class II shippers would pay an average unit toll and the revenue from these tolls less the direct costs for this service would be refunded to Class I shippers.

This toll design proposal was opposed by all shippers and, as a result, was withdrawn by Trans Mountain. An alternative toll design proposal was developed by Trans Mountain with the assistance of its shippers and submitted to the Board.

8.2 Alternative Toll Design Proposal

Trans Mountain expressed two major concerns. One is the difficulty in forecasting exports and the other is the sensitivity of its return to volume changes. The latter concern is due to the size of the rate base. The amount of return on equity is a small percentage of the cost of service. Therefore, any change in throughput can have a large impact on the Company's profit.

To address these concerns, Trans Mountain's shippers agreed to provide to the Company, by the tenth of each month, a forecasted throughput for the following 13 months. The forecast would be supplied in writing in a format to be agreed upon between the Company and the shippers. The Company proposed to initiate a Class I Application if the current throughput forecast varies by 5 percent or more from the forecast used to derive the then current tolls. Trans Mountain proposed to file with the Board and serve on interested parties this Class I Application at least ten working days before the proposed effective date for new tolls. For convenience, the Applicant would attempt to have new tolls effective from the first day of a month. To minimize the regulatory lag, the Company proposed that the toll should be approved as interim. Class I Applications would continue to be based on a calendar year throughput and, as at present, neither revenue shortfalls nor gains from earlier periods would be included in the Applications. Any adjustments to the toll which might result from the interim and final tolls would be made prospectively over the balance of the calendar year. The 5 percent variation criterion would be determined on a cubic metre-kilometre basis rather than on a volumetric basis as at present. This would have the effect of weighting the throughput by the distance of the transmission through the pipeline.

Intervenors did not address the specifics for toll revisions but indicated that they supported the alternative toll design proposed by the Applicant, and undertook to provide to Trans Mountain by the tenth of each month their throughput forecasts for the ensuing 13 months. The Airlines stated that the Board should receive from the shippers the same information which they submit to the Company. In argument, the Applicant took the position that the proposal should be tried to see how it works as it has the support of the shippers.

This alternative toll design methodology was supported by the shippers. However, there was no agreement on the discontinuance of the use of density differentials or the treatment of terminalling charges in establishing tolls.

8.2.1 Density Differentials

In its application, Trans Mountain proposed the use of a single toll to cover all crude oils having densities less than 876 kilograms per cubic metre (kg/m^3) in order to simplify calculations and procedures and to stabilize revenues. Trans Mountain noted that most of the products carried in its system lay within a narrow band of densities included in the current tariff but that limitations existed on the movement of heavy crude oil due to the physical capability of the system. Further, following the recent electrification of the pump stations, the minimum demand charge portion of the billing system used by the utility companies resulted in insignificant changes in fuel and power costs due to density differentials of light and medium crude. However, an adjustment to tolls would be necessary for heavy crude.

Petro-Canada opposed the discontinuation of the use of density differentials as the toll classes implied differences in the cost of shipping crude oils of different densities. Petro-Canada also took the position that no justification was advanced to warrant any change in method, particularly as the Board was concerned with the "just and reasonable" aspect of tolls, not solely with the simplification argument presented by the Applicant.

The Board notes that, presently, a significant portion of throughput lies within a narrow range of densities. Under the circumstances the Board approves the elimination of the density differentials for the movement of crude oil other than heavy crude oil.

8.2.2 Terminalling

On the advice of a consultant retained by Trans Mountain to review toll design methodology, the Company proposed that the separate allocation of terminalling and transmission costs be eliminated and that the applicable costs of service be combined into a single volume/distance toll. In support of this view, the Company stated that system changes have occurred since the existing toll design was established in the 1978 Reasons for Decision. The Company identified the maturity of the system and repowering of the pump stations from diesel to electric power as examples of the system changes.

The Company testified that the terminalling function is an integral part of the pipeline operation. As crude oil is received at the Edmonton terminal it is metered and, through the manifolds, is either directed to holding tankage or, if the incoming stream is similar to the stream being pumped, routed direct to the pump station. Crude is also received at Edson and Kamloops which, depending again on the type of crude that is being pumped into the mainline, may be either injected in the passing batch or received in the tanks. In addition, oil batches can be initiated at either of these points. At Sumas there are a number of tanks which are used for back-up storage for the Burnaby Terminal. The tankage in Burnaby is used to make deliveries to the Vancouver area refineries at lower rates than the pipeline pumping rate. Along the line there are a number of locations equipped with relief and break-out tankage.

On the basis of these operations, the Company concluded that tankage in its pipeline system is working tankage and is necessary to maintain the flow, to minimize the risk of contamination and to provide the necessary pressure relief. In support of this view, the Company stated that in a short haul pipeline less breakout and relief tankage is required than in a long haul pipeline because there is less oil in the system, therefore, less storage is needed in the event of an interruption. For these reasons, the Company proposed that the terminalling element be eliminated and the total cost of service be combined into a single transmission toll based on cubic metre-kilometres.

In response to the Board’s information requests, the Company submitted tolls calculated on the basis of the existing methodology but included in terminalling, in addition to the cost of tankage, the costs of the ancillary facilities that are more in the nature of terminalling than transmission. As some facilities and costs are not readily identifiable as one or the other, the Company allocated the related assets and the cost of service based on the judgment of its operating departments. During cross-examination the Company’s position was that if the present methodology is retained all of the terminalling-related costs should be included in the terminalling component of the cost of service. Several intervenors took the position that the existing toll design methodology should not be changed.

In argument, the Company maintained its position that the distinction between terminalling and transmission should be abandoned, and the total cost of service should be distributed in the tolls on the basis of volume and distance. The reasons given by the Company were that the tankage is an essential part of the pipeline, that the terminalling facilities benefit all users, and that the method is practical and easy to administer.

The position of the Airlines was that terminalling and perhaps the lifting and delivery function should be included in the toll design as a separate component on the basis of useful facilities for a particular function. Gulf’s position was that the present toll design should be retained but the methodology refined to segregate costs into five groups. The first group would include the costs for the transmission facilities and the related costs would be distributed on the basis of volume and distance. The second and third groups would include the costs for terminalling crude and products, respectively, and the respective costs would be charged to the users on the basis of volume only. The fourth and fifth groups would include the costs for dedicated facilities for crude and products and the cost would be allocated to the two groups of users. The basis for allocation was not addressed.

Petro-Canada’s position was that the justification advanced by the Company for the rolling-in of costs proved only that the assets are used and useful. It quoted passages from the 1978 Reasons for Decision where the existing methodology was implemented: "The first step in a determination of just and reasonable tolls is a study of how costs are actually incurred ... costs associated with the terminalling function such as storage of products are not incurred on a distance basis and are common to every barrel of throughput handled by the system. Transmission costs such as pump station operating costs are related to both throughput and distance transported." On that basis, Petro-Canada’s position was that Trans Mountain’s proposal should not be accepted.

Shell also took the position that the method for allocating terminalling costs should not be changed, but suggested that relief and break-out tankage are part of the transmission function, and that cross-examination showed that these represented approximately 10 percent of the tankage value resulting on a rate base value of $640 000. This should remain in the transmission function, but the terminalling costs should be allocated on the basis of volume.

The Board is persuaded by the evidence that tankage is required for the proper scheduling of batches through the pipeline system whether or not an individual batch uses tankage. The Board, therefore, finds that the separation of terminalling and transmission costs for the determination of tolls is no longer appropriate.

8.2.3 Variation to Trigger Toll Adjustment

As described in Section 8.2 the Company, in its alternative toll design, proposed that a toll adjustment be triggered by a variation in throughput of 5 percent or more. During cross-examination, the Company was asked to consider whether the adjustment procedure should be triggered by a throughput variation or by a rate of return variation of 2 percent as prescribed by Board Order TO-4-80 applicable to Interprovincial Pipe Line Limited and informally extended to Trans Mountain. The Company stated that it would prefer to continue to use a toll adjustment triggered by a 5 percent throughput variation. This approach had been discussed with the shippers and they had not objected. It was noted that a toll adjustment based on a 2 percent variation of the rate of return on equity, as required by Order No. TO-4-80, would result in frequent toll adjustments, while an adjustment based on a 5 percent variation of throughput would allow a substantial fluctuation in the rate of return without a toll adjustment being triggered.

The Applicant proposed that the variation to trigger a toll adjustment should be determined on a cubic metre-kilometre basis, rather than on a purely volumetric basis as set out in Board Order TO-1-83. This modification was proposed to be compatible with the basis of toll design.

In the March 1983 Reasons for Decision, the Board noted that Trans Mountain’s earnings are sensitive to changes in throughput and that increases or decreases in throughput can occur on short notice. On that basis, the Board found it useful to maintain a procedure that would permit adjustments to the tolls to be made in an expeditious manner whenever the throughput varies by 5 percent or more.

8.2.4 Decision

The Board finds that it would be desirable to continue the use of a toll adjustment triggered by a 5 percent throughput variation in view of the fact that the shippers have agreed to submit monthly to Trans Mountain updated throughput forecasts. The Board, therefore, directs that Trans Mountain continue to submit the monthly throughput forecasts as required by Board letter of 14 March 1984 showing the throughput projected in each month, each quarter and for the year, together with a breakdown by shipper of the throughput projected for each month. Whenever the forecast throughput in cubic metre-kilometres for the current calendar year varies by 5 percent or more from the throughput in cubic metre-kilometres on which the tolls in effect are based, Trans Mountain should submit new tolls reflecting the estimated throughput and the related fuel and power costs for the movement of the revised volume. The Board is of the view that, if the shippers were also to submit a copy of these forecasts to the Board, it would expedite the processing of a toll adjustment application. The Board, therefore, requests that Trans Mountain's shippers submit to the Board copies of each 13-month throughput forecast at the same time that these are submitted to the Company.

8.3 Clause 25 of Rules and Regulations

Clause 25 of the Rules and Regulations, which forms part of Trans Mountain's Tariffs, governs the batch size, the required form of notice of shipment, and the allocation of space when the product tendered exceeds the capacity of the line. The wording of the last sentence, which is the same in the crude oil and refined products Rules and Regulations, states that:

"When the combined amount of refined petroleum and petroleum tendered to carrier is more than can be transported currently. the transportation furnished by carrier shall be apportioned among all shippers equitably."

Chevron requested that the last sentence of Clause 25 of the Rules and Regulations be amended to add the words "giving due consideration to the requirements of Vancouver refiners". Chevron requested the amendment because it receives its crude oil supply from British Columbia and Alberta only, thus Trans Mountain performs an essential service in transporting the crude oil feedstock to the Burnaby refineries. Chevron stated that there is no immediately available alternative source of crude oil for Vancouver refineries.

Trans Mountain stated that it wants to be equitable in any proration of deliveries that might, of necessity, come about through capacity restrictions. In argument, Trans Mountain stated that the wording proposed by Chevron would be unjustly discriminatory within the meaning of the Act and suggested that the Board could prevent the need for pipeline space allocation through judicious licensing of exports. In the Company's view, it is not for Trans Mountain to discriminate between one shipper and another.

In argument, Chevron again advocated that the Board should give due consideration and full recognition to the fact that Vancouver refineries have no access to petroleum other than via Trans Mountain.

In Chevron's view, the inclusion of the requested wording in the Rules and Regulations would not constitute unjust discrimination. Chevron suggested that there are greater benefits to Canada from refining crude oil in Canada and exporting the products than from exporting crude oil. Gulf supported Chevron's position with respect to Vancouver refiners, but indicated that any special consideration of the Vancouver refineries could be done better through export licensing decisions by the Board than by amending Clause 25 of the Rules and Regulations, Shell also supported Chevron's position on prorating volumes in the event that movement of refined products results in a reduction of throughput in time of tight capacity, but Shell did not state its position with respect to Clause 25.

The Board finds that the allocation of space in the pipeline is a responsibility of the Company and notes that the Act requires that the pipeline be operated without unjust discrimination. The Board finds that there is no need to amend Clause 25 of the Rules and Regulations.

8.4 Refined Products Toll

Trans Mountain had proposed a refined product toll based on the same methodology it originally proposed for crude oil tolls. The Company proposed to classify the movement of refined products as Class I Service and developed a toll consisting of three components: the fixed monthly charge and variable component as payable for the shipment of crude oil, plus a fixed monthly surcharge designed to recover the incremental costs associated with the movement of refined products.

As noted in Section 8.1, Trans Mountain withdrew the original toll design proposal for crude oil in favour of an alternative based on the existing toll design. As a result, Trans Mountain revised its refined products toll design to include the new proposal for crude oil tolls plus a surcharge. The following sections deal with the surcharge proposal.

8.4.1 Tankage Credit

Gulf stated that it should receive a credit in computing the refined product surcharge to reflect the fact that Trans Mountain's tanks are not used for either the receipt or the delivery of the Gulf refined products. Trans Mountain stated that usage of its tankage should not be an issue, as the existence of tankage enhanced scheduling flexibility without which it could not receive products directly into the pipeline.

Trans Mountain testified that tankage is needed to control the flow into the mainline in order to maintain throughput. However, the Company agreed that in theory if the pumping rate of the refined products matched the mainline pumping rate and the scheduling could be arranged to have one system feed the other, then the specific movement could be made without the use of the pipeline tankage, but some terminalling facilities including the terminal manifolds are necessary.

Under cross-examination by Imperial, the Company stated that if a credit were to be given to everyone who does not use certain facilities on the system, it would require an analysis of each movement by each and every shipper. However, tankage is used at the discretion of the carrier to maintain the overall scheduling flexibility of the system. If credit is given for a facility not used by a particular shipper, the carrier could end up with an extremely complex toll structure which would require continuous review and analysis. Since different facilities have different costs, the toll for a shipper could vary with the type of facilities which the carrier may choose to use for a particular movement, resulting in a complex toll, forecasting difficulties, and less than reasonable assurance that the carrier would recover its costs.

In the argument in the review proceedings, Trans Mountain's position was that the tankage assists scheduling, and on that basis there should not be a credit in the refined products toll just because refined products do not use the tankage. Gulf's position was that as a matter of principle it should not have to pay for costs of facilities which it does not use merely because they assist in scheduling. The other intervenors did not address this issue. In the argument of the toll proceedings, Trans Mountain maintained that if the Board were to endorse some sort of a specific tankage credit for Gulf, then it would be equitable or necessary to provide tankage credits to other shippers who might not use the Edmonton tanks or other facilities in the system, thus complicating the toll structure. None of the intervenors addressed this matter further.

Although Gulf refined products do not use the tankage directly, the Board finds that tanks are essential for the scheduling and efficient operation of the pipeline. The Board believes that it is appropriate for refined products shippers to pay the full crude oil toll as tanks assist in the scheduling which makes the delivery of products possible. The Board is of the view that all shippers receive the benefits and, consequently, all shippers should pay for the cost of tankage.

8.4.2 Refined Products Surcharge

Trans Mountain proposed that the refined products surcharge should be a fixed monthly charge.

Gulf, the only refined product shipper, opposed the monthly surcharge proposed by the Applicant, and proposed that the surcharge should be determined on the same basis that the crude oil toll is determined, that is to say, the toll should be calculated on a volumetric basis and charged on the basis of volumes shipped. Thus, if Gulf were to tender products on behalf of other shippers it would know what it should charge for the transportation. In addition, Gulf proposed the exclusion of the costs for the deactivation of the 762 mm loops (see Section 6.8) from the refined products surcharge.

In proposing a volumetric surcharge for the refined product toll, Gulf stated that it would backstop Trans Mountain's costs and would agree to pay any surcharge-related costs which are not collected through tolls in 1985. However, Gulf would expect a credit for any overpayment of the tolls.

All crude shippers took the position that there should not be any subsidization of refined product shippers by crude oil shippers and cross-examined Trans Mountain on the subject of cost allocation. The Company's position was that refined product shippers should definitely pay the variable costs associated with refined product movements but that any other costs would be difficult to segregate between crude oil and refined products as both would use common facilities.

8.4.3 Decision

The Board is of the view that it would be more appropriate if Trans Mountain were to recover in the surcharge the incremental fixed costs associated with the movement of refined products as a fixed monthly charge during the remainder of the test year commencing 1 May 1985, and that the variable costs be recovered in the surcharge on the basis of volume shipped. In accordance with this view, the Board has determined the appropriate refined product surcharge in Table 8-1.

The Board approves a fixed monthly surcharge of $10 625 to be collected from May to December 1985 and a variable surcharge of $0.443 per cubic metre. For shipments from January through April, Gulf is paying only the crude oil toll, fixed by the Board in Order No. TOI-2-84 as an interim toll for refined products movements. The Board estimates the uncollected portion of the variable surcharge at $62 000 and directs that Trans Mountain, no later than 1 June 1985, charge Gulf, in respect of petroleum products transported between 1 January 1985 and 30 April 1985, the refined products surcharge of $0.443 per cubic metre transported, together with interest on each month's component for the period from the date of the invoice under which that component was collected to the date of the invoice required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans.

Table 8-1
Refined Product Surcharge

		Fixed ($)	Variable ($)	Total ($)
Toll to be effective 1 May 1985				
Refined Product Incremental Costs				
Operating Costs			243 000	243 000
Amortization of Delivery Facilities		75 000		75 000
Hearing Costs		10 000		10 000
		85 000	243 000	328 000
Refined Product Scheduled Movements in m^3				
1 January to 30 April 1985	139 700 m^3			
1 May to 31 December 1985	409 200 m^3			
Total Deliveries	548 900 m^3			
Refined Product Surcharges				
Monthly Fixed Surcharge From May to December 1985 $85 000/8 Months				10 625
Volume Variable Surcharge $243 000/548 900 m^3				0.443
Surcharge for Uncollected Costs From 1 January to 30 April 139 700 m^3 at $0.443				61 887
Uncollected Surcharge to be Collected as a Lump Sum Billing				62 000

8.5 Shell Special Facility Charges

In June 1984, Trans Mountain applied to the Board for a toll for the movement of a special stream from the Shell Edmonton refinery to its refinery in Burnaby. This toll comprised the then approved crude oil toll, a 4 percent surcharge to recover the additional handling costs, and a monthly charge to recover the cost of the additional facilities necessary to make the deliveries from Trans Mountain's terminal in Burnaby to the Shell refinery. The Board, by letter dated 11 July 1984, approved the requested toll and tariff with the condition that they be examined at the next toll hearing.

When Trans Mountain introduced the alternative toll design for the mainline toll, it stated that the special facilities were covered by agreement between Trans Mountain and Shell that included both a surcharge and a fixed monthly charge.

During cross-examination, Shell testified that the particular arrangement resulted from negotiations and was in part dictated by the unpredictability of the volumes to be shipped. Trans Mountain stated that, in its view, costs for special facilities constructed for a single customer should be recovered through a fixed monthly charge instead of a volumetric charge.

The Airlines questioned the Company on the determination of the 4 percent surcharge. The Company, in its June letter to the Board, had stated that some adjustment might be required in light of the Company's experience. During cross-examination, the Company advised that the 4 percent surcharge could not be cost-justified based on the movement of two batches during 1984, and proposed dropping the surcharge.

The Shell special stream surcharge was not addressed by any other intervenor.

The Board has reviewed the methodology for determining the additional charge for delivering the Shell special stream. Since the methodology is based on an agreement between Trans Mountain and Shell, the Board accepts the proposed methodology modified by the removal of the 4 percent surcharge. However, in the event that Trans Mountain commences movement for other shippers through the same facilities, the Board will review the method for determining this charge.

The Board accepts the continuation of the toll for the Shell Special Stream as approved in Tariff S1, effective 1 September 1984, modified by removing the 4 percent surcharge, and by adjusting it to reflect the approved rate of return on rate base and the resulting income tax provision. The Board, in determining the pipeline revenue requirement, has deducted the estimated revenue which Trans Mountain may receive from Shell. The determination of the amount is shown in Table 8-2.

8.6 Edson Gathering Line Charge

Consistent with the proposed toll design, Trans Mountain initially filed a fixed monthly toll for the Edson gathering line. In the revision to the Application filed 13 November 1984. the Company rolled the cost of service for this facility into the mainline transmission toll. During the hearing, the Company filed a separate cost of service for this facility and a volumetric toll consistent with the toll design finally proposed by the Company. The Company explained that it had rolled the costs for these facilities into the mainline toll as it appeared that there were no users for the facilities. However, it became apparent to the Company that during 1985 there will be a possibility of a shipper using these facilities who is not presently a mainline shipper, and on that basis, the Company was of the view that a toll is required.

The Board has reviewed the methodology and the toll for the Edson gathering line charge. The Board finds the methodology acceptable, but has adjusted the cost of service to reflect the approved rate of return and the resulting income tax provision. The approved toll is shown on Table 8.3.

Table 8-2
Shell Special Stream Estimated Charge

	Application	**NEB Adjustments**	**NEB Allowed**
Rate Base Computation[1]			
Transportation Plant	$737 089	-	$737 089
Accumulated Depreciation and Amortization	(144 159)	-	(144 159)
Net Assets in Service	592 930		592 930
Average Deferred Taxes	(15 995)	-	(15 995)
Working Capital	9 332	($ 2 402)	6 930
	$586 267	**($2 402)**	**$583 865**
Estimated Revenue Requirement			
Salaries, Wages and Benefits	$24 000		$24 000
Insurance	2 300		2 300
Property Taxes	46 200		46 200
Administration	11 120		11 120
Operating Costs	83 620		83 620
Depreciation and Amortization	41 900		41 900
Return on Rate Base	93 099	($7 504)	85 595
Provision for Income Taxes	55 930	(9 022)	46 908
Total Revenue Requirement	**$274 549**	**($16 526)**	**$258 023**

1. Average balance 1985

Table 8-3
Edson Gathering Line Charges

	Application[1]	NEB Adjustments	NEB Allowed
Rate Base Computation[2]			
Transportation Plant	121 107	-	121 107
Accumulated Depreciation	(67 313)	-	(67 313)
Net Assets in Service	53 794	-	53 794
Average Deferred Taxes	(10 800)		(10 800)
Working Capital	1 050	(254)	796
Total Rate Base	**44 044**	**(254)**	**43 790**
Cost of Service			
Return on Rate Base	6 994	(574)	6 420
Provision for Income Taxes	4 202	(679)	3 523
Depreciation	3 000	-	3 000
Operating Expenses	11 800	-	11 800
Total Cost of Service	**25 996**	**(1 253)**	**24 743**
Daily Throughput	90 m^3		90 m^3
Toll	0.791/m^3		0.753/m^3

1. As filed in Exhibit B-74
2. Average balances

Table 8-4
Computation of 1985 Tolls

	($000)
Revenue Requirement Less:	38 972
Refined Product Surcharge	328
Shell Special Stream	258
Edson Gathering Line Charge	25
Crude Oil Revenue Requirement	**38 361**

Calculation of Volume/Distance Units

Source	Delivery	km	m^3	Daily m^3km
Edmonton	Kamloops	822	1 500	1 233 000
	Sumas	1 090	1 790	1 951 100
	Burnaby	1 146	16 200	18 565 200
Edson	Sumas	861	-	-
	Burnaby	918	790	725 220
Kamloops	Sumas	267	-	-
	Burnaby	324	2 910	942 840
			23 190	**23 417 360**
Annualized m^3km				**8 547 336 400**

Unit transportation charge = Revenue requirement/annualized m^3km
= 38 743 000/8 547 336 400
= $0.004488064/$m^3km$

8.7 Treatment of the Differential Between Interim and Final Tolls

Trans Mountain applied for interim tolls in the event that the Board would not hear and decide on the Company’s toll application before 1 January 1985. Trans Mountain requested the interim toll on the basis of an expected throughput reduction and increased cost of service. By Order TOI-3-84 the Board directed that Trans Mountain’s existing tolls be interim from 1 January 1985 until the Board issues its final order with respect to the Applicant’s tolls.

The shipper intervenors objected to any toll adjustment which would have resulted in adjustments to prior billings and proposed that any adjustment should be done on a prospective basis. Gulf, Imperial, and Shell preferred that any adjustment be included in the toll as a surcharge or a credit on future shipments while Chevron suggested that any difference should be included as a surcharge or credit or rolled into future tolls on a prospective basis.

Section 52.2 of the NEB Act allows the Board where it has made an interim toll order to direct a company to recover or refund in a manner satisfactory to the Board, the amount by which the revenue collected from the interim tolls differs from the revenue determined by the application of the final tolls approved by the Board, together with interest on the amount recovered or refunded.

The Board estimates that the interim tolls have resulted in overpayment by shippers of approximately $320 000. The base for calculating this differential are the interim tolls, the tolls resulting from the approved cost of service and throughput and the Board's estimate of deliveries from 1 January to 30 April 1985.

To reimburse shippers for this overpayment the Board directs that Trans Mountain, in its invoices to shippers for the transportation of crude petroleum and refined products in the month of May 1985, credit each shipper with a share of the total of

(a) the difference between the revenues recovered for the transportation of crude petroleum and refined products from 1 January 1985 to 30 April 1985 and the revenues that would have been recovered at the tolls prescribed in Table 8-5 hereto in respect of the transportation in those months of crude petroleum and the crude petroleum toll portion of the toll for transportation of refined products, and

(b) interest on each monthly component of the amount referred to in subparagraph (a) for the period from the date of the invoice under which that component was collected to the date of the invoice containing the credit required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans determined by that shipper's rateable proportion of the total of the products of the volumes of all crude petroleum and refined products transported in May 1985 and the corresponding distances transported.

The Board estimates that, for the Edson gathering line, the interim tolls have resulted in an underpayment by shippers of $1 242.00 and directs that Trans Mountain, no later than 1 June 1985, charge each shipper that used the Edson gathering facilities between 1 January 1985 and 30 April 1985 the difference between

(a) the Edson gathering charge charged pursuant to Order No. TOI-3-84 and

(b) the Edson gathering charge prescribed in Table 8-5 hereto, together with interest on each monthly component of the amount charged for the period from the date of the invoice under which that component was collected to the date of the invoice required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans.

Table 8-5
Tolls

Crude Petroleum of Density Greater than 611 kg/m^3 and less than 877 kg/m^3

From	**To**	**Toll ($/m^3)**
Edmonton	Kamloops	3.689
Edmonton	Sumas	4.892
Edmonton	Burnaby	5.143
Edson	Kamloops	2.667
Edson	Sumas	3.864
Edson	Burnaby	4.120
Kamloops	Sumas	1.198
Kamloops	Burnaby	1.454

Refined Product Toll

Edmonton-Kamloops		
Fixed Monthly Charge		$10 625 per month
Variable Toll		
Crude Oil Toll	$3.689/m^3	
Variable Surcharge	0.443/m^3	$4.132/m^3

Other Charges and Tolls

Edson Gathering Line Toll	$0.753/m^3
Westridge Loading Charge	$0.251/m^3

Chapter 9
Westridge Propane Facility

9.1 Jurisdiction

By letter dated 26 September 1984, Trans Mountain submitted for Board approval an amendment to its contract with Gulf for the processing of propane through the Westridge propane facility at Burnaby, British Columbia. As the amendment incorporated an increase in the charge for the use of the facility, the Board on 7 November 1984 issued Order No. TOI-2-84 approving the toll increase on an interim basis, pending further consideration in the public hearing.

Without prior notice, Trans Mountain advanced evidence at the hearing in support of the position that the Westridge propane facility is not part of its interprovincial pipeline system, and therefore is not subject to the jurisdiction of the Board. The Company stated that the sole purpose of the facility since its construction in 1966 has been to liquify propane delivered to the facility by rail, and to load the liquid propane aboard vessels for export. Throughout the life of the plant this service has been provided to one shipper, originally the British American Oil Company Limited, and later its successor Gulf.

Although the construction of the plant was originally authorized by the Board under Section 49 of the Act, Trans Mountain suggested that such authorization had not been required, and that the Company had submitted to the procedure in order to avoid delays in construction while the jurisdictional question was resolved. It was suggested that over the years a practice of Board approval of tolls for the use of the facility had arisen, in which Trans Mountain had acquiesced because until the present time such a process had not presented problems for Trans Mountain.

The Company gave evidence that the propane facility is a discrete facility that has never been connected to the pipeline. Propane has always been received by rail, and nothing shipped through the pipeline has ever entered the propane plant. It was stated that the only interrelationship between the propane service and the pipeline undertaking is that the Westridge crude oil loading dock has been used to load propane aboard ships, via a delivery line not connected to the crude oil loading facilities. This dual use of the dock has been recognized by the Board by appropriate allocation of the rate base and operating costs.

Trans Mountain stated that it was raising the issue of jurisdiction at this time because Gulf had given the required six-months notice of its intention to cease shipments through the facility. This, together with negotiations for Gulf's contribution to certain incomplete capital improvements to the facility required by the Canadian Transport Commission and the District of Burnaby, and uncertainty over the number of shipments to be made before termination of the service, made determination of an appropriate toll very difficult. In Trans Mountain's view, it was appropriate at the present time to resolve the jurisdictional question in order to give the two companies flexibility to negotiate the appropriate payments, and to allow Trans Mountain to react quickly to any prospects for continued use of the facility that might arise in future.

The Board's jurisdiction over facilities is a question of fact and of law. A decision that a jurisdiction previously exercised does not exist cannot be taken lightly, especially in a case where the Company has not seriously challenged the existence of that jurisdiction in almost 20 years of operation of the facility.

In this case the Board is not satisfied, on the basis solely of Trans Mountain's evidence, that the propane facilities are outside the Board's jurisdiction.

This matter of jurisdiction has not been completely examined. If Trans Mountain had given proper notice of its intention to raise the issue, it would have permitted a more thorough investigation. The Board notes that as late as 26 September 1984, Trans Mountain's actions were consistent with the existence of jurisdiction on the part of the Board, in that the Company applied on that date under Section 49 of the Act for authorization to make capital improvements to the propane facility.

Under the circumstances, the Board does not consider that a sufficient case has been made to cause it to change the present status of these facilities, that is that they are under the Board's jurisdiction.

9.2 Toll

In view of the fact that Gulf is the only user of the facility, of the difficulty of determining an appropriate toll at the present time, and of the lack of indication by Gulf of any unhappiness with the course of negotiation of the unresolved issues, the Board deems it appropriate to allow the parties maximum flexibility in arriving at a resolution of the issues. The Board has, therefore, made the interim Order set out in Appendix IV to these Reasons, and will monitor the progress of the winding-down of the propane service. The final settlement of accounts between Trans Mountain and Gulf will require the approval of the Board.

Chapter 10
Disposition

The foregoing, together with Board Orders No. AO-1 TOI-2-84, AO-1-MO-56-84 and TO-1-85, constitute our Reasons for Decision and our Decisions in this matter.

J.R. Hardie
Presiding Member

R.B. Horner, Q.C.
Member

W.G. Stewart
Member

March 1985
Ottawa, Canada

Appendix I
BOARD ORDER No. MO-56-84

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

IN THE MATTER OF an application by Gulf Canada Limited (hereinafter called "Gulf") for an order under section 59 of the *National Energy Board Act*; filed with the Board under file no. 1755-G30-1.

B E F O R E the Board on Tuesday, 4 December 1984.

WHEREAS an application dated 4 October 1984, as amended on 21 November 1984, has been made by Gulf for an order directing Trans Mountain Pipe Line Company Ltd. (hereinafter called "Trans Mountain") to receive, transport and deliver certain specific volumes of petroleum products through its pipeline from Edmonton, Alberta to Kamloops, British Columbia during the months of December 1984 to December 1985 inclusive;

AND WHEREAS the Board has heard the evidence and submissions of Gulf, Trans Mountain and all interested parties with respect to the Gulf application at a public hearing which commenced in Ottawa, Ontario on 26 November 1984;

AND WHEREAS the Board is of the opinion that, in the circumstances of this case, it is Trans Mountain’s duty to receive, transport and deliver via its pipeline, from Edmonton to Kamloops, gasolines and distillates offered for transmission by Gulf during the year 1985;

IT IS ORDERED THAT, pursuant to section 12 and section 59 of the *National Energy Board Act*:

1. Subject to paragraph 2, Trans Mountain shall, commencing during January 1985 and, with due care and diligence, receive, transport and deliver, via its pipeline, from Edmonton to Kamloops, gasolines and distillates offered for transmission by Gulf;

2. For the purposes of paragraph 1, Trans Mountain shall be under no obligation to receive, transport and deliver volumes in excess of those specified for each month in Appendix "A" to this order, or for a period extending beyond 31 December 1985;

3. Trans Mountain shall, no later than 12 December 1984, file with the Board, its shippers and the parties of record in the hearing held pursuant to Board Order RH-4-84 a revised tariff containing tolls for the services ordered by this order and including revisions to the tariff’s "rules and regulations" made necessary by this order;

4. Gulf, Trans Mountain's other shippers and the other said parties of record shall, no later than 17 December 1984, file with the Board and with Trans Mountain any comments they may have on the tariff filed pursuant to paragraph 3;

5. Notwithstanding the filing of the new tariff and tolls, the same shall remain suspended and of no effect until specifically approved in writing by the Board.

NATIONAL ENERGY BOARD

G. Yorke Slader,
Secretary

MO-56-84

APPENDIX "A"

	VOLUME IN MEGALITRES
JANUARY 1985	26.5
FEBRUARY	30.0
MARCH	40.0
APRIL	43.2
MAY	50.5
JUNE	43.3
JULY	55.3
AUGUST	55.3
SEPTEMBER	49.5
OCTOBER	49.3
NOVEMBER	54.4
DECEMBER	51.6
	548.9

Appendix II
Board Order No. AO-1-MO-56-84

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

IN THE MATTER OF an application by Gulf Canada Limited (hereinafter called "Gulf") for an order under section 59 of the *National Energy Board Act*, filed with the Board under File No. 1755-G30-1.

BEFORE:

J.R. Hardie
Presiding Member

R.B. Horner
Member

on Friday, the 18th day of January, 1985

W.G. Stewart
Member

WHEREAS by an application dated 4 October 1984, as amended, Gulf applied to the Board for an order under section 59 of the Act directing Trans Mountain Pipe Line Company Ltd. (hereinafter called "Trans Mountain") to receive, transport and deliver certain volumes of petroleum products through its pipeline from Edmonton, Alberta to Kamloops, British Columbia during the months of December 1984 to December 1985, inclusive;

AND WHEREAS, following a public hearing held pursuant to Order No. RH-4-84, as amended, at which Gulf, Trans Mountain and interested parties were heard, the Board issued Order No. MO-56-84 requiring Trans Mountain to receive, transport and deliver certain volumes of petroleum products during the year 1985;

AND WHEREAS Trans Mountain by application dated 10 December 1984 applied to the Board under section 17 of the Act for a review of and a change, alteration and variation of Order NO. MO-56-84, and under section 49 of the Act for exemption from the provisions of certain sections of the Act in respect of certain modifications to its pipeline at the Kamloops pumping station;

AND WHEREAS the Board, by an amendment to Order No. RH-4-84, set down Trans Mountain's applications for public hearing commencing 7 January 1985, and gave notice of its disposition, of its own motion, to amend Order No. MO-56-84 to require specifically the method of delivery at Kamloops of the petroleum products;

AND WHEREAS the Board has heard the evidence and submissions of Trans Mountain, Gulf and interested parties in respect of Trans Mountain's applications at a public hearing held pursuant to Order No. RH-4-84, as amended, that commenced on 7 January 1985;

AND WHEREAS the Board is satisfied that, pursuant to sections 12 and 17, and subsections 59(l) and (3) of the Act, Order No. MO-56-84 must be amended, altered and varied in order to carry out the purpose of the said Order, and that an exemption under section 49 of the Act should be granted in respect of certain of the facilities modifications requested by Trans Mountain;

IT IS ORDERED THAT:

1. Paragraphs 3, 4, and 5 of Order No. MO-56-84 are revoked and the following substituted therefore:

   "3. Trans Mountain shall, with due care and diligence, in the month of January 1985 deliver the volume of petroleum products set out in Appendix "A" hereto directly to the Gulf terminal at Kamloops via the 323.9 mm. delivery line (the "Gulf take-off") using the same special procedures and supervision as were used in 1984 to deliver test batches.

   4. Commencing with the volumes set out in Appendix "A" hereto for the month of February 1985 and until any facilities referred to in paragraph 6 are completed and in service, Trans Mountain shall deliver the petroleum products to the Gulf terminal at Kamloops with Mainline Valve 817 open, using one of the following procedures, as may permit delivery with the greatest degree of safety, the greatest rate of delivery, and the least degree of contamination of the petroleum products:

      (a) via Trans Mountain's Kamloops pump station and the 219 mm. Gulf delivery line to the Gulf terminal using the "tight-line" procedure described at the public hearing and without the use of tankage at the pump station except in case of emergency; or

      (b) the procedure described in sub-paragraph (a), but, if the safe operation of the pipeline and the reasonable minimization of contamination of the petroleum products permit, with simultaneous delivery of the petroleum products via the 219 mm. Gulf delivery line from the pump station and the 323.9 mm. delivery line direct to the Gulf terminal in order to minimize the reduction in throughput of the pipeline during deliveries.

   5. The modifications to the pipeline at the Kamloops pump station set out in Appendix "B" to this order are exempt from the provisions of sections 26 to 29, except paragraph 26(l)(b), of the Act.

   6. If after two batches of petroleum products have been delivered to the Gulf terminal in accordance with paragraph 4, Gulf believes that it can demonstrate to the Board that:

      (a) deliveries of petroleum products to the Gulf refinery have been accomplished at average rates lower than 550 cubic metres per hour, or

      (b) the volume of either batch of petroleum products that is contaminated on delivery exceeds the volume contaminated during the most successful of the test deliveries made to the Gulf terminal during 1984 by more than 100 cubic metres,

      Gulf shall so notify the Board and Trans Mountain in writing, and Trans Mountain shall within 15 days of receipt of such notice tender to the Board and serve on Gulf the detailed design and estimated cost of the minimum pressure relief and control facilities, to be installed on the pipeline at or near the 323.9 mm. delivery line to the Gulf terminal, necessary to comply with the Act, the Oil Pipeline Regulations, and the prospective Onshore Pipeline Regulations, to be constructed at the expense of Gulf pursuant to an order that the Board may issue under subsection 59(3) of the Act.

AND IT IS FURTHER ORDERED THAT:

7. Until any final toll for the transportation of petroleum products is ordered by the Board, Trans Mountain shall charge as an interim toll for the transportation of petroleum products, the toll for the transportation of crude oil of the corresponding density set out in Tariff No. 27 that came into effect 1 September 1984.

8. Trans Mountain shall, no later than 21 January 1985, file with the Board and serve on the parties to the hearing held pursuant to Order No. MO-56-84 tariff "Rules and Regulations" identical to those filed in the said hearing as Exhibit No. B-60, but with the definition of ’effective date" deleted from clause 5 thereof, and the Rules and Regulations so filed shall be expressed to be effective on the date on which they are filed with the Board."

AND IT IS FURTHER ORDERED THAT:

2. Order No. MO-56-84 is further amended by adding thereto Appendix "B" to this Order.

NATIONAL ENERGY BOARD,

G. Yorke Slader,
Secretary

Appendix "B" to order No. MO-56-84

APPENDIX "B"

PROJECT

1. Clean tank no. 61 for emergency use in petroleum product service.

2. Connect the 219 mm. delivery line belonging to Gulf to the pump station facilities and prepare for use in petroleum product delivery.

Appendix III
Board Order No. TOI-2-84

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. (hereinafter referred to as "Trans Mountain") for an order approving tolls pursuant to paragraph 51(l)(b) of the *National Energy Board Act* filed with the Board under File Nos. N1848-T4 and N1755-T4-3.

BEFORE the Board on Wednesday, 7 November 1984.

WHEREAS an application dated 26 September 1984 has been made by Trans Mountain requesting *inter alia* the approval, pursuant to paragraph 51(l)(b) of the *National Energy Board Act*, of an increase in the tolls to be charged by Trans Mountain for the handling of propane at the Westridge Terminal;

AND WHEREAS the Board on the evidence before it at this time is of the view that the proposed toll is not unreasonable;

AND WHEREAS the Board is of the opinion that the application should be further considered in the hearing to be held pursuant to Board Order RH-4-84, as amended;

AND WHEREAS the Board is prepared to grant, on an interim basis, the increase proposed, that is from $5.510 per cubic metre to $10.10 per cubic metre;

IT IS ORDERED THAT:

1. Trans Mountain shall, effective 7 November 1984, charge in respect of the handling of propane at the Westridge Terminal pursuant to an agreement between Trans Mountain and Gulf Canada Limited, dated 1 January 1982, as amended by an agreement dated 27 August 1984, an interim toll of $10.10 per cubic metre.

2. Trans Mountain shall forthwith file with the Board and serve on all parties of record in the hearing to be held pursuant to Board Order RH-4-84, as amended, a tariff conforming with this Order.

3. The said tariff, filed in conformity with paragraph 2 hereof, shall remain in effect only until such time as the Board issues its final Order with respect to Trans Mountain’s application under Part IV of the *National Energy Board Act*, which is to be heard pursuant to Board Order RH-4-84, as amended.

4. Those provisions of the Trans Mountain’s tariffs and tolls, or any portion thereof, that are contrary to any provision of the *National Energy Board Act*, or to any Order of the Board including this Order, are hereby disallowed, such disallowance to be effective 6 November 1984.

NATIONAL ENERGY BOARD,

G. Yorke Slader,
Secretary

TOI-2-84

Appendix IV
Board Order No. AO-1-TOI-2-84

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. (hereinafter referred to as "Trans Mountain") for an Order approving tolls pursuant to paragraph 51(l)(b) of the *National Energy Board Act*, filed with the Board under File Nos. N1848-T4 and N1755-T4-3;

IN THE MATTER OF an application by Trans Mountain for an order under section 51 of the *National Energy Board Act* for new tolls, filed with the Board under File No. 1762-T4-8.

BEFORE the Board on Tuesday, 29 January 1985.

WHEREAS by application dated 26 September 1984 Trans Mountain has requested, *inter alia*, the approval pursuant to paragraph 51(l)(b) of the *National Energy Board Act* of an increase in the tolls to be charged by Trans Mountain for the handling of propane at its Westridge Propane Facility;

AND WHEREAS the Board on 7 November 1984 issued Order No. TOI-2-84 prescribing on an interim basis the toll to be charged effective 7 November 1984;

AND WHEREAS the Board has heard further evidence and submissions on the application at a public hearing held pursuant to Order No. RH-4-84, as amended, held in respect of Trans Mountain's application under section 51 of the Act for new tolls dated 14 September 1984;

AND WHEREAS it appears that the amounts of certain elements of the Revenue Requirement cannot yet be determined;

AND WHEREAS the Board is satisfied that it is appropriate to maintain tolls on an interim basis until the final revenue requirement can be determined;

IT IS ORDERED THAT:

1. Order No. TOI-2-84 is amended by revoking paragraphs 1 through 4 thereof and by substituting therefor the following paragraphs:

   "1. The Revenue Requirement of Trans Mountain for the propane service during 1984 shall, on an interim basis, be fixed at $2,278,800.00.

   2. The Revenue Requirement for the propane service during 1985 shall, on an interim basis, be fixed at $623,000.00.

   3. Trans Mountain shall determine interim tolls to recover the Revenue Requirements referred to in paragraphs 1 and 2, in accordance with the agreement dated I January 1982 between Trans Mountain and Gulf Canada Limited, as amended by the agreement dated 27 August 1984 and by any other agreement that may be approved by the Board.

4. Trans Mountain shall submit to the Board for its approval any agreement between Trans Mountain and Gulf Canada Limited, other than the agreements dated 1 January 1982 and 27 August 1984 referred to in paragraph 3, pertaining to propane service at the Westridge Facility.

5. Trans Mountain shall, before the final payment or adjustment is made between Trans Mountain and Gulf Canada Limited for propane service at the Westridge Facility during 1984 and 1985, submit to the Board for its approval the final Revenue Requirements for 1984 and 1985 for propane service at the Westridge Facility, a reconciliation of payments and adjustments for Service in the years 1984 and 1985 made to the date of the submission, and details of the final payment by Gulf Canada Limited or refund by Trans Mountain necessary to effect recovery of the final Revenue Requirements submitted.

6. The tolls determined pursuant to paragraph 3 hereof shall remain in effect until the Board issues a final Order with respect to the tolls for propane service during 1984 and 1985 at the Westridge Facility.

7. Those provisions of Trans Mountain’s tariff and tolls, or any portion thereof, that are contrary to any provision of the *National Energy Board Act*, or to any Order of the Board including this Order, are hereby disallowed, such disallowance to be effective 29 January 1985."

NATIONAL ENERGY BOARD

G. Yorke Slader,
Secretary

Appendix V
Board Order No. TOI-3-84

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. (hereinafter called Trans Mountain) for an order under Section 51 of the *National Energy Board Act* for new tolls; filed with the Board under File No. 1762-T4-8.

In the matter of an application by Gulf Canada Limited (hereinafter called Gulf) for an order under Section 59 of the *National Energy Board Act*; filed with the Board under File No. 1755-G30-1.

BEFORE the Board on Tuesday, 18 December 1984.

WHEREAS Trans Mountain has filed an application dated 14 September 1984 pursuant to part IV of the *National Energy Board Act* for new tolls for the transportation of oil;

AND WHEREAS Trans Mountain has also requested an interim order pursuant to Sections 16.1 and 52.2 of the *National Energy Board Act* approving the new tolls pending the Board's final decision on the Part IV application;

AND WHEREAS the Board by Order No. RH-4-84, as amended, has set down for hearing the Part IV application for new tolls for the transportation of oil, at which hearing all matters relating to tolls charged by Trans Mountain will be considered;

AND WHEREAS the Board considers it desirable to establish as interim tolls, the approved tolls filed by Trans Mountain in Tariff No. 27 that came into effect 1 September 1984.

IT IS ORDERED THAT:

1. The approved tolls filed by Trans Mountain in Tariff No. 27 that came into effect 1 September 1984 shall be interim tolls.

2. This interim order shall come into force on 1 January 1985 and remain in effect only until the Board issues its final order with respect to Trans Mountain's application dated 14 September 1984.

NATIONAL ENERGY BOARD,

G. Yorke Slader,
Secretary

Appendix VI
Board Order No. TO-1-85

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. (hereinafter called Trans Mountain) for an Order under Section 51 of the *National Energy Board Act* for new tolls; filed with the Board under File No. 1762-T4-8.

BEFORE:

J.R. Hardie
Presiding Member

R.B. Horner, Q.C., Member

On Monday, the 25th day of March, 1985

W. G. Stewart
Member

WHEREAS Trans Mountain filed an application dated 14 September 1984 under Section 51 of the *National Energy Board Act* for new tolls for the transportation of petroleum;

AND WHEREAS Trans Mountain also requested in the said application an interim Order pursuant to Sections 16.1 and 52.2 of the *National Energy Board Act* approving the new tolls effective 1 January 1985 pending the Board's final decision on the application;

AND WHEREAS the Board, by Order No. TOI-3-84 dated 18 December 1984, made the existing tolls interim effective 1 January 1985, such interim Order to remain in effect until the Board issues its final Order with respect to Trans Mountain's application;

AND WHEREAS Trans Mountain by letter dated 26 September 1984 applied for approval of an amendment to its contract with Gulf Canada Limited for use of the Westridge Propane Facility, which amendment included an increase in the toll for the use of the facility;

AND WHEREAS the Board by Order No. TOI-2-84 dated 7 November 1984 approved the toll increase for the use of the Westridge Propane Facility pending further consideration at the public hearing;

AND WHEREAS pursuant to Order No. AO-3-RH-4-84 Trans Mountain filed proposed tolls for the transportation of refined products on behalf of Gulf Canada Limited;

AND WHEREAS by Order AO-1-MO-56-84 the Board prescribed Tariff Rules and Regulations for Refined Products and prescribed as an interim toll for the transportation of petroleum products on behalf of Gulf Canada Limited the existing toll for crude petroleum of the same density;

AND WHEREAS Section 52.2 of the *National Energy Board Act* allows the Board, where it has made an interim toll Order, to direct a company to recover in its tolls or to refund, in a manner satisfactory to the Board, the amount by which the tolls determined by the Board to be just and reasonable differ from the tolls charged by the company under the interim Order, together with such interest as the Board may fix;

AND WHEREAS the Board has heard evidence and submissions relating to the said application, and to the proposed tolls for the Westridge Propane Facility and for the transportation of refined products, at a public hearing which commenced in Ottawa on 7 January 1985;

AND WHEREAS, the Board by Order No. AO-1-TOI-2-84 dated 29 January 1985 has established the toll for the use of the Westridge Propane facility on an interim basis until the facility is closed;

AND WHEREAS it appears that the just and reasonable tolls for the transportation of crude petroleum are lower than the interim tolls set by Board Order No. TOI-3-84 and that the just and reasonable Edson gathering charge and toll for the transportation of refined products are higher than the interim tolls set by Order Nos. TOI-3-84 and AO-1-MO-56-84, respectively;

AND WHEREAS the Board has determined that tolls charged in accordance with this Order will be just and reasonable;

IT IS ORDERED THAT:

1. Subject to paragraphs 2, 3 and 4, Trans Mountain shall, effective 1 May 1985, charge for the transmission of crude petroleum and refined products the tolls prescribed in Schedule "A" hereto.

2. Trans Mountain shall in its invoices to shippers for the transportation of crude petroleum and refined products in the month of May 1985, credit each shipper with a share of the total of

   (a) the difference between the revenues recovered for the transportation of crude petroleum and refined products from 1 January 1985 to 30 April 1985 and the revenues that would have been recovered at the tolls prescribed in Schedule 'A' hereto in respect of the transportation in those months of crude petroleum and the crude petroleum toll portion of the toll for transportation of refined products, and

   (b) interest on each monthly component of the amount referred to in subparagraph (a) for the period from the date of the invoice under which that component was collected to the date of the invoice containing the credit required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans determined by that shipper's rateable proportion of the total of the products of the volumes of all crude petroleum and refined products transported in May 1985 and the corresponding distances transported.

3. (1) Trans Mountain shall, no later than 1 June 1985, charge Gulf Canada Limited, in respect of petroleum products transported between I January 1985 and 30 April 1985 the refined products surcharge of $0.443 per cubic metre transported prescribed in Schedule 'A' hereto, together with interest on each month's component for the period from the date of the invoice under which that component was collected to the date of the invoice required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans.

(2) For greater certainty, any over-recovery of revenues in respect of the crude petroleum toll portion of the toll for transportation of refined products from 1 January 1985 to 30 April 1985 shall be refunded in accordance with paragraph 2 hereof.

4. Trans Mountain shall, no later than 1 June 1985, charge each shipper that used the Edson gathering facilities between 1 January 1985 and 30 April 1985 the difference between

(a) the Edson gathering charge charged pursuant to order No. TOI-3-84 and

(b) the Edson gathering charge prescribed in Schedule 'A' hereto, together with interest on each monthly component of the amount charged for the period from the date of the invoice under which that component was collected to the date of the invoice required by this paragraph, at the rate per annum charged Trans Mountain from time to time during the period by its bank for short-term loans.

5. Trans Mountain shall, effective 1 May 1985, charge in respect of partially refined synthetic petroleum transported from Edmonton to the Shell Canada Limited refinery in Burnaby, British Columbia, (the "Shell Special Stream"), a toll calculated in accordance with Tariff S1, that came into effect 1 September 1984, modified as follows:

(a) the portion of the toll relating to transportation from Edmonton to Burnaby Terminal shall be the toll for transportation of crude petroleum in effect from time to time, without surcharge; and

(b) the annual revenue requirement for transportation from Burnaby Terminal to the Shellburn Refinery shall be calculated using a Rate of Return on Equity of 15.75 per cent.

AND IT IS FURTHER ORDERED THAT:

6. Chevron Canada Limited's request for an amendment to Section 25 of Trans Mountain's Tariff Rules and Regulations is denied.

7. The Petroleum Rules and Regulations filed as Exhibit B-65 in the hearing held pursuant to Order No. RH-4-84 are approved.

8. Trans Mountain shall, no later than 26 April 1985, file with the Board and serve on interested parties tariffs and tolls conforming with the principles and methodology set out in the Board's Reasons for Decision dated March 1985, and with this Order.

9. Notwithstanding the filing of the tariffs and tolls referred to in paragraph 8, the same shall remain suspended and be of no effect until 1 May 1985.

10. Those provisions of Trans Mountain's tariffs and tolls, or any portion thereof, that are contrary to any provision of the *National Energy Board Act*, or to any Order of the Board including this Order, are disallowed effective 1 May 1985.

AND IT IS FURTHER ORDERED THAT:

11. Trans Mountain shall, effective 1 January 1985, charge for accounting purposes the depreciation rates shown in Appendix VII of the Reasons for Decision dated March 1985.

12. Trans Mountain shall, by the 20th day of each month, file with the Board a statement of actual throughput in the previous month and a current forecast of throughput for the current calendar year, the current month and the succeeding twelve months by origin and destination, showing the throughput projected in each month, each quarter and for the year, together with a breakdown by shipper of the throughput projected for each month.

13. Trans Mountain shall file with the Board and serve on interested parties an application for new tolls as soon as possible after it becomes apparent that the throughput in the then current calendar year, expressed as the sum of the products of volumes and the corresponding distances to be transported, will vary by 5 percent or more from the throughput upon which the then current tolls are based, expressed on the same basis.

14. In this Order, "interested party" includes

    (a) any party who intervened in the hearing held pursuant to Order No. RH-4-84,

    (b) each shipper on Trans Mountain’s pipeline,

    (c) the Attorneys General of the provinces of British Columbia, Alberta and Saskatchewan, and

    (d) any person who has notified Trans Mountain and the Board in writing that he wishes to be registered as an interested party in respect of Trans Mountain’s tolls and tariffs, and has been accepted by the Board as such.

NATIONAL ENERGY BOARD,

G. Yorke Slader,
Secretary

Schedule "A"

Tolls

CRUDE PETROLEUM OF DENSITY GREATER THAN 611 KG/M^3 AND LESS THAN 877 KG/M^3

From	To	Toll $\$/m^3$
Edmonton	Kamloops	3.689
Edmonton	Sumas	4.892
Edmonton	Burnaby	5.143
Edson	Kamloops	2.667
Edson	Sumas	3.864
Edson	Burnaby	4.120
Kamloops	Sumas	1.198
Kamloops	Burnaby	1.454

OTHER CRUDE PETROLEUM CHARGES

Westridge Loading Charge	$\$0.251/m^3$
Edson Gathering Charge	$\$0.753/m^3$

GULF CANADA LIMITED REFINED PRODUCTS
(Moved under Board Order No. AO-1-MO-56-84)

From Edmonton to Kamloops

1. A monthly charge of $10 625.00 and

2. A charge per cubic metre consisting of the appropriate crude petroleum toll and a surcharge of $0.443.

Appendix VII
Summary of Approved Depreciation Rates and Revised
Asset Groupings for Depreciation Purposes
as of 1 January 1985

Table a7-1
Trans Mountain Pipe Line Company Ltd.

Summary of Approved Depreciation Rates and Revised
Asset Groupings for Depreciation Purposes
as of 1 January 1985

Account	Description	Annual Depreciation Rate[1] (Percent)
	Gathering Line	
102	Land Rights	2.26
103	Pipelines	2.24
108	Pumping Equipment	2.17
109	Station Oil Lines	2.42
110	Other Station Equipment	4.60
	Trunk Line	
151	Land	Non-Depreciable
152	Land Rights	0.65
153	Pipelines	0.65
153	Corrosion Prevention Facilities	2.23
156	Buildings	1.49
156	Employee Dwellings	Suspended
158	Pumping Equipment	1.14
159	Station Oil Lines	2.30
160	Other Station Equipment	1.82
160	Supervisory Control and Data Acquisition System	20.93
161	Crude Oil Storage Tanks	2.39
162	Receiving and Delivery Facilities	
	- Land	Non-Depreciable
	- Buildings, Dock Structures, etc.	3.00
	- Loading Equipment	5.00
	- Other Equipment	Fully Depreciated
163	Communications System	
	- Assets Acquired Prior to 1978	Fully Depreciated
	- Subsequently Acquired Assets	4.01
	General Plant	
184	Office Furniture and Equipment	
	- Assets Acquired Prior to 1979	Fully Depreciated
	- Subsequently Acquired Assets	4.21
185	Vehicles	20.00

185	Other Work Equipment	
	- Assets Acquired Prior to 1979	Fully Depreciated
	- Subsequently Acquired Assets	4.97
186	Data Processing Computer	20.56
186	Other Data Processing Hardware	19.98
186	Data Processing Software	15.60
186	Construction Overhead Unallocated	0.57
188	Joint Plant	8.00
189	Interest During Construction	6.13
190	Construction Overhead	6.13
36	Improvements to Leased Facilities	4.08

1. All depreciation rates are on a straight line basis.

Appendix VIII
Iteration Profits For The Calculation Of Income Taxes Payable

Table a8-1
Iteration Profits For The Calculation
Of Income Taxes Payable
($000)

First Approximation of Rate Base		
Average Net Plant in Service		37 624
Average Deferred Tax Debits		302
Cash Working Capital:		
Operating Expenses	25 616	
Income Taxes Payable		
Cash cost of service (CCS 1)	25 616	
Cash Working Capital (19/365 x CCS 1)		1 333
Average Inventories		1 306
Average Prepaid Expenses		584
Average Net Rate Base		41 149
First Approximation of Income Taxes Payable		
Utility Income After Tax		
Basic Calculation	3 243	
Permanent Differences		
3% Inventory Allowance	(39)	
Depreciation on Equity AFUDC	2	3 206
Utility Income Tax Provision		3 270
Amortization of West-East Pipeline		263
Timing Differences:		
Depreciation	2 212	
Capital Cost Allowance	(4 324)	
Toll Hearing Costs	(5)	
Interest During Construction	(106)	
Deferred Charges	(265)	
		(2 488)
Taxable Income		4 251
Federal Part I Tax Payable		1 531
Provincial Income Tax Payable		616
Income Taxes Payable		2 147

Table a8-2
Iteration Process For The Calculation
Of Income Taxes Payable
($000)

Second Approximation of Rate Base		
Average Net Plant in Service		37 624
Average Deferred Tax Debits		302
Cash Working Capital:		
Operating Expenses	25 616	
Income Taxes Payable	2 147	
Cash cost of service (CCS 1)	27 763	
Cash Working Capital (19/365 x CCS 1)		1 445
Average Inventories		1 306
Average Prepaid Expenses		584
Average Net Rate Base		41 261
Second Approximation of Income Taxes Payable		
Utility Income After Tax		
Basic Calculation	3 251	
Permanent Differences		
3% Inventory Allowance	(39)	
Depreciation on Equity AFUDC	2	3 214
Utility Income Tax Provision		3 279
Amortization of West-East Pipeline		263
Timing Differences:		
Depreciation	2 212	
Capital Cost Allowance	(4 324)	
Toll Hearing Costs	(5)	
Interest During Construction	(106)	
Deferred Charges	(265)	
		(2488)
Taxable Income		4 269*
Federal Part I Tax Payable		1 537
Provincial Income Tax Payable		619
Income Taxes Payable		2 156

* Rounded

Table a8-3
Iteration Process For The Calculation Of Income Taxes Payable
($000)

Third Approximation of Rate Base		
Average net plant in service		37 624
Average deferred tax debits		302
Cash Working Capital:		
Operating Expenses	25 616	
Income taxes payable	2 156	
Cash cost of service (CCS I)	27 772	
Cash working capital (19/365 x CCS I)		1 446
Average inventories		1 306
Average prepaid expenses		584
Average Net Rate Base		41 262
Third Approximation of Income Taxes Payable		
Utility income after tax	3 251	
Basic Calculation		
Permanent Differences		
3% Inventory Allowance	(39)	
Depreciation on equity AFUDC	2	3 214
Utility income tax provision		3 279
Amortization of West-East pipeline		263
Timing differences:		
Depreciation	2 212	
Capital Cost Allowance	(4 324)	
Toll Hearing Costs	(5)	
Interest During Construction	(106)	
Deferred Charges	(265)	
		(2 488)
Taxable Income		4 269*
Federal Part I Tax Payable		1 537
Provincial Income Tax Payable		619
Income Taxes Payable		2 156

* Rounded