



National Energy Board

Reasons for Decision

**Trans Mountain Pipe Line
Company Ltd.**

RHW-2-96

March 1996

Tolls

National Energy Board

Reasons for Decision

In the Matter of

**Trans Mountain Pipe Line Company
Ltd.**

Application dated 29 January 1996 for
approval of an incentive toll settlement

RHW-2-96

March 1996

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represented by the National Energy Board

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Abbreviations

Act	<i>National Energy Board Act</i>
Board	National Energy Board
CAPP	Canadian Association of Petroleum Producers
Chevron	Chevron Canada Limited
Imperial	Imperial Oil Limited
MTBE	Methyl Tertiary Butyl Ether
Petro-Canada	Petro-Canada Limited
Shell	Shell Canada Limited
Trans Mountain	Trans Mountain Pipe Line Company Ltd.

Recital and Appearances

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. dated 29 January 1996 for approval of an incentive toll settlement and associated toll orders pursuant to Part IV of the Act; and

IN THE MATTER OF National Energy Board Hearing Order RHW-2-96;

EXAMINED by means of written submissions.

BEFORE:

R.L. Andrew	Presiding Member
R. Priddle	Member
K.W. Vollman	Member

SUBMITTORS:

Canadian Association of Petroleum Producers

Alberta Department of Energy

Chapter 1

Background and Application

On 6 October 1995, the Board issued Hearing Order RH-3-95 and set down for an oral hearing commencing 27 November 1995, a toll application by Trans Mountain Pipe Line Company Ltd. ("Trans Mountain"). On 20 November 1995, Trans Mountain advised that it had reached a settlement in principle with its principal shippers with respect to its revenue requirement for 1995 and an incentive toll settlement for the years 1996-2000.

On 23 November 1995, the Board, at the request of Trans Mountain and its principal shippers, adjourned *sine die* the determination of the appropriate revenue requirement for 1995 and 1996 and limited the scope of the oral proceeding to the consideration of how the results of Trans Mountain's study of tankage use, costs and credits should be incorporated in the determination of 1996 tolls. On 13 December 1995, Trans Mountain, with the support of CAPP, applied for final tolls for 1995 based upon an agreed revenue requirement of \$95.5 million and its existing toll design. After canvassing interested parties to the RH-3-95 proceeding, the Board approved final tolls for 1995 pursuant to Order TO-1-96 (see Appendix I).

On 20 December 1995, Trans Mountain requested that tolls derived from its agreed revenue requirement for 1996 of \$106 million and its existing toll design be charged on an interim basis effective 1 January 1996. On 10 January 1996, the Board issued Order TOI-2-96 allowing Trans Mountain to charge interim tolls on this basis (see Appendix II). On 16 February 1996, the Board issued its decision for the RH-3-95 proceeding approving a revised toll design for 1996 tolls. This decision is contained in Appendix III.

On 29 January 1996, Trans Mountain applied for approval of its incentive toll settlement for the years 1996 to 2000. This agreement had been negotiated with its principal shippers, Chevron Canada Limited ("Chevron"), Imperial Oil Limited ("Imperial"), Shell Canada Limited ("Shell") and Petro-Canada Limited ("Petro-Canada"), and CAPP. Although only Chevron and CAPP were signatories to the final agreement, Shell, Imperial and Petro-Canada provided letters of support.

In order to implement this settlement, Trans Mountain sought approval for:

1. the establishment of eight separate deferral accounts (Efficiency Incentive, Excess Capacity Incentive, Methyl Tertiary Butyl Ether ["MTBE"]/New Materials Incentive, Non-routine Adjustment Variance, Petroleum Loss/Gain Allowance, Starting Point Inflation Adjustment, Tax Allowance Variance and Transportation Revenue Variance);
2. current tolls becoming interim effective 1 January of each year of the agreement pending the filing of final tolls on or before 1 March of that year;
3. draft tariffs for crude oil and refined and semi-refined petroleum and MTBE;
4. revised depreciation rates based upon the average group life methodology and remaining economic life until the year 2020;

5. modification of the toll design for Westridge loading to recover Bulk Oil Cargo fees levied;
6. relief from all reporting and filing requirements pursuant to Order TO-3-92 and the Memorandum of Guidance dated 16 February 1994; and
7. withdrawal of those portions of its application in the RH-3-95 proceeding previously adjourned *sine die* except the consideration of appropriate depreciation rates.

On 31 January 1996, the Board established a procedure for reviewing the application including two technical workshops, one in Vancouver and another in Calgary, on 12 and 14 February 1996, respectively, with a deadline for receipt of written comments of 19 February 1996. The only comments received were further letters of support from CAPP and Alberta Department of Energy. On 21 February 1996, the Board advised parties that it had terminated the RH-3-95 proceeding subsequent to the issuance of its decision with respect to the tankage issue and had directed that all filings relevant to the application for approval of the settlement be transferred to a new proceeding, identified as RHW-2-96. The Board also granted standing in the RHW-2-96 proceeding to all parties in RH-3-95 in their respective capacities.

On 26 February 1996, Trans Mountain requested relief from paragraphs 5 and 8, particularly paragraph 8(e) of Order TG/TO-1-95. Trans Mountain considers that its settlement represents a significant departure from the rate base/rate of return method of toll setting contemplated by that order.

Chapter 2

Toll Settlement

The agreement between Trans Mountain, Chevron and CAPP has been reproduced in its entirety in Appendix IV. For a complete understanding or more details of the terms of the settlement, parties should refer to the original document.

The main features of the settlement include the following:

- (a) The term is from 1 January 1996 to 31 December 2000 with provision to renew the agreement thereafter.
- (b) The revenue requirement for 1996 is set at \$106 million based upon an after-tax Starting Point of \$98.5 million plus a tax allowance of \$7.5 million with net income set at \$13 million.
- (c) The revenue requirement for 1997 and each year thereafter will include:
 - the previous year's Starting Point increased each year by not less than 1% or more than 5% for inflation based upon the Consumer Price Index;
 - the difference between actual and forecast tax allowances from the previous year;
 - 80% of the variance in the previous year's transportation revenue from its forecast;
 - adding or subtracting a Power Adjustment based upon 20% of the difference in toll revenue associated with the variance in the throughput forecast from the one used the previous year;
 - amounts associated with certain defined non-routine adjustments;
 - amounts for the shippers' share of Excess Capacity, Efficiency, and MTBE/New Materials Incentives and petroleum losses or gains; and
 - carrying charges calculated for year-end balances using the average of the 12 monthly bank rates plus 50 basis points.

Positive variances associated with the following three incentives are shared between Trans Mountain and its shippers. The shippers' share of these incentives is used to reduce the following year's revenue requirement. All are supported by schedules in the agreement which detail their method of calculation.

- The Excess Capacity Incentive is shared 50/50. It is based on toll revenue from monthly throughput in excess of defined sustainable capacity at the pipeline bottleneck point at Edson.

- The Efficiency Incentive is shared 50/50 on a before tax basis. It applies to net income realized in excess of \$13 million.
- The MTBE/New Materials Incentive requires Trans Mountain to first spend in excess of \$250,000 to transport new materials or to increase MTBE throughput above 1,230 m³ per day. Trans Mountain retains 30% of the resulting revenue and shippers 70%.

The agreement requires renegotiation during the term if any of the following occur:

- the annual rate of change in the Consumer Price Index exceeds 5%;
- Trans Mountain's debt is downgraded;
- an actual or anticipated failure of Trans Mountain to satisfy financial integrity tests; or
- there is an uninsured expenditure or liability in excess of \$5 million.

The agreement provides for partial retention by Trans Mountain of some of its achieved incentive benefits beyond the year 2000.

The proposed filing regime anticipates Trans Mountain filing by 15 December of each year the tolls to be charged on an interim basis effective the following 1 January and at least two weeks prior to the following 1 March filing final tolls for the year with reasonable supporting details. Parties have agreed to support Trans Mountain's application to be exempted from the surveillance reporting and toll filing requirements prescribed by Order TO-3-92 and the Memorandum of Guidance dated 16 February 1994.

Trans Mountain has agreed to file an annual compliance audit report with the Board, Chevron and CAPP. In addition, CAPP may elect to undertake a further audit each year at its own expense. Disputed matters are referable to the Board.

Negotiated Settlement Guidelines

In examining agreements among parties to a proceeding, the Board is guided by its *Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs*, dated 23 August 1994, and the cover letter from the Board of the same date. Of particular relevance in these proceedings are the following extracts from those documents:

- All parties having an interest in a pipeline's traffic, tolls and tariffs should have a fair opportunity to participate and have their interests recognized and appropriately weighed in a negotiated settlement. The settlement process should be open and all interested parties should be invited to participate in the actual settlement negotiations.
- A negotiated settlement must not fetter the Board's ability and discretion to take into account any public interest considerations which may extend beyond the immediate concerns of the negotiating parties.

- Upon filing of information related to a settlement, interested parties would be provided with an opportunity to comment on the settlement. Should the settlement not be opposed by any party, the Board would normally be able to conclude that the resultant tolls are just and reasonable without a public hearing.
- The Board confirms that, when presented with a settlement package, it will either accept or reject the package in its entirety.

Views of the Board

The Board is satisfied that all parties with an interest in this proceeding have had sufficient opportunity to inform themselves and comment upon Trans Mountain's application and the settlement. The Board notes that no party has expressed any opposition to any aspect of the agreement.

The Board notes that the definition of carrying charges contained in the agreement creates an inconsistency with respect to the rate to be used to calculate carrying charges for 1995. Order TO-1-96 specified a rate of 6.5%. The Board expects that Trans Mountain would use this rate to adjust its billings for 1995 tolls and to apply the rate derived from the agreement thereafter.

With regard to Trans Mountain's ancillary requests concerning filing requirements, the Board is in the process of considering the filing requirements of all pipeline companies operating under approved incentive toll agreements and will advise Trans Mountain in due course on this matter.

Decision

The Board approves the settlement as filed and directs Trans Mountain to file final tolls for 1996 in accordance with this decision. For greater clarity, the Board approves:

- 1. the establishment of eight separate deferral accounts (Efficiency Incentive, Excess Capacity Incentive, MTBE/New Materials Incentive, Non-routine Adjustment Variance, Petroleum Loss/Gain Allowance, Starting Point Inflation Adjustment, Tax Allowance Variance and Transportation Revenue Variance);**
- 3. the draft tariffs for crude oil and refined and semi-refined petroleum and MTBE;**
- 4. revised depreciation rates based upon the average group life methodology and remaining economic life until the year 2020;**
- 5. modification of the toll design for Westridge loading to recover Bulk Oil Cargo fees levied;**

6. relief from all reporting and filing requirements pursuant to Order TO-3-92 and the Memorandum of Guidance dated 16 February 1994, pending the outcome of the Board's examination of appropriate filing requirements for pipeline companies operating under incentive toll agreements; and
7. withdrawal of those portions of its application in the RH-3-95 proceeding previously adjourned *sine die* except the consideration of appropriate depreciation rates.

Further, the Board has decided to grant Trans Mountain the relief sought with respect to paragraphs 5 and 8 of Order TG/TO-1-95.

Order TO-2-96 gives effect to the above decisions (see Appendix V).

Chapter 3

Disposition

The foregoing constitute our Decision and Reasons for Decision on this matter.

R.L. Andrew
Presiding Member

R. Priddle
Member

K.W. Vollman
Member

Calgary, Alberta
March 1996

Appendix I

Order TO-1-96

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

IN THE MATTER OF an application by Trans Mountain Pipe Line Company Ltd. ("Trans Mountain") dated 13 December 1995 for approval of final tolls for 1995 pursuant to Part IV of the Act; filed with the National Energy Board ("the Board") under File No. 4200-T004-5.

BEFORE the Board on 10 January 1996.

WHEREAS Trans Mountain, since 1 January 1995, has been charging the tolls approved by the Board in Order TOI-6-94, as amended, on an interim basis;

AND WHEREAS Trans Mountain, by application dated 29 September 1995, applied to the Board for certain orders under subsection 19(2) and Part IV of the Act fixing tolls that Trans Mountain may charge in 1995 and 1996 for the transportation of crude oil and other liquid hydrocarbons;

AND WHEREAS Trans Mountain, on 20 November 1995, filed an agreement in principle with respect to the Company's revenue requirement for 1995 and a five-year Incentive Toll Agreement to take effect as of 1 January 1996;

AND WHEREAS Trans Mountain, on 13 December 1995, requested that the Board issue an Order approving the agreed-upon 1995 transportation revenue requirement and tolls based upon the revenue requirement and actual 1995 throughput;

AND WHEREAS the Board has considered the comments of parties and found Trans Mountain's request to be just and reasonable;

AND WHEREAS the Board, by this same date, has issued Order TOI-2-96 approving new interim tolls effective 1 January 1996;

THEREFORE IT IS ORDERED THAT:

1. The agreed-upon 1995 revenue requirement of \$95.5 million is approved;
2. Trans Mountain shall calculate new tolls in accordance with the approved 1995 revenue requirement and actual 1995 throughput and shall file with the Board forthwith for approval, and serve on intervenors to the RH-3-95 proceeding, new tariffs incorporating those new tolls;
3. Order TOI-6-94, as amended, which authorized tolls that Trans Mountain may charge on an interim basis, effective 1 January 1995, is revoked and the tolls that have been authorized thereunder are disallowed as of the end of the day on 31 December 1995.

4. Trans Mountain shall charge, on a final basis for 1995, tolls authorized by paragraph 2 of this Order;
5. Trans Mountain is directed to refund or recover that part of the tolls charged by the Company under Order TOI-6-94, as amended, which is either greater or less than the tolls determined by the Board to be just and reasonable in this Order, together with carrying charges on the amount so refunded or recovered at an annual interest rate of 6.5 percent.

NATIONAL ENERGY BOARD

J.S. Richardson
Secretary

Appendix II

Order TOI-2-96

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

IN THE MATTER OF an application dated 20 December 1995 by Trans Mountain Pipe Line Company Ltd. ("Trans Mountain") for an Order varying the interim tolls effective 1 January 1996; filed with the Board under File No. 4200-T004-5.

BEFORE the Board on 10 January 1996.

WHEREAS the Board has issued Order TOI-6-94 establishing tolls on an interim basis for Trans Mountain effective 1 January 1995;

AND WHEREAS the tolls that Trans Mountain currently charges on an interim basis were established effective 1 October 1995 pursuant to Order AO-3-TOI-6-94;

AND WHEREAS Trans Mountain, on 20 November 1995, filed an agreement in principle for a five-year Incentive Toll Agreement to take effect as of 1 January 1996;

AND WHEREAS Trans Mountain expects to file, and seek approval of, a comprehensive agreement to give effect to the Incentive Toll Agreement sometime in January 1996;

AND WHEREAS Trans Mountain, on 20 December 1995, requested that the interim tolls effective 1 January 1996 be varied to give effect to the Principles of the Settlement of the Incentive Toll Agreement;

AND WHEREAS Trans Mountain, on 21 December 1995, filed a copy of the detailed toll calculations, including the calculation of dedicated facilities charges;

THEREFORE IT IS ORDERED THAT:

1. The proposed tolls shown on the interim tariff sheets enclosed with Trans Mountain's application dated 20 December 1995, and the dedicated facilities charges enclosed with Trans Mountain's letter dated 21 December 1995, shall be charged on an interim basis effective 1 January 1996 and shall remain in effect until the Board approves final tolls for 1996.

NATIONAL ENERGY BOARD

J. S. Richardson
Secretary

Appendix III

RH-3-95 Decision

16 February 1996

**Trans Mountain Pipe Line Company Ltd. ("Trans Mountain")
Toll Application Dated 29 September 1995**

**Reasons for Decision - Toll Design
RH-3-95
Application**

As part of ongoing efforts to improve the efficacy of the toll setting process, the Board initiated a generic proceeding for the determination of the cost of capital. On 17 March 1994, the Board issued Order RH-2-94 setting down a hearing to determine *inter alia* the cost of capital for Trans Mountain. On 16 December 1994, the Board issued Order TOI-6-94 authorizing Trans Mountain to continue charging its existing tolls on an interim basis effective 1 January 1995 pending a decision on this matter. On 11 April 1995, the Board issued its decision approving for Trans Mountain a deemed common equity ratio of 45% and a rate of return on common equity of 12.25 percent for 1995.

On 30 May 1995, Trans Mountain filed an application for final tolls for 1995 and requested that the tolls being charged on an interim basis be revised to its applied-for tolls effective 1 June 1995. The Board amended Order TOI-6-94 in accordance with Trans Mountain's request. On 22 June 1995, the Canadian Association of Petroleum Producers ("CAPP") requested an oral hearing to consider matters raised by the application. The Board decided to hold an oral hearing to determine tolls for both 1995 and 1996 and directed Trans Mountain to file a new application.

On 29 September 1995, Trans Mountain filed a new application using updated forecasts and incorporating the results of its study of tankage use, costs and credits. Trans Mountain requested that the tolls being charged on an interim basis be further revised. On 6 October 1995, the Board issued Hearing Order RH-3-95 which set down the application for a hearing commencing 27 November 1995. The Board further amended Order TOI-6-94 to vary the tolls being charged on an interim basis effective 1 October 1995.

On 20 November 1995, Trans Mountain advised the Board that, as the result of negotiations with CAPP and its principal shippers, it had reached a settlement in principle with respect to the Company's revenue requirement for 1995 and an incentive toll settlement for the years 1996-2000. Trans Mountain therefore requested that the determination of the appropriate revenue requirement for 1995 and 1996 be adjourned *sine die*.

On 23 November 1995, the Board amended Hearing Order RH-3-95 to limit the scope of the oral proceeding to the consideration of how the results of Trans Mountain's study of tankage use, costs and credits should be incorporated in the determination of 1996 tolls. The oral proceeding was held in Vancouver, British Columbia from 27 to 29 November 1995.

Background

The Trans Mountain pipeline system consists of a single trunk pipeline which transports crude oil, refined and semi-refined products and Methyl Tertiary Butyl Ether ("MTBE") in a series of batch trains. Trans Mountain's receipt tankage consists of 19 tanks at Edmonton and 3 tanks at Edson and its delivery tankage consists of 6 tanks at Sumas and 13 tanks at Burnaby. An additional 3 tanks at Kamloops as well as some of the Sumas tanks are used as break-out tankage to facilitate system flows and deliveries to alternate delivery points.

The pipeline was originally built as a crude oil pipeline in the early 1950s. During the 1980s, the pipeline began transporting various refined products in addition to crude oil. The toll treatment for refined products has been contentious from the outset. Refined products required different handling and the construction of additional receipt and delivery facilities while, on the other hand, they often bypassed system tankage when they were received or delivered directly at pipeline rates. In such cases, refined product shippers used their own rather than system tankage and did not wish to pay for tankage that they did not use.

In its OH-1-87 decision, the Board directed Trans Mountain to develop a methodology to credit shippers who do not use receipt or delivery tankage. After extensive discussions with shippers, Trans Mountain began using the existing tankage credit methodology in 1991. Under this methodology, Trans Mountain determines the costs of receipt and delivery tankage and allocates a portion of each to system tankage required by all users for scheduling purposes. The system tankage is the volume of tankage required to contain the pipeline's working stock. The remaining receipt and delivery tankage is then paid for by those shippers which use that type of tankage. Credit factors of approximately 65% of either receipt and delivery tankage charges are given to non-users with the remaining proportion in each case being the cost of the common system tankage required for scheduling.

Initially, the Board approved the determination of separate charges for the additional receipt and delivery facilities required to transport refined products. In the OH-1-87 decision, the Board allowed the roll-in of their capital and related operating costs if the facilities are of a level and nature required to provide basic transportation service for a multi-stream pipeline system or if they generally enhanced the overall efficiency of the system. Facilities which, at that time, provided a unique service continued to be charged separately to their users. In its RH-3-93 decision, the Board had accepted the rolling-in of facilities that had joint or alternate use.

In the RH-3-93 decision, the Board also accepted continuation of the existing tankage credit methodology; however, in light of continuing refinery closures and concerns expressed during the hearing, the Board directed Trans Mountain to conduct an independent review of tankage use, costs and credits. The approved terms of reference for this study specified that the objective was "to derive a toll design proposal that allocates tankage costs equitably to system users in proportion to benefits received". In response, Trans Mountain filed with the Board the "Review of Tankage Use, Costs, and Credits for Trans Mountain Pipe Line Company, Ltd." ("tankage study") dated 29 September 1995 prepared by Ernst & Young LLP.

Toll Design and Tankage

In its application of 29 September 1995, Trans Mountain applied to continue with its existing tankage toll methodology for 1995 and to amend its toll design for 1996 to incorporate the recommendations set out in the tankage study. All parties indicated their support for continuing the existing methodology for 1995. On 10 January 1996, the Board issued Order TO-1-96 approving tolls for 1995 based upon the continued use of the existing methodology.

Trans Mountain proposed to revise its toll design for 1996 as follows:

1. Roll all the costs of dedicated facilities used for either the receipt or delivery of semi-refined and refined products and MTBE into the volumetric charges associated with their respective terminalling cost pool.
2. Set the level of the receipt and delivery tankage credits at 25% for directly injected volumes at Edmonton and Kamloops and directly delivered volumes at Kamloops and discontinue all other tankage credits, including the delivery tankage credit for exports at Sumas.
3. Allocate the cost of tankage used to store water for hydrostatic testing to the transmission cost pool.
4. Continue to split the cost of Sumas tankage between transmission and delivery tankage cost pools.
5. Eliminate the credit for receipt terminalling of butane at Edmonton.
6. Eliminate the fuel and power credit for the transportation of refined and partially refined products and MTBE.

The most contentious items of this proposal were the roll-in of the dedicated facilities and the 25% tankage credits for shippers of directly injected and delivered throughput.

Trans Mountain cited the tankage study as support for its revised toll design. Dr. Timothy Crichfield, the partner with Ernst & Young LLP who appeared as a witness to speak to the tankage study, indicated that the current tankage credit methodology results in a single group of shippers assuming most of the cost of assets that benefit all shippers. He found that the nature of costs associated with tankage, the system history and its joint use caused him to recommend a general rolling-in of the costs of the various dedicated receipt and delivery facilities and the establishment of a 25% credit level for non-use of either the receipt or delivery tankage.

Dr. Crichfield characterized tankage on the Trans Mountain system as a multiple-use facility with costs incurred to provide service to multiple users. While the tankage study identified five tankage functions: scheduling, batch accumulation, segregation/blending, pressure relief and buffer/interface, Dr. Crichfield was unable to allocate costs to these separate functions because tankage costs were fixed and did not vary directly with measurable levels and types of service provided. Moreover, the tankage study found that all system users, whether or not their volumes physically enter tankage, availed themselves of at least four of the five services provided by tankage and that, while one type of shipper may use a disproportionate amount of receipt and delivery facilities for particular functions, other

shippers frequently balance this usage with a disproportionate use of tankage for another function. He therefore recommended that all users be assessed charges for both receipt and delivery tankage.

The tankage study found that dedicated receipt and delivery lines which allow the direct injection or receipt of volumes at pipeline rates are partial substitutes for the construction of additional tankage at a higher cost. Additional investments have also been made by certain shippers in facilities which they own to aid the direct injection and receipt of their products. The ability to adapt the single pipeline to accommodate the needs of multiple streams has avoided the need to construct a second pipeline which would have increased costs for all users. Thus, it was submitted that a roll-in of all dedicated facilities was justified.

Dr. Crichfield noted that shippers who deliver and receive their throughput directly have made their own investments in tankage and should not have to pay twice for this service. He was concerned however that providing too high a credit would invite the cannibalization of system assets, particularly higher cost tankage, leaving shippers with no options liable for the residual costs of the more expensive assets. Therefore, Dr. Crichfield recommended that the credit be set at 25%, rather than 100%, in order to take into consideration the newer vintage of tankage assets as compared to other pipeline assets and thereby remove the incentive to avoid the relatively more costly tankage facilities.

Trans Mountain stated that there has been a major transformation of its system in recent years which has caused the day-to-day operation of the pipeline to change. Large scale movements of refined products and regular shipments of MTBE have altered the way in which tankage is used. Trans Mountain contended that the existing toll design for tankage is no longer appropriate because it presumes that directly injected and delivered refined products only use tankage for scheduling purposes and allocates all residual tankage costs to other shippers. The Company presented its amended toll design as a balanced package and cautioned against varying parts of its proposal.

CAPP was the only party to present evidence and an alternative proposal at the hearing. CAPP agreed that the existing toll methodology was no longer appropriate, but opposed the proposed methodology and, in particular, both the roll-in of the costs of dedicated facilities and the 25% tankage credit. It noted that the proposed roll-in would be contrary to previous Board decisions on these matters and warned that once these were rolled-in there would be no rationale to impose separate charges to users of future additions. CAPP was concerned that crude oil shippers who do not use these facilities would be paying 65% of the cost of any rolled-in facilities. It dismissed Trans Mountain's contention that some of these dedicated facilities were substitutes for higher cost additional tankage as hypothetical since the use and toll treatment of such unbuilt facilities was unknown. CAPP objected to any tankage credit for refined product shippers as ignoring the significant indirect benefits this tankage affords refined product shippers.

CAPP proposed an alternative toll design for tankage based upon an equal allocation of tankage costs to each of the five functions identified in the tankage study and the computation of separate volumetric charges for each function. CAPP considered its approach more cost-based than Trans Mountain's proposal because Trans Mountain had not assigned any costs to the identified functions. It asserted that rolling-in all costs would result in cross-subsidization. In argument, Trans Mountain characterized CAPP's proposal as illusory precision which ignored the considered opinion of Trans Mountain's experts in these matters.

Chevron Canada Limited ("Chevron") criticized the existing tankage credit as providing an incentive for certain shippers to by-pass Trans Mountain's tankage, thereby leaving the remaining shippers to bear these costs. Chevron argued that shippers receiving such credits are not paying for the ancillary services which they receive from this tankage. Moreover, it found the proposed level of the credit to be arbitrary. As for the proposed roll-in of dedicated facilities, Chevron asserted that there had been no changes in circumstances which would justify such a departure from established tolling principles.

Imperial Oil Limited ("Imperial") supported the proposed roll-in of direct injection and receipt facilities. It proposed that tankage to provide scheduling and pressure relief be included in the transmission cost pool. Imperial was concerned that no charges be levied on direct injectors for tankage used for batch accumulation, segregation and blending functions as these are services which such shippers provide for themselves. Finally, Imperial recommended that the costs of any residual tankage be allocated on a volumetric basis to users which do not directly inject or receive.

The Alberta Department of Energy ("ADOE") opposed Trans Mountain's proposal. It considered the proposed awarding of credits to be arbitrary and inequitable. Credits were being awarded to some non-users of tankage and not others and for example, no credit was proposed for the 60% of Sumas deliveries that bypass delivery tankage. It maintained that giving directly injected refined products a credit for their non-use of batch accumulation tankage would ignore the economic benefit they receive as this tankage allows them to ship in larger batch trains and thereby decrease the relative size of interface. In addition, ADOE objected to the proposed roll-in of dedicated facilities and urged the Board to continue to apply its established tests in this regard. It supported CAPP's proposal as a user-pay approach.

Views of the Board

The Board notes that over the past decade there has been a fundamental change in the operations of the Trans Mountain pipeline system. The system has evolved from a single stream into a multi-stream pipeline which integrates shipper-owned and system tankage facilities to provide appropriate access for all users. The current toll design is rooted in the era of the single stream crude oil pipeline. This has resulted in numerous separate charges for discrete facilities required to make the pipeline accessible to all streams. Meanwhile, the method used to calculate tankage credits has resulted in most of the costs of tankage becoming a residual cost borne by one group of users namely, crude oil shippers, whose level of service has not changed. Further, no party to the present proceeding expressed any continuing support for the current tankage credit methodology. Therefore, the Board is satisfied that the existing methodology must be replaced.

The Board continues to believe that tolls should be as cost-based as practical; however, the choice in this proceeding is between two proposals neither of which embodied a convincing analysis of cost causality. In the absence of such an analysis, the Board is required to exercise its judgement concerning the relative equity of the two proposals. The problem at hand concerns the allocation of joint costs. Clearly, all users benefit directly and indirectly from existing tankage. Nonetheless, whatever indirect benefits may be ascribed to a user, the user-pay principle requires that shippers not pay for tankage facilities which they provide for themselves. Therefore, some toll reduction

for shippers of directly injected streams is justified; however, just how much of a reduction is difficult to ascertain when system tankage costs remain largely unaffected by this non-use.

The Board is not persuaded by the CAPP alternative. CAPP sought to eliminate credits altogether by allocating tankage costs equally, and in the Board's view, arbitrarily, to each of the five functions identified even though there was evidence that two of these functions, blending and pressure relief, made virtually no demand on system tankage. Another questionable aspect was the apparent double-charging for buffer and interface tankage by allocating to this function another equal portion of costs while maintaining that there should continue to be separate add-on charges for the relevant facilities.

The Board recognizes that Trans Mountain's approach is an attempt by a party which does not appear to have an economic interest in the outcome to balance competing interests in a reasonable manner. The Board finds that the dedicated facilities are necessary to provide appropriate access to the common carrier pipeline and that to some extent, these facilities have obviated the need to construct additional tankage at a higher cost. Although the Board continues to have reservations about the rationale put forward by Trans Mountain for the 25% credit level for direct injection and receipt, it is satisfied that, in the absence of the requisite cost information, the level of credit must remain a matter of judgement. The Board considers that the 25% level of credit results, in its judgement, in a just and reasonable toll for volumes which are directly injected and received.

Based upon the foregoing, the Board finds that Trans Mountain's proposal would result in tolls that are just and reasonable.

The Board expects that, over time, other proposals in connection with this issue will arise, and the Board continues to encourage all of the interested and affected parties to consider jointly any innovative methods for the allocation of Trans Mountain's tankage costs.

Decision

The Board approves Trans Mountain's toll design proposal as set out in its toll application of 29 September 1995.

Disposition

The foregoing constitute our Decision and Reasons for Decision on this matter.

(Original Signed)

J.A. Snider
Presiding Member

(Original Signed)

R. Priddle
Member

(Original Signed)

R. Andrew
Member

Calgary, Alberta
February 1996

Appendix IV

Settlement Agreement

INCENTIVE TOLL SETTLEMENT

Between

**TRANS MOUNTAIN PIPE LINE COMPANY LTD.
("TMPL")**

and

**CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS
("CAPP")**

and

**CHEVRON CANADA LIMITED
("Chevron")**

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1.0 INTRODUCTION

- 1.1 TMPL is a body corporate incorporated under the laws of Canada, having its registered office in the City of Vancouver, in the Province of British Columbia. TMPL owns and operates a National Energy Board regulated hydrocarbon pipeline.
- 1.2 CAPP is an association having its principal office in the City of Calgary, in the Province of Alberta. CAPP represents the interest of upstream crude oil and natural gas producing companies, the member companies of which account for approximately 95% of Canadian crude oil and natural gas production.
- 1.3 Chevron is not a member of CAPP. Chevron is a principal shipper of crude oil on the TMPL System.
- 1.4 TMPL, CAPP and Chevron have negotiated a proposed settlement in respect of the establishment of the Revenue Requirement to be utilized by TMPL in the derivation of 1995 Tolls on the TMPL System for the transportation of hydrocarbons. TMPL, CAPP and Chevron have also negotiated a proposed incentive Toll arrangement for the years 1996 to 2000 inclusive.
- 1.5 TMPL, CAPP and Chevron have agreed that TMPL should seek National Energy Board ("NEB or "the Board") approval for the 1995 revenue requirement and for a future Toll methodology containing certain incentive features, in accordance with the Toll Settlement contained herein.
- 1.6 TMPL, CAPP and Chevron acknowledge that certain toll design issues remain outstanding and subject to a proceeding currently before the NEB. The resolution of those issues by the NEB will effect the manner in which the Toll Settlement is implemented with respect to Dedicated Facilities Charges.
- 1.7 It is intended that the incentive based Toll methodology contemplated by this Toll Settlement will better align the interests of TMPL and its Tollpayers by providing a framework which encourages cost reductions and the minimization of Tolls for service, relative to the Tolls which would have existed under a cost of service approach, and simultaneously permits TMPL an opportunity to increase profitability. Moreover, the proposal is intended to encourage maximization of throughput on the TMPL system, reduce burdens associated with the traditional cost of service regulation, and provide a long-term basis for efficient and effective Toll regulation of TMPL.
- 1.8 TMPL, CAPP and Chevron have reached the Toll Settlement on a negotiated basis, and agree that no component of the Toll Settlement is to be construed as representing the position of any party on the appropriate result which would obtain in the absence of a negotiated settlement. The parties intend that the settlement be viewed as a whole, and that there should be no prejudice to the positions of any party in the future. No element of the settlement should be considered as acceptable to any party in isolation from all other aspects of the settlement. In addition, the use of certain bond rating criteria for the purposes of this settlement does not necessarily represent the view of the parties as to the appropriate debt rating for TMPL. The parties intend that the settlement will be applicable solely to TMPL and will have no application to or form a precedent for other NEB-regulated pipelines.

2.0 DEFINITIONS

- 2.1 In this Toll Settlement the following terms have the meaning set out below:
 - (a) **Actual Tax Allowance** means a tax allowance based on the Earnings Threshold in existence from time to time, the actual statutory corporate income tax rate and the flow-through method of accounting for income taxes and actual permanent and timing differences calculated in a manner consistent with that previously approved by the NEB.
 - (b) **Actual Transportation Revenue** means transportation revenue generated in the year derived from Tolls.

- (c) **Annual Agreement Compliance Audit** means an audit in the nature of the audit described in the Canadian Institute of Chartered Accountants Handbook, Section 5815, as may be amended from time to time.
- (d) **Average Toll** for purposes of calculating the Excess Capacity Incentive Amount means the weighted average of the Tolls for transporting light crude oil from Edmonton to Sumas, light crude oil from Edmonton to Burnaby and refined petroleum from Edmonton to Burnaby (net of applicable tankage credits and Dedicated Facilities Charges) calculated using deemed relative weighting of 50%, 35% and 15%, respectively. The method of calculating the Average Toll is as set forth in Schedule "P".
- (e) **Bulk Oil Cargo Fee** means a fee payable to a certified response organization, established pursuant to regulations made under the *Canada Shipping Act*, applicable to volumes of oil loaded as cargo onto marine vessels at TMPL's Westridge Terminal.
- (f) **Capital Structure Ratio** means the capital structure of the TMPL System having a deemed equity component of 45% of capitalization as prescribed for TMPL by the NEB as a result of RH-2-94 proceeding, Order TG/TO-1-95.
- (g) **Carrying Charges** means carrying costs calculated on balances as of December 31 at the average of the 12 monthly Bank Rates published in the Bank of Canada Statistical Review plus 50 basis points, and shall be applicable to all adjustments or amounts carried forward or payable hereunder.
- (h) **Dedicated Facilities** means any portion of the TMPL System that is, by order of the NEB or contractual arrangement between TMPL and any shipper or group of shippers, used exclusively to provide service to a shipper or group of shippers.
- (i) **Dedicated Facilities Charge** means any fee, including a Toll, charged to any shipper or group of shippers for Dedicated Facilities.
- (j) **Depreciation Expense** means the annual allowance for depreciation of TMPL's plant in service. TMPL will submit for NEB approval new depreciation rates for individual plant accounts, based on remaining economic life until year 2020 and average group life methodology, which approximate an average rate of 3.3%.
- (k) **Earnings Efficiency** means the amount, if any, by which Net Income exceeds the Earnings Threshold in any year.
- (l) **Earnings Threshold** means the negotiated threshold of \$13.0 million which may be adjusted from time to time by the occurrence of certain of the Non-Routine Adjustments pursuant to Article 11.
- (m) **Efficiency Incentive** means the amount calculated and allocated in accordance with Article 9.
- (n) **Excess Capacity Incentive** means the amount calculated and allocated in accordance with Article 6.
- (o) **Extraordinary Event** means an event described in Article 12.
- (p) **Forecast Consumer Price Index** means the most current forecast of the rate of change in the Consumer Price Index for Canada from the Conference Board of Canada, Canadian Outlook, Economic Forecast, Winter Edition, for each applicable year, divided by 100.
- (q) **Forecast Revenue Requirement** means TMPL's forecast of the Revenue Requirement for the year in question, calculated in accordance with Article 4.3.5.

- (r) **Forecast Tax Allowance** means TMPL's forecast of an annual tax allowance based upon the Earnings Threshold in existence from time to time, the forecast statutory corporate income tax rate, the flow-through method of accounting for income taxes and forecast permanent and timing differences calculated in a manner consistent with that previously approved by the NEB.
- (s) **Heavy Oil** means oil which has a density greater than 904 kg/m³ at 15°C or a kinematic viscosity greater than 100 mm²/second at TMPL's reference pipeline temperature. Oil will not be considered to be Heavy Oil when it forms part of a blend having a density not greater than 904 kg/m³ at 15°C or kinematic viscosity not greater than 100 mm²/sec.
- (t) **Interest Expense** shall have the meaning ascribed in Article 10.2.
- (u) **Major Facilities Expansion** means a capital expenditure of not less than \$5 million required for construction of any project (which may include facilities at more than one geographic location) that is requested or agreed to by the shippers or ordered by the NEB.
- (v) **MTBE/New Materials Incentive** means the amount calculated and allocated in accordance with Article 8.
- (w) **Net Income** means net income on an after-tax basis calculated in accordance with article 10.
- (x) **Non-Routine Adjustment** means an adjustment to Revenue Requirement made as a result of a Non-Routine Event.
- (y) **Non-Routine Event** means an event described in Article 11.
- (z) **Operating Costs** means actual operating costs for the year for pipeline operations, calculated in the manner currently approved by the NEB.
- (aa) **Petroleum Loss/Gain Allowance** means the amount of any actual purchase or sale of petroleum to cover losses or gains calculated in accordance with Article 5.
- (bb) **Power Adjustment** means, for any year subsequent to 1996, the revenue variance resulting from the change in fuel and power costs required to transport the throughput volume forecast for that year. For purposes of determining the Revenue Requirement of any year subsequent to 1996, the Power Adjustment shall be 20% of:

(Throughput Forecast - previous year's Throughput Forecast) x previous year's Tolls.
- (cc) **Power Allowance** means 20% of:
 - (i) Transportation Revenue Variance; or
 - (ii) revenue derived from throughput in excess of Sustainable Capacity; or
 - (iii) revenue derived from throughput subject to the MTBE/New Materials Incentive Amount,
 as may be required by the context of this Toll Settlement.
- (dd) **Retroactive Adjustment Amount** means the revenue variance associated with the difference between interim Tolls effective January 1 to the end of February and final Tolls effective March 1 of each year multiplied by the actual volume transported during the months of January and February.

- (ee) **Revenue Requirement** means an amount, calculated annually in accordance with Article 4, from which TMPL's Tolls will be calculated.
 - (ff) **Starting Point** means an initial negotiated sum of \$98.5 million for 1996 which will be inflated year over year on an annual basis pursuant to Article 4.3.3, and when so inflated will be used to calculate the Starting Point in each of the years subsequent to 1996.
 - (gg) **Starting Point Inflation Adjustment** means, for all years except 1996 and 1997, the amount obtained by subtracting the Forecast Consumer Price Index from the actual Consumer Price Index for Canada, All-Items (Publication No. 62-001 reported by Statistics Canada in January), for the year (divided by 100) multiplied by the prior year's Starting Point.
 - (hh) **Sustainable Capacity** means those volumes, determined on a monthly basis, in accordance with Article 6.
 - (ii) **Tax Allowance Variance** means the variance calculated and allocated in accordance with Article 4.3.2.
 - (jj) **Throughput Forecast** means the annual forecast of throughput, showing the volumes forecast to be transported from specific points of receipt to specific points of delivery prepared in accordance with Article 4.4.
 - (kk) **TMPL System** means the NEB regulated portion of the pipeline system owned and operated by TMPL.
 - (ll) **Toll or Tolls** means the amount per unit established by TMPL from time to time, in accordance with the terms of this Agreement, to transport a hydrocarbon stream from a specified point of receipt to a specified point of delivery through the TMPL System and published in a tariff filed with the NEB.
 - (mm) **Transportation Revenue Variance** means the variance calculated and allocated in accordance with Article 7.
- 2.2 Wherever the singular or plural is used in this Toll Settlement, it shall be construed as meaning the plural or singular as the context requires.
- 2.3 Any reference to "current" practices or levels of service in this Toll Agreement shall be construed as meaning the practices or levels of service prevailing as of January 1, 1996.
- 2.4 Schedules "A" through "P" attached hereto shall form part of this Toll Settlement, provided that the numerical values contained therein are illustrative only.

3.0 TERM

- 3.0 The specific parameters of the incentive methodology that have been negotiated encompass the period January 1, 1996 to December 31, 2000 inclusive. As more specifically set out in Article 13, the parties intend to enter into good faith negotiations in an effort to reset parameters as necessary to extend incentive Tolling beyond December 31, 2000.

4.0 REVENUE REQUIREMENTS/TOLL CALCULATION

4.1 Revenue Requirement: 1995

- 4.1.1 The revenue requirement for 1995 shall be \$95.5 million. TMPL shall issue an invoice or refund, as the case may be, to all 1995 shippers on a retroactive basis for the difference between the revenue collected under TMPL's interim Tolls and \$95.5 million, with Carrying Charges.

4.2 Revenue Requirement: 1996

- 4.2.1 The Revenue Requirement for 1996 shall be \$106 million, comprising the sum of the following:

- (a) 1996 Starting Point of \$98.5 million; and
- (b) Forecast Tax Allowance of \$7.5 million.

4.3 Calculation of Revenue Requirement: 1997 to 2000

- 4.3.1 Tolls for transportation on the TMPL System for the calendar years 1997 to 2000 inclusive shall be based on a Revenue Requirement calculated on an annual basis.
- 4.3.2 The Tax Allowance Variance shall be the difference between the Forecast Tax Allowance and the Actual Tax Allowance. The methods of calculating Forecast Tax Allowance and Tax Allowance Variance are as set forth in Schedules "A" and "B", respectively.
- 4.3.3 The method of calculating the Starting Point and Starting Point Inflation Adjustment is as set forth in Schedule "C".
- 4.3.4 The method of calculating the Power Adjustment is as set forth in Schedule "D".
- 4.3.5 Revenue Requirement for the years 1997 to 2000 inclusive shall be calculated based on the following formula:

(Previous Year's Starting Point + Starting Point Inflation Adjustment plus or minus Power Adjustment) x (1 + Forecast Consumer Price Index) + Forecast Tax Allowance + Non-Routine Adjustments, and plus or minus the sum of the following items related to the previous year:

- (a) Starting Point Inflation Adjustment;
- (b) Tax Allowance Variance;
- (c) Non-Routine Adjustment Variance;
- (d) Transportation Revenue Variance;
- (e) shippers share of Excess Capacity Incentive;
- (f) shippers share of Efficiency Incentive;
- (g) shippers share of MTBE/New Material Incentive;
- (h) Petroleum Loss/Gain Allowance;
- (i) Carrying Charges on the amounts referred to in paragraphs (a) - (h) of this Article.

4.3.6 For the purpose of this Toll Settlement, the Consumer Price Index shall be deemed not to exceed 5% nor fall below 1%.

4.3.7 The method of calculating the Revenue Requirement is as set forth in Schedule "E".

4.4 Toll Calculation

The Tolls calculated for 1996 to 2000 inclusive shall be based on the Toll design approved by the NEB from time to time, and on the Throughput Forecast prepared by TMPL in the same manner as currently utilized for preparing such forecasts. The 1996 Throughput Forecast and Tolls are annexed as Schedule "F".

5.0 PETROLEUM LOSS/GAIN ALLOWANCE

5.1 An allowance for future gains or losses of petroleum will be based on actual transactions required to balance the system. The actual amount of any purchase or sale will be recorded in a deferral account. Revenue Requirement for the subsequent year will be adjusted to reflect positive or negative balances in the account.

5.2 The purchase or sale of petroleum will be based on the requirements of the system. TMPL will not purchase or sell petroleum if balances do not require the transaction. Any transaction will be dependent upon the inventory position (gain or loss), shippers' requirements for receipts and deliveries, and the forecast capability of the system to meet these requirements. If a purchase or sale of petroleum is necessary, TMPL will solicit sealed tenders or bids, as the case may be, and will accept the most commercially favourable terms to meet the requirements of the system.

5.3 The Petroleum Loss/Gain Allowance shall be the amount, positive or negative, in the deferral account at year end.

5.4 The method of calculating the Petroleum Loss/Gain Allowance is as set forth in Schedule "G".

6.0 EXCESS CAPACITY INCENTIVE

6.1 The sustainable capacity of the TMPL System is dependent on the number of batches of heavy crude transported through the system and the volume of petroleum received at Kamloops. On completion of the Stage 2 capacity expansion, the sustainable pumping capability past the bottleneck at Edson is 39,300 m³/day for light crude and 33,000 m³/day for heavy crude. A chart illustrating the effect of varying volumes of heavy crude on the sustainable capacity of the TMPL System is attached as Schedule "H".

6.2 The Sustainable Capacity in a month will be determined by averaging the sustainable pumping capability on the number of days with heavy crude in transit and the sustainable pumping capability on the number of days available to pump at the light crude flowrate and adding the average deliveries of petroleum received at Kamloops.

6.3 If, in any month, actual deliveries out of the TMPL System exceed the Sustainable Capacity for that month, an Excess Capacity Incentive shall be determined using the following formula:

$$\text{Excess Capacity Incentive} = 0.8 \times (\text{actual deliveries exceeding Sustainable Capacity} \times \text{Average Toll})$$

6.4 TMPL shall retain 50% of the Excess Capacity Incentive for its own account.

6.5 The amount of Excess Capacity Incentive not retained by TMPL shall be used to reduce the following year's Revenue Requirement.

6.6 The method of calculating the Excess Capacity Incentive is as set forth in Schedule "I".

7.0 TRANSPORTATION REVENUE VARIANCE

7.1.1 A Transportation Revenue Variance shall be determined annually based on the following formula:

$$\text{Transportation Revenue Variance} = 0.8 \times (\text{Actual Transportation Revenue} - \text{Forecast Revenue Requirements} - \text{Excess Capacity Incentive} - \text{MTBE/New Materials Incentive})$$

7.1.2 The amount of the Transportation Revenue Variance will be applied to either reduce or increase the Revenue Requirement in the following year.

7.1.3 The method of calculating the Transportation Revenue Variance is as set forth in Schedule "J".

8.0 MTBE/NEW MATERIALS INCENTIVE

8.1 Incremental revenues, net of the Power Allowance, for transporting materials not already transported through the system, or for transporting more than 1230 m³/day of MTBE, shall be shared for five years between TMPL (30%) and the shippers (70%), provided TMPL has been required to expend not less than \$250,000 to enable such volumes to be shipped. The TMPL expenditures may be for research, technological innovation, development or capital.

8.2 The MTBE/New Materials Incentive shall be determined monthly using the following formula:

$$\text{MTBE/New Materials Incentive} = 0.8 \times [(\text{throughput of MTBE in excess of 1230 m}^3/\text{day} + \text{throughput of New Materials}) \times \text{Toll}]$$

8.3 TMPL shall retain 30% of the MTBE/New Materials Incentive for its own account.

8.4 The amount of MTBE/New Materials Incentive not retained by TMPL shall be used to reduce the following year's Revenue Requirement.

8.5 If in any month TMPL operates above Sustainable Capacity, any incentive calculated under this Article 8 shall be suspended to the extent of the volumes transported above Sustainable Capacity and the Excess Capacity Incentive shall apply to such volumes in those circumstances.

8.6 The method of calculating the MTBE/New Materials Incentive is as set forth in Schedule "K".

9.0 EFFICIENCY INCENTIVE

9.1 Earnings Efficiency shall be the amount by which the Net Income in any year exceeds the Earnings Threshold in that year.

9.2 TMPL shall retain 50% of the Earnings Efficiency for its own account.

9.3 The Efficiency Incentive used to reduce the following year's Revenue Requirement shall be determined as:

$$\text{Efficiency Incentive} = 0.5 \times (\text{Earnings Efficiency}) \div (1 - \text{income tax rate})$$

9.4 If Net Income is less than Earnings Threshold, the Revenue Requirement shall not be increased to reflect the failure to achieve the Earnings Threshold.

9.5 The method of calculating the Efficiency Incentive is as set forth in Schedule "L".

10.0 NET INCOME

10.1 Net Income for each year shall be calculated in the next succeeding year based on the following formula:

Actual Transportation Revenue + /- prior year adjustments

- Excess Capacity Incentive
- MTBE/New Materials Incentive
- +/- Transportation Revenue Variance

= Adjusted Transportation Revenue

- +/- Tax Allowance Variance
- +/- Starting point Inflation Adjustment
- +/- Non-routine Adjustment Variance
- Operating Costs
- Depreciation Expense
- Interest Expense
- Resultant income taxes payable

= NET INCOME

The method of calculation of Net Income is as set forth in Schedule "M" inclusive of prior year adjustments calculated as set forth in Schedule "O".

10.2 Interest Expense will be the amount calculated using the amount of and interest rate applicable to TMPL's current long-term debt attributable to the TMPL System, being \$101 million at a cost rate of 10.62%, plus the amount of short-term debt required in any year to balance the capitalization of the TMPL system with the amount of long-term debt and the Capital Structure Ratio. The cost rate applicable to short-term debt for any year will be TMPL's weighted average short-term rate for that year.

10.3 Notwithstanding the provisions of Article 10.2, if in any year the capitalization of the TMPL System contains more than 55% debt the portion of the Interest Expense associated with the portion of debt in excess of 55% of capitalization, calculated at TMPL's weighted average short-term rate for that year, will be excluded from the calculation of Net Income.

10.4 For the purposes of Article 10.2 TMPL's debt ratio will be calculated as 55% of the capitalization of assets related to the TMPL System, which are defined as the simple average of opening and closing balances for plant in service plus working capital minus accumulated deferred income tax balance.

10.5 In the determination of costs associated with earnings (other than Interest Expense), the parties intend that actual pipeline costs will be utilized, which costs shall be determined in accordance with the principles and practices established by the NEB for TMPL. TMPL will provide CAPP and Chevron with reasonable notice of any actual or anticipated significant deviation from or changes in existing practice.

11.0 NON-ROUTINE ADJUSTMENTS TO ANNUAL REVENUE REQUIREMENTS

11.1 Circumstances may arise which necessitate adjustment to the annual Revenue Requirement and resulting Tolls. A Non-Routine Event shall be:

- (a) increase in costs as a result of increase in aggregate taxes (other than income taxes) of more than 5% over the previous year;
- (b) costs resulting from the unsuccessful resolution of litigation between TMPL and the Government of British Columbia concerning the applicability to TMPL of certain government levies, relating to the Energy Council;

- (c) changes in costs resulting from programs requested by shippers, or agreed to by shippers, provided that it is understood any shipper may ask the NEB to determine whether such costs should be recovered through Tolls on a "rolled in" basis or a "stand alone" basis. If stand alone, costs will be billed directly to the shipper.
- (d) where TMPL is subject to an NEB order which would have a material impact on elements of cost to TMPL. TMPL will not seek to set a precedent by requesting from the NEB an order which would have a material impact. However, where such a precedent has been set by the issuance of NEB orders to other pipelines, TMPL may seek a similar order, and any resulting increases to costs shall be a non-routine adjustment;
- (e) increase in power costs required to transport Heavy Oil if the total volume of Heavy Oil forecast to be transported in any year exceeds 5% of the total volume of the Throughput Forecast for that year. In that event, the increase in power costs will be calculated as the amount by which the total power costs then forecast exceeds current power costs, as adjusted by the sum of inflation adjustments (calculated in the same manner as the Starting Point Inflation Adjustment) and Power Adjustments from the date of this Toll Settlement;
- (f) increase in costs as a result of uninsured losses;
- (g) changes in costs resulting from legislation, regulations, orders or directions by any government authority which result in changes to safety or environmental requirements, practices, or procedures for TMPL; or
- (h) the cost of distinct and new programs necessary to address new or unanticipated failure mechanisms which significantly impact upon the integrity of the pipeline.

11.2 With respect to Articles 11.1 (f), (9) and (h), the Revenue Requirement for a year shall only be adjusted if the Non-Routine Adjustment calculated pursuant to such sub-clauses exceeds \$150,000 for each adjustment or \$300,000 in aggregate in any one year. For the purposes of calculating the aggregate adjustment to Revenue Requirement, only individual adjustments of \$75,000 or more shall be aggregated.

11.3 Non-Routine Adjustment means the sum of the following components:

- (a) additional Operating Costs associated with the Non-Routine Event;
- (b) additional capital-related costs associated with the Non-Routine Event including:
 - (i) Depreciation Expense;
 - (ii) annual Interest Expense, based on TMPL's actual cost of debt in respect of the Non-Routine Event, if such a debt cost is identifiable; provided that, if actual debt cost is not identifiable, annual Interest Expense will be determined in accordance with Article 10.2;
 - (iii) annual earnings based on the common equity rate of return in effect resulting from the National Energy Board Multi-Pipeline Proceeding (RH-2-94) as adjusted from time-to-time and the Capital Structure Ratio; and
 - (iv) an allowance for funds used during construction (AFUDC) calculated in accordance with the Capital Structure Ratio. The equity portion of AFUDC shall reflect the common equity rate of return in effect resulting from the NEB multi-pipeline proceeding (RH-2-94), as adjusted from time to time and an interest rate determined as the weighted average cost of interest determined by the NEB as being attributable to the TMPL System in the RH-3-93 proceeding.

- (c) annual income taxes calculated using the annual earnings calculated in accordance with Article 11.3(b)(iii), the forecast statutory income tax rate, the flow through methodology for accounting for income taxes and the application of actual permanent and timing differences in a manner consistent with that previously approved by the NEB.
- 11.4 Once Non-Routine Adjustments have been determined, such adjustments shall be added to the Revenue Requirement in each year following the inclusion of the adjustment for so long as and to the extent that such costs continue to be incurred.
- 11.5 Once Non-Routine Adjustments have been determined, the Earnings Threshold will be increased by the additional annual earnings calculated in accordance with Article 11.3(b)(iii).
- 11.6 If a Non-Routine Event as defined in Article 11.1 (c) would permit TMPL to qualify for the MTBE/New Materials Incentive or the Excess Capacity Incentive, then TMPL shall not calculate a Non-Routine Adjustment in addition to the applicable incentive amount.
- 11.7 The method of calculating Non-Routine Adjustments is as set forth in Schedule "N".

12.0 REQUIRED RENEGOTIATION DURING TERM

- 12.1 Neither CAPP, Chevron nor TMPL will initiate a review of the Tolls during the term of this agreement unless an Extraordinary Event occurs or there is a proposed Major Facilities Expansion. An Extraordinary Event is:
 - (a) an annual rate of change in the Consumer Price Index for Canada of greater than 5%;
 - (b) an expectation by TMPL that a downgrading of TMPL's debt rating to below BBB is about to occur;
 - (c) the actual or anticipated failure of TMPL to satisfy the interest coverage or other financial integrity tests contained in its outstanding Trust Indenture dated as of February 18, 1987;
 - (d) an uninsured expenditure or liability, of more than \$5 million, which amount would be required to:
 - (i) repair damage or restore operating ability as a result of an occurrence which affected operations;
 - (ii) cover expenses arising by reason of any of the matters described in Article 11.1 (f), (9) and (h).
- 12.2 If there is an Extraordinary Event, or a proposed Major Facilities Expansion, TMPL will meet with the shippers to attempt to develop a mutually acceptable solution. If the Extraordinary Event involves a potential downgrading of TMPL's debt rating, TMPL will:
 - (a) obtain documentation from the rating agency to verify the potential or actual downgrade and what minimum corrective measures will be required to maintain or restore the rating;
 - (b) ensure that such documentation shall clearly indicate whether non-NEB-regulated pipeline activities undertaken by TMPL have materially adversely affected the ratings relative to the ratings in existence January 1, 1996.

If agreement is not reached within 45 days, any party may commence proceedings to have the NEB resolve the issues.

13.0 CONTINUATION OF AGREEMENT BEYOND 2000

- 13.1 In 1998, the parties intend to negotiate, in good faith, the factors for the escalation of Revenue Requirement and the benefit sharing mechanisms for 2001 and subsequent years in an effort to continue to set Tolls on an incentive basis. All aspects of this Toll Settlement are subject to renegotiation except for those outlined in this Article.
- 13.2 The parties intend that the negotiations to establish future Revenue Requirement shall commence on the basis of adjustments to the Starting Point, as otherwise renegotiated, for the year 2000 being:
- (a) the 2000 Starting Point shall be reduced by 75% of the average of Earnings Efficiency for the years 1998, 1999 and 2000, calculated on a pre-tax basis; and
 - (b) the 2000 Starting Point shall be increased by the Non-Routine Adjustments, to the extent that such costs continue to be incurred.
- 13.3 Any MTBE/New Materials Incentive that is in effect in the year 2000 will be continued so that it applies for a total period of five years.
- 13.4 The determination of the Earnings Threshold effective in 2001 will include recognition of efficiencies attained by TMPL by increasing the Earnings Threshold, as otherwise renegotiated, by:
- (a) 25% of the average of Earnings Efficiency for the years 1998, 1999 and 2000; and
 - (b) increases in amounts determined in Article 11.5 for the average of the years 1998, 1999 and 2000 for the appropriate time period of the adjustment.
- 13.5 The Forecast Income Tax Allowance for 2001 shall be based upon the new Earnings Threshold.
- 13.6 If the average of Net Income for 1999 and 2000 is less than the Earnings Threshold, the year 2001 Starting Point will be adjusted on a pre-tax basis to achieve the Earnings Threshold.

14.0 REPORTING AND FILING REQUIREMENTS

- 14.1 On or before December 15 of each year TMPL shall file with the NEB and interested parties interim Tolls to take effect January 1 of the following year. TMPL shall forecast and incorporate all material variances into the interim tolls.
- On or before March 1 of each year TMPL shall file with the NEB and interested parties final Tolls for the year based upon the automatic year to year adjustment mechanism contemplated in this Toll Settlement. The filing will be supported by calculations in reasonable detail to permit confirmation of compliance with the methodology set out in this Toll Settlement. Not less than two weeks in advance of the March 1 filing with the NEB, TMPL will review the form and content of the information to be provided with shippers and interested parties.
- 14.2 The Retroactive Adjustment Amount shall be refunded or invoiced to shippers as soon as practicable after March 1st.
- 14.3 TMPL will seek, and CAPP and Chevron will support TMPL's request for NEB exemption from all the Toll filing requirements of NEB Order TO-3-92, and in particular, paragraph 5 thereof.
- 14.4 TMPL will seek, and CAPP and Chevron will support, TMPL's request for NEB exemption from the requirement for TMPL to file annual financial forecasts, quarterly and monthly surveillance reposts, and

monthly throughput forecasts required by NEB Order TO-3-92, and the NEB Memorandum of Guidance dated February 22, 1995.

15.0 AUDIT

- 15.1 TMPL shall provide an Annual Agreement Compliance Audit Report to the NEB, CAPP and Chevron. The Annual Agreement Compliance Audit Report will be provided to other shippers and interested parties upon request.
- 15.2 At the expense of CAPP and upon reasonable notice to TMPL, CAPP may elect to have an additional Annual Agreement Compliance Audit performed in each year, in addition to the annual audit performed by TMPL's auditors and once again to audit 2000.
- 15.3 The auditors selected by CAPP pursuant to Article 15.2 must be a recognized, major firm of Chartered Accountants and the audit must be conducted during normal business hours. TMPL will provide such auditors with reasonable access to source data necessary for the conduct of the audit; provided that, such auditors will maintain confidentiality in respect of source data identified by TMPL as confidential. Where confidential data is identified by TMPL, TMPL will provide CAPP with sufficient information to resolve any dispute related to such data.

16.0 TOLL DESIGN

- 16.1 If, as a result of the RH-3-95 Proceedings, the NEB determines that all or a part of the Dedicated Facilities should not be rolled in, TMPL will seek the concurrence of each shipper having a contractual arrangement for Dedicated Facilities and approval of the NEB, to the effect that:
- (a) the 1996 revenue requirement exclusive of income taxes for each Dedicated Facility, calculated under the current rate base/rate of return methodology, will form the 1996 starting point for each Dedicated Facility;
 - (b) each Dedicated Facility starting point will be inflated annually in the same manner as the Starting Point to determine new Dedicated Facility starting points for 1997 and subsequent years;
 - (c) each Dedicated Facility will bear its share of the Forecast Tax Allowance, based on each Dedicated Facility's relative contribution to 1996 Net Income together with associated timing differences; and
 - (d) each Dedicated Facility will share in the following incentive or adjustment amounts:
 - (i) the portion of any Non-Routine Adjustment applicable to a Dedicated Facility;
 - (ii) Starting Point Inflation Adjustment;
 - (iii) Tax Allowance Variance: and
 - (iv) shipper's share of the Efficiency Incentive.
- 16.2 When the changes contemplated in Article 16.1 have been effected, the Starting Point and Forecast Tax Allowance for each year will be reduced by the total of the Dedicated Facility starting point and applicable tax allowance for that year.
- 16.3 Effective January 1, 1996 the amount of the Bulk Oil Cargo Fee in effect from time to time shall be charged directly, in addition to any other applicable Toll, to any shipper who tenders oil for loading onto marine vessels at the Westridge Terminal. The Bulk Oil Cargo Fee will not be included in the calculation of Actual Transportation Revenue, Forecast Revenue Requirement or Operating Costs in any year.

- 16.4 The parties to this Toll Settlement shall request that any changes in TMPL's Toll design, arising from the RH-3-95 proceeding not take effect prior to January 1, 1996.

17.0 MISCELLANEOUS PROVISIONS

17.1 Disputes Referrable to NEB

- 17.1 The parties acknowledge that the National Energy Board has exclusive jurisdiction over the establishment of TMPL's Tolls and that any matters respecting the derivation of Tolls under this Toll Settlement shall be determined by the NEB. In the event of a dispute respecting the matters agreed upon which has not been satisfactorily resolved after negotiations and/or mediation between the parties, they will jointly request that the NEB deal with such disputed matters on an expedited basis.

17.2 Items Excluded From Revenue Requirements

- 17.2.1 The parties acknowledge that the 1996 Starting Point which forms part of the Revenue Requirement does not reflect the draw down of any portion of the deferred tax balance existing as at January 1, 1996.
- 17.2.2 TMPL confirms that the 1996 Starting Point specifically reflects the depreciation rates contained in TMPL's response to NEB Information Request 7.2 in the RH-3-95 proceeding.
- 17.2.3 The parties acknowledge that the 1996 Starting Point which forms part of the Revenue Requirement specifically excludes any provision for a negative salvage allowance.

17.3 Compliance with NEB Orders

- 17.3 Nothing in this Toll Settlement is intended to preclude TMPL from reflecting in its Tolls the cost consequences of NEB orders or directives applicable to it by virtue of any proceeding initiated by a party other than TMPL, or by the NEB of its own motion, nor to preclude TMPL from participation in any multi-pipeline proceeding if requested to do so by the NEB.

17.4 Lapsing of References

- 17.4 Should the Conference Board of Canada or Statistics Canada cease to exist or cease to publish the documents referred to in this Settlement, or should the Bank of Canada Statistical Review cease to be published, TMPL and the parties will, within 60 days of learning of such an event, meet and agree upon an alternate reference institution and/or publication as the case may be.

17.5 Approval in Whole by NEB

- 17.5 If the Toll methodology contemplated by this Toll Settlement is not approved in its entirety by the NEB, or if it is materially varied by subsequent NEB Order, none of the parties will be bound to support the implementation or continued implementation of such Toll methodology.

17.6 Disposition of Deferral and Sharing Amount

- 17.6.1 If this Toll Settlement ceases to be utilized at any time on or before December 31, 2000, TMPL will apply to the NEB, supported by CAPP and Chevron, to amortize all outstanding deferral and variance amounts in Tolls over the year following the termination of Tolls calculated pursuant to this Settlement. TMPL will prospectively amortize deferral and sharing balances unless otherwise ordered by the NEB.
- 17.6.2 Deferral and variance amounts which accrue in 2000 will be amortized in Tolls in the year 2001 regardless of whether or not the methodology contemplated by this Settlement is extended.

17.7 Service Standards

- 17.7.1 The parties intend that TMPL will continue to provide service in accordance with current levels, which exceed the standards existing in its current tariff Rules and Regulations.
- 17.7.2 TMPL intends to operate its system as efficiently as practical, having regard to the flexibility shippers require to reschedule batches or make batch changes.
- 17.7.3 The parties recognize that the level of service provided is dependent upon the commodity mix transported by TMPL, and changes in the commodity mix may change the level of service, or result in further expenditures being required in order to maintain the level of service, in which case TMPL will seek support for a Non-Routine Adjustment as contemplated in Article 11.

17.8 Insurance

- 17.8.1 TMPL will at all times insure its property and potential liability exposures against loss or damage that would otherwise be borne by TMPL. Unless otherwise agreed by the parties hereto, the program of insurance shall provide coverage comparable to the level of coverage currently maintained by TMPL.

SCHEDULE "A"

Method of Calculating Forecast Tax Allowance (\$'000)

Line	1996	1997	1998	1999	2000
1 Earnings Threshold	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>
Permanent & Timing Differences					
2 Capital Cost Allowance	<u>(19,381)</u>	<u>(19,155)</u>	<u>(18,888)</u>	<u>(18,647)</u>	<u>(18,429)</u>
Depreciation Expense					
3 Depreciation	13,988	14,697	15,290	15,961	16,587
4 Depreciation on Equity AFUDC	238	243	247	252	257
5 Non deductible Depreciation	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
sub-total	<u>14,230</u>	<u>14,944</u>	<u>15,541</u>	<u>16,217</u>	<u>16,848</u>
6 Capitalized Interest AFUDC	(119)	(118)	(116)	(122)	(127)
7 Other Timing Differences	377	225	100	100	100
8 Other Adjustments	123	124	123	127	128
9 Large Corporations Tax	<u>579</u>	<u>587</u>	<u>589</u>	<u>589</u>	<u>589</u>
10 Tax Base	<u>8,809</u>	<u>9,607</u>	<u>10,349</u>	<u>11,264</u>	<u>12,109</u>
11 Income Taxes payable (line 10 * .4421 / (1 - .4421))	6,981	7,613	8,201	8,926	9,596
12 Large Corporations Tax	<u>579</u>	<u>587</u>	<u>589</u>	<u>589</u>	<u>589</u>
13 Forecast Tax Allowance	<u><u>7,560</u></u>	<u><u>8,200</u></u>	<u><u>8,790</u></u>	<u><u>9,515</u></u>	<u><u>10,185</u></u>

SCHEDULE "B"

Method of Calculating Tax Allowance Variance (\$'000)

Line	1996 Actual (a)	Forecast (b)	1996 Variance (a - b)
1 Earnings Threshold	<u>13,000</u>	<u>13,000</u>	<u>0</u>
Permanent & Timing Differences			
2 Capital Cost Allowance	<u>(19,155)</u>	<u>(19,381)</u>	<u>226</u>
Depreciation Expense			
3 Depreciation	13,800	13,988	(188)
4 Depreciation on Equity AFUDC	238	238	0
5 Nondeductible Depreciation	<u>4</u>	<u>4</u>	<u>0</u>
subtotal	<u>14,042</u>	<u>14,230</u>	<u>(188)</u>
6 Capitalized Interest AFUDC	(100)	(119)	19
7 Other Timing Differences	377	377	0
8 Other Adjustments	123	123	0
9 Large Corporations Tax	<u>579</u>	<u>579</u>	<u>0</u>
Subtotal	<u>(4,134)</u>	<u>(4,191)</u>	<u>57</u>
10 Tax Base	<u>8,866</u>	<u>8,809</u>	<u>57</u>
11 Income Taxes payable (line 10 * .4421 / (1 - .4421))	7,026	6,981	45
12 Large Corporations Tax	<u>579</u>	<u>579</u>	<u>0</u>
13 Tax Allowance Variance	<u>7,605</u>	<u>7,560</u>	<u>45</u>
15 Carrying Charges (for illustrative purposes 8%)			<u>4</u>
16 Total amount applied to Revenue Requirement in year + 1			<u>49</u>

Please note: For presentation purposes, only one year has been shown as the mechanics for the remaining years are identical. This amount would be added to the 1997 Revenue Requirement (under collection received from the Shippers).

SCHEDULE "C"

Method of Calculating Starting Point and Starting Point Inflation Adjustment (\$'000)

Line	1996	1997	1998	1999	2000
1. Starting Point					
1 Prior year's Starting Point	98,440	98,440	101,484	104,635	106,833
2 Starting Point Inflation Adjustment (line 10)	0	0	(198)	(408)	521
3 Forecast Power Adjustment	<u>0</u>	<u>569</u>	<u>797</u>	<u>0</u>	<u>(797)</u>
4 Subtotal	<u>98,440</u>	<u>99,009</u>	<u>102,083</u>	<u>104,227</u>	<u>106,557</u>
5 Forecast CPI (line 4 * line 7)		<u>2,475</u>	<u>2,552</u>	<u>2,606</u>	<u>2,664</u>
6 Starting Point	<u>98,440</u>	<u>101,484</u>	<u>104,635</u>	<u>106,833</u>	<u>109,221</u>
2. Starting Point Inflation Adjustment					
a) Inflation Variance (%)					
7 Forecast CPI		2.50%	2.50%	2.50%	2.50%
8 Actual CPI		<u>2.30%</u>	<u>2.10%</u>	<u>3.00%</u>	<u>2.80%</u>
9 Inflation Variance (line 8 - 7)		<u>-0.20%</u>	<u>-0.40%</u>	<u>0.50%</u>	<u>0.30%</u>
b) Start Point Inflation Adjustment Amount (\$000)					
10 Starting Point Inflation Adjustment (line 9 * line 4)		(198)	(408)	521	320
11 Carrying Charges (for illustrative purposes 8%)		<u>(16)</u>	<u>(33)</u>	<u>42</u>	<u>26</u>
12 Total amount applied to Revenue Requirement in year + 1		<u>(214)</u>	<u>(441)</u>	<u>563</u>	<u>346</u>

SCHEDULE "D"

Method of Calculating Power Adjustment

Line		1996	1997	1998	1999	2000
1	Throughput Forecast (m3 / day)	37,100	38,100	39,500	39,500	38,100
2	previous year's Throughput Forecast (m3 / day)		37,100	38,100	39,500	39,500
3	Change in throughput (m3 / day) (line 1 - line 2)		<u>1,000</u>	<u>1,400</u>	<u>0</u>	<u>(1,400)</u>
4	Forecast change in Revenues (\$000) (assume prior year's Tolls = \$7.80 / m3)		<u>2,847</u>	<u>3,986</u>	<u>0</u>	<u>(3,986)</u>
5	Power Adjustment (\$000) (line 4 * 20%) (exclusive of Forecast CPI)	20%	<u>569</u>	<u>797</u>	<u>0</u>	<u>(797)</u>

SCHEDULE "E"

Method of Calculating Revenue Requirement (\$'000)

Line		Ref.	1996	1997	1998	1999	2000
1	Starting Point	C 1.	98,440	101,484	104,635	106,833	109,221
2	Forecast Tax Allowance	A	7,560	8,200	8,790	9,515	10,185
3	Non-routine Adjustments						
	i) Property & other taxes in excess of 5%	N 1.		0	0	457	1,012
	ii) Energy Council costs (3 years)	N 2.		0	367	367	367
	iii) other	N 3.		0	150	354	863
4	Starting Point Inflation Adjustment	C 2.	0	0	(198)	(408)	521
5	Tax Allowance Variance	B		45			
6	Non-routine Adjustment Variance						
7	Transportation Revenue Variance	J		(942)			
	Shippers Share of:						
8	Excess Capacity Incentive	I				(290)	
9	Efficiency Incentive	L		0	(792)	0	(29)
10	MTBE / New Materials Incentive	K				(920)	(920)
11	Petroleum Loss / Gain Allowance	G		0	487	0	(517)
12	Carrying charges (for illustrative purposes 8%)			(71)	48	(34)	35
13	Revenue Requirement ^[1]		106,000	108,716	113,487	115,874	120,738

Note: [1] The Carrying Charges for items 3 to 11 have been aggregated on line 13. The Carrying Charge amounts associated with each adjustment are shown on the appropriate Schedules.

SCHEDULE "F"

1996 Forecast of Throughput and Tolls

	Length of Haul (km)	Forecast Deliveries (m ³ /day) ('000 m ³ -km/day)		Net Tolls (\$/m ³)
From Edmonton				
to Kamloops	822			
<i>Refined Petroleum Direct</i>		2,473	2,032.8	6.749
<i>Refined Petroleum Tank</i>		694	570.5	6.902
to Sumas	1,090	13,564	14,784.8	8.066
to Vancouver	1,146			
<i>Light Crude</i>		6,107	6,998.6	8.959
<i>Shell Special Stream</i>		1,378	1,579.2	8.959
<i>MTBE</i>		1,137	1,303.0	8.959
<i>Butane</i>		120	137.5	8.806
<i>Refined Petroleum Direct</i>		4,727	5,417.1	8.806
<i>Refined Petroleum Tank</i>		2,372	2,718.3	8.959
From Edson				
to Sumas	861	72	62.0	6.768
From Kamloops				
to Sumas	267	2,112	563.9	3.247
to Vancouver	324	2,344	759.5	4.146
Total Mainline		37,100	36,927.2	
Westbridge Tanker Loading		514		0.251
Heavy Surcharge		203		1.792

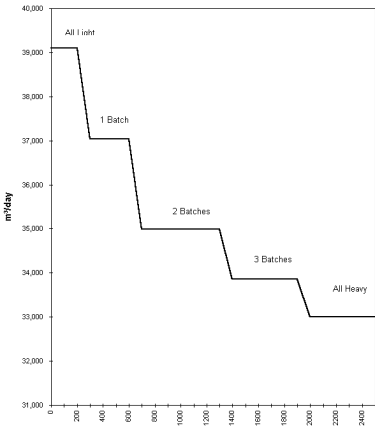
SCHEDULE "G"

Method of Calculating Petroleum Loss / Gain Allowance

Line	1997	1999
1 Recorded Purchase / (Sale) of Oil (m3)	4074	(4,325)
2 Cost per cubic metre (\$)	\$119.60	\$119.60
<i>Assume light crude @ \$19 / bbl</i>		
3 Petroleum Loss / Gain Allowance (\$000) (line 2 * line 1)	487	(517)
4 Carrying Charges (for illustrative purposes 8%)	39	(41)
5 Total amount applied to Revenue Requirement in year + 1 (\$000)	526	(558)

Figure A4-1
SCHEDULE "H"

Chart of Sustainable Pumping Capacity



SCHEDULE "I"

Method of Calculating Excess Capacity Incentive

Line	1998 Volumes (m3/d)				
	Actual Deliveries (a)	Monthly Capacity (b)	Days in Month (c)	Variance (m3) (a - b) * c	(\$'000)
1 Monthly Throughput					
March Deliveries (<i>all light</i>)	43,984				
Less Kamloops Deliveries	<u>(4,200)</u>				
March Throughput Ex Edmonton	39,784	39,300	31	15,004	
October Deliveries (<i>all light</i>)	44,161				
Less Kamloops Deliveries	<u>(4,200)</u>				
October Throughput Ex Edmonton	39,961	39,300	31	2,0491	
November Deliveries (<i>all light</i>)	44,517				
Less Kamloops Deliveries	<u>(4,200)</u>				
November Throughput Ex Edmonton	40,317	39,300	30	30,510	
December Deliveries (<i>all light</i>)	44,129				
Less Kamloops Deliveries	<u>(4,200)</u>				
December Throughput Ex Edmonton	39,929	39,300	31	<u>19,499</u>	
2 Throughput above Sustainable Capacity (sum of Variance column)				<u>85,504</u>	
3 Revenues					<u>726</u>
Average Toll (per Schedule P, subsection 1)	\$8.489				
4 Excess Capacity Incentive (line 3 * .8)					<u>581</u>
5 Shipper's share of Excess Capacity Incentive (line 4 * 50%)					290
6 Carrying Charges (for illustrative purposes 8%)					<u>23</u>
7 Total amount applied to Revenue Requirement in year + 1					<u>313</u>

Please note: For presentation purposes, only one year has been shown as the mechanics for the remaining years are identical. This amount will be credited to the 1999 Revenue Requirement (over earnings returned to Shippers).

SCHEDULE "J"

Method of Calculating Transportation Revenue Variance

Line	1996 Actual (a)	1996 Forecast (b)	Variance (a - b)
1 Throughput (m3 / day)	37,500	37,100	<u>400</u>
2 Transportation Revenues (\$000)	107,178	106,000	<u>1,178</u>
Less:			
3 Excess Capacity Incentive (\$000)			0
4 MTBE / New Materials Incentive (\$000)			<u>0</u>
5 Actual Transportation Revenue above forecast (\$000)			<u>1,178</u>
6 Transportation Revenue Variance (\$000) (line 5 * .8)			942
7 Carrying Charges (for illustrative purposes 8%)			<u>75</u>
8 Total amount applied to Revenue Requirement in year + 1 (\$000)			<u><u>1,017</u></u>

Please note: For presentation purposes, only one year has been shown as the mechanics for the remaining years are identical. This amount will be credited to the 1997 Revenue Requirement (over earnings returned to Shippers).

SCHEDULE "K"

Method of Calculating MTBE / New Materials Incentive

Line	1998 + Results m3 / day	m3 per annum	Capacity Test Over Under
1 Volumes exceed sustainable Capacity (yes or no)			NO
2 Volume of new material transported	500	<u>182,500</u>	
3 Actual Transportation Revenues (\$000) <i>Assumed Toll (\$9.00 / m3)</i>			<u>1,643</u>
4 MTBE / New Materials Incentive (\$000) (line 3 * .8)			<u>1,314</u>
6 Shipper's share of MTBE / New Materials Incentive (\$000) 70%			920
7 Carrying Charges (for illustrative purposes 8%)			<u>74</u>
8 Total amount applied to Revenue Requirement in year + 1 (\$000)			<u><u>994</u></u>

Please note: For illustrative purposes, only one year has been shown as the mechanics for the remaining years are identical and TMPL's system will operate under sustainable capacity. This amount will be credited to the 1999 and subsequent Revenue Requirements (70% of incentive revenues shared with Shippers).

If in any month TMPL operates above Sustainable Capacity, any incentive calculated per Article 8 shall be suspended to the extent of the volumes transported above Sustainable Capacity and the Excess Capacity Incentive shall apply to such volumes in those circumstances.

SCHEDULE "L"

Method of Calculating Efficiency Incentive (\$'000)

Line	1996	1997	1998	1999	2000
1 Net Income	12,959	13,884	12,220	13,032	13,395
2 Earnings Threshold	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>	<u>13,000</u>
3 Variance (line 1 - line 2)	<u>(41)</u>	<u>884</u>	<u>(780)</u>	<u>32</u>	<u>395</u>
4 Earnings Efficiency (positive amounts on line 3)	<u>0</u>	<u>884</u>	<u>0</u>	<u>32</u>	<u>395</u>
Shipper's Share of Efficiency Incentive					
5 Earnings Efficiency shared at 50%	<u>0</u>	<u>442</u>	<u>0</u>	<u>16</u>	<u>198</u>
6 Grossed up shared Earnings Efficiency (line 5 / (1 - .4421))	<u>0</u>	<u>792</u>	<u>0</u>	<u>29</u>	<u>355</u>
7 Carrying Charges 8%	<u>0</u>	<u>63</u>	<u>0</u>	<u>2</u>	<u>28</u>
8 Total amount applied to Revenue Requirement in year +1	<u>0</u>	<u>855</u>	<u>0</u>	<u>31</u>	<u>383</u>

SCHEDULE "M"

Method of Calculating Net Income (\$'000)

Line	1996	1997	1998	1999	2000
1 Actual Transportation Revenue	107,178	108,716	113,487	115,874	120,738
Adjustments to Actual Transportation Revenue					
2 Prior year adjustments (net)	0	1,066	(62)	474	(1,332)
3 Excess Capacity Incentive			(581)	0	0
4 MTBE / New Materials Incentive			(1,314)	(1,314)	(1,314)
5 Transportation Revenue Variance	(942)	0	0	0	0
6 Other Income	<u>152</u>	<u>138</u>	<u>134</u>	<u>128</u>	<u>121</u>
7 Adjusted Transportation Revenue	<u>106,388</u>	<u>109,920</u>	<u>111,664</u>	<u>115,162</u>	<u>118,213</u>
Deductions to arrive at Pre-tax Income					
8 Tax Allowance Variance	45	0	0	0	0
9 Starting Point Inflation Adjustment		198	408	(521)	(320)
10 Non-routine Adjustment Variance		0	0	0	0
11 Operating Expenses [1]	58,670	58,893	62,222	63,796	64,693
12 Depreciation	14,042	14,944	15,541	16,217	16,849
13 Interest Expense	<u>13,100</u>	<u>13,100</u>	<u>13,100</u>	<u>13,100</u>	<u>13,100</u>
14 Subtotal	<u>85,857</u>	<u>87,135</u>	<u>91,271</u>	<u>92,592</u>	<u>94,322</u>
15 Pre-tax income	20,531	22,785	20,393	22,570	23,891
16 Allowable deductions	<u>(4,713)</u>	<u>(3,979)</u>	<u>(3,238)</u>	<u>(2,327)</u>	<u>(1,483)</u>
17 Taxable income	<u>15,818</u>	<u>18,806</u>	<u>17,155</u>	<u>20,243</u>	<u>22,408</u>
18 Income Taxes Payable (line 17 * .4421)	6,993	8,314	7,584	8,949	9,907
19 Large Corporations Tax	<u>579</u>	<u>587</u>	<u>589</u>	<u>589</u>	<u>589</u>
17 Resultant Income Taxes Payable	<u>7,572</u>	<u>8,901</u>	<u>8,173</u>	<u>9,538</u>	<u>10,496</u>
20 Net Income	<u>12,959</u>	<u>13,884</u>	<u>12,220</u>	<u>13,032</u>	<u>13,395</u>

Note: [1] Operating Expenses include Property & other taxes and Other Income Charges.

SCHEDULE "N"

Method of Calculating Non-Routine Adjustments (\$'000)

Line	1996	1997	1998	1999	2000
1. Property & other taxes in excess of 5%					
1 Actual Property & other taxes	20,700	21,735	22,803	23,917	25,080
2 Forecast Property & other taxes (by CPI)	<u>20,763</u>	<u>21,282</u>	<u>21,814</u>	<u>22,359</u>	<u>22,918</u>
3 Increase above Forecast	<u>(63)</u>	<u>453</u>	<u>989</u>	<u>1,558</u>	<u>2,162</u>
4 Prior Year Forecast by 5% (line 2 * 1.05)		<u>21,801</u>	<u>22,346</u>	<u>22,905</u>	<u>23,477</u>
5 Increase in excess of 5% (line 1 - line 4)		0	457	1,012	1,603
6 Carrying Charges (for illustrative purposes 8%)		<u>0</u>	<u>37</u>	<u>81</u>	<u>128</u>
7 Total amount applied to Revenue Requirement in year + 1		<u>0</u>	<u>494</u>	<u>1,093</u>	<u>1,731</u>
2. Unsuccessful resolution of Energy Council Litigation					
1 Balance Forward at beginning of year		0	1,188	792	396
2 Actual billing from Provincial Government		1,100	0	0	0
3 Three year recovery		0	455	426	396
4 Carrying charges (for illustrative purposes 8%)		<u>88</u>	<u>59</u>	<u>29</u>	<u>0</u>
5 Balance forward at end of year		<u>1,188</u>	<u>792</u>	<u>396</u>	<u>0</u>
Amount recovered in revenue requirement					
6 Three year recovery of initial billing			367	367	367
7 Carrying charges (prior year)			<u>88</u>	<u>59</u>	<u>29</u>
8 Total amount applied to Revenue Requirement		<u>0</u>	<u>455</u>	<u>426</u>	<u>396</u>
3. Other					
1 Program costs tolled on a rolled in basis (shipper requests)		0	0	200	205
2 Cost of new programs as result of NEB Order		0	0	0	500
3 Costs resulting from legislation, regulations, orders or directions from any government authority in excess of limits defined in clause 11.2		0	150	154	158
4 Uninsured losses in excess of limits defined in clause 11.2					
5 Total amount applied to Revenue Requirement		<u>0</u>	<u>150</u>	<u>354</u>	<u>863</u>

SCHEDULE "O"

Method of Calculating Prior Year Adjustments (\$'000)

Line		1996	1997	1998	1999	2000
Amounts applied against current year revenue requirement as a result of prior year adjustments (amounts include Carrying Charges)						
1	Starting Point Inflation Adjustment			214	441	(563)
2	Tax Allowance Variance (100%)		49	0	0	0
3	Non-routine Adjustments (100%)		0	(605)	(1,274)	(2,352)
4	Transportation Revenue Variance (100%)		1,017	0	0	0
Shipper's share of						
5	Excess Capacity Incentive (50%)		0	0	313	0
6	Efficiency Incentive (50%)		0	855	0	31
7	MTBE / New Materials Incentive (70%)		0	0	994	994
8	Petroleum Loss / Gain Allowance (100%)		<u>0</u>	<u>(526)</u>	<u>0</u>	<u>558</u>
9	Total amount applied to calculation of current year Revenue Requirement		<u>1,066</u>	<u>(62)</u>	<u>474</u>	<u>(1,332)</u>

SCHEDULE "P"

Illustration of Tolls used for Calculating Incentives

1. Excess Capacity

For the purposes of calculating the incentive sharing revenues, it is deemed that there is equal likelihood of additional volumes moving to Sumas and Burnaby, therefore, an average toll will be calculated as follows:

			Throughput (m3/day)	Weight (%)	Toll (\$/m3)	Weighted Toll
1	Edmonton to Sumas	Light Crude	13,564	50%	8.066	4.033
2	Edmonton to Burnaby	Petroleum, other than line 3	10,994	35%	8.959	3.109
3		Petroleum, directly injected	<u>4,847</u>	15%	8.806	<u>1.347</u>
4	Average Toll (\$/m3)		<u>29,405</u>			<u>8.489</u>

2. Transportation Revenue Variance

As the Throughput Forecast is of sufficient detail to allow comparison by toll, the actual tolls as set out in the Tariff will be used to calculate the Transportation Revenue Variance. For 1996, the illustrative tolls are provided on Schedule F.

3. MTBE / New Materials

5 a) MTBE

The toll for incremental MTBE volumes will be the toll as specified in the Tariff. For 1996, the illustrative toll is provided on Schedule F.

6 b) New Materials

New Materials are likely to be transported to either Burnaby or Sumas. For the purposes of calculating the incentive sharing revenues, the volumes moved will be charged the appropriate toll based on the destination of the material and the use of tankage facilities. Illustrative tolls for 1996 are set out in Schedule F.

Appendix V

Order TO-2-96

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

IN THE MATTER OF an application dated 29 January 1996 by Trans Mountain Pipe Line Company Ltd. ("Trans Mountain") for approval of an incentive toll settlement ("the Agreement") for the years 1996 to 2000 and associated toll orders pursuant to Part IV of the Act and filed with the National Energy Board ("Board") under File No. 4200-T004-5-1.

BEFORE the Board on 12 March 1996.

WHEREAS Trans Mountain has applied for orders pursuant to Part IV of the Act fixing tolls which Trans Mountain may charge in the years 1996 to 2000 for the transportation of crude oil and other liquid hydrocarbons;

AND WHEREAS Trans Mountain has been charging tolls on an interim basis since 1 January 1996 pursuant to Order TOI-2-96;

AND WHEREAS on 16 February 1996 the Board issued its decision in the RH-3-95 proceeding approving a revised toll design for Trans Mountain;

AND WHEREAS the Agreement has been negotiated with Trans Mountain's shippers and prescribes the method to be used to determine tolls for the years 1996 to 2000;

AND WHEREAS Trans Mountain requests that for 1997 and thereafter new tolls calculated in accordance with the Agreement be charged on an interim basis effective 1 January pending the approval of final tolls to be filed on or before 1 March of that year;

AND WHEREAS Trans Mountain's shippers have indicated their support and consent for Trans Mountain's application;

AND WHEREAS the Board is satisfied that final tolls for 1996 calculated in accordance with the Agreement will be just and reasonable;

IT IS ORDERED THAT:

1. The agreed-upon 1996 revenue requirement of \$106 million and throughput forecast of 13 578 500 cubic metres are approved.
2. Trans Mountain shall calculate final tolls for 1996 in accordance with the Board's decision in the RH-3-95 proceeding using the approved 1996 revenue requirement and throughput forecast and shall file with the Board forthwith for approval, and serve on intervenors to the RH-3-95 proceeding, new tariffs incorporating these new tolls.

3. Order TOI-2-96, which authorized tolls that Trans Mountain may charge on an interim basis, effective 1 January 1996, is revoked and the tolls that have been authorized thereunder are hereby disallowed.
4. Trans Mountain is directed to refund or recover that part of the tolls charged by the Company under Order TOI-2-96, which is either greater or less than the tolls determined by the Board to be just and reasonable in this Order, together with carrying charges on the amount so refunded or recovered calculated in accordance with the Agreement.
5. Trans Mountain shall on or before 15 December of 1996 and each year thereafter, file with the Board and serve upon interested parties new tolls for the following year calculated in accordance with the Agreement.
6. All tolls filed in accordance with paragraph 5 are interim tolls and shall be charged on an interim basis effective 1 January of the year which follows their filing until final tolls for that year are approved by a further order of the Board.
7. Any application for final tolls filed on or before 1 March 1997 or any year thereafter, shall contain tolls calculated in accordance with the Agreement and supported by reasonable detail to permit confirmation of their compliance with the methodology set out in the Agreement.
8. In filing tolls with interested parties pursuant to paragraphs 5 and 7, Trans Mountain shall advise these parties that they may file comments on the proposed tolls with the Board and Trans Mountain within ten calendar days from the date of such filing.
9. Upon the issuance of final tolls for the year, Trans Mountain shall refund or recover the difference between final tolls and the tolls which have been charged on an interim basis pursuant to paragraph 6, together with carrying charges calculated in accordance with the Agreement.

NATIONAL ENERGY BOARD

J.S. Richardson
Secretary