



National Energy Board

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## Reasons for Decision

**Westcoast Transmission  
Company Limited**

**RH-5-83**

**April 1985**

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**In the Matter of the Method of  
Regulation of the Tolls**

# **National Energy Board**

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Cat. No. NE22-1/1985-18E  
ISBN 0-662-14045-1

**This report is published separately in both official languages.**

Copies are available on request from:

Regulatory Support Office  
National Energy Board  
473 Albert Street  
Ottawa, Canada  
K1A 0E5  
(613)992-3972

Printed in Canada

**Ce rapport est publié séparément dans les deux langues officielles.**

Exemplaires disponibles sur demande auprès du:

Bureau du soutien de la réglementation  
Office national de l'énergie  
473, rue Albert  
Ottawa (Canada)  
K1A 0E5  
(613) 992-3972

Imprimé au Canada

# Table of Contents

	Page
<b>Abbreviations</b> .....	(iii)
<b>Recital and Appearances</b> .....	(v)
<b>Executive Summary</b> .....	(vii)
<b>1. Introduction</b> .....	1
1.1 Background .....	1
1.2 Request for a Review of the Method of Regulation .....	2
1.3 Provincial Policy for Marketing British Columbia Natural Gas .....	3
<b>2. Regulation Of The Tolls And Tariffs Of Westcoast</b> .....	5
2.1 The Board's Jurisdiction .....	5
2.2 The Method of Regulation .....	6
2.2.1 Essential Elements of the Methods .....	6
2.2.2 General Advantages and Disadvantages of the Methods .....	7
2.2.3 Assessment of Changed Circumstances .....	8
2.2.4 Determination of Price to Producers and Customers for B.C. Gas Under the Existing System .....	9
2.2.5 The Hewitt Letter .....	9
2.2.6 Determination of Price Paid to Out-of-Province Producers Under the Existing System .....	10
2.2.7 The Demand Charge .....	10
2.2.8 The New Pricing System to LDCs and Producers .....	11
2.2.9 Decision on the Method of Regulation .....	11
<b>3. Toll Design</b> .....	13
3.1 Introduction .....	13
3.2 Tolls for Firm Service .....	13
3.2.1 Fixed Toll with Demand and Commodity Components .....	13
3.2.2 Phasing-In of the Demand Component .....	14
3.2.3 Decision .....	14
3.3 Transportation Toll for Interruptible Service .....	15
3.3.1 Decision .....	15
3.4 Toll for Gas Processing .....	15
3.4.1 Decision .....	16
3.5 Other Toll Matters .....	16
3.5.1 Decision .....	17
<b>4. Depreciation</b> .....	18
4.1 Background .....	18
4.2 Westcoast's Depreciation Study .....	18
4.3 Determination of the Composite Economic Life of the Pipeline .....	19
4.4 Determination of the British Columbia Reserves Base .....	19
4.5 Negative Salvage .....	20
4.6 The Unit of Throughput Method of Depreciation .....	21
4.7 Decision .....	21

<b>5. Matters Relating To Order No. TG-5-79</b> .....	23
5.1 Decision .....	23
<b>6. Disposition</b> .....	24

## **List of Appendices**

I	Hearing Order No. RH-5-83 .....	25
II	Hearing Order No. AO-1-RH-5-83 .....	37
III	Hearing Order No. AO-2-RH-5-83 .....	39
IV	Letter, dated 8 March 1979, to the Board from the Minister of Energy, Mines and Petroleum Resources of the Province of British Columbia ("Hewitt letter") .....	40
V	Decision by the Board concerning a request by the CPA and IPAC for a review of the method of regulation - Chapter 3 of the August 1983 Westcoast Reasons for Decision .....	42
VI	Statistical Profile of Westcoast Transmission Company Limited .....	43
VII	Map of Westcoast Transmission Company's Pipeline System .....	44

## Abbreviations

AGBC	Attorney General of British Columbia
APMC	Alberta Petroleum Marketing Commission
BCPC Agreement	Westcoast/BCPC Agreement dated 13 November 1973
BCPC	British Columbia Petroleum Corporation
BCUC	British Columbia Utilities Commission
B.C. Hydro	British Columbia Hydro and Power Authority
CPA	Canadian Petroleum Association
CVG	Commodity Value of Gas
Dome	Dome Petroleum Limited
FERC	U.S. Federal Energy Regulatory Commission
FTM	Fixed Toll Method
Inland	Inland Natural Gas Company Limited
IPAC	Independent Petroleum Association of Canada
LDC	Local distribution company
MDVO	Maximum Daily Volume Obligation
NEB or the Board	National Energy Board
NEB Act or the Act	<i>National Energy Board Act</i>
NGL	Natural gas liquids
Northwest	Northwest Pipeline Corporation
O & M	Operating and Maintenance
Province	Province of British Columbia
VCSM	Variable Cost of Service Method
VRAC	Vancouver Refinery Acquisition Cost

Westcoast	Westcoast Transmission Company Limited
September 1979 Westcoast Reasons For Decision	"National Energy Board Reasons for Decision in the Matter of an Application Pursuant to Part IV of the <i>National Energy Board Act</i> (Tolls and Method of Regulation) of Westcoast Transmission Company Limited - September 1979".
August 1983 Westcoast Reasons For Decision	"National Energy Board Reasons for Decision in the Matter of an Application Pursuant to Part IV of the <i>National Energy Board Act</i> (Tolls Application) of Westcoast Transmission Company Limited - August 1983".

## Recital and Appearances

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

AND IN THE MATTER OF the method of regulation of the tolls of Westcoast Transmission Company Limited (hereinafter called "Westcoast") Prescribed by Order No. TG-5-79, as amended. Board File Nos. 1562-W5-3 and 1562-W5-5.

HEARD in Vancouver on: 20, 21, 22, 23, 26, 27, 28 and 29 November 1984

AND in Ottawa on: 4, 5, 6, 7, 13 and 14 December 1984.

BEFORE:

Mr. A.D. Hunt	Presiding Member
Mr. J. Farmer	Member
Mr. A.B. Gilmour	Member

APPEARANCES:

J. Lutes P.G. Griffin	Westcoast Transmission Company Limited
J.R. Smith, Q.C.	Alberta Natural Gas Company Ltd.
S.T. Trueman	Amoco Canada Petroleum Company Ltd.
F.M. Saville, Q.C.	Canada LNG Corporation
W. Silk C.H. Morel	Canterra Energy Ltd.
R. Kimpton	Cominco Ltd.
K.E. Gustafson	Consumers Glass Company Limited
M.F. Belich	Dome Petroleum Limited
J. Lutes	Foothills Pipe Lines (Yukon) Ltd.
C.B. Johnson D.M. Masuhara	Inland Natural Gas Co. Ltd.
D.K. Watkiss	Northwest Pipeline Corporation
D.G. Hart, Q.C.	Ocelot Industries Ltd. and Ocelot Investments Ltd.
R.C. Muir	PacGas Limited
C.P. Donohue	Pacific Northern Gas Ltd.



K.F. Keeler	Pan-Alberta Gas Ltd.
M. Potts	Petro-Canada Inc.
K.E. Gustafson	Quesnel River Pulp Company
M.W.P. Boyle	Trans Mountain Pipe Line Company Limited
R.B. Wallace	Council of Forest Industries of British Columbia
J.P. Peacock, Q.C.	Independent Petroleum Association of Canada
J.B. Ballem, Q.C.	The Canadian Petroleum Association
W.M. Smith	Alberta Petroleum Marketing Commission
H.R. Eddy	Attorney General of British Columbia
J.M. Pelrine	British Columbia Petroleum Corporation
L.F. Hindle	British Columbia Hydro and Power Authority
A. Davis	National Energy Board

## **Executive Summary**

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

### **Introduction**

During the 1983 Westcoast toll hearing, CPA and IPAC requested that the Board review the method of regulating Westcoast's tolls. The Board, recognizing that the method of regulation had not been specifically identified as an issue in that proceeding, ruled that it would hold a separate hearing into the method of regulation at a later date. Originally set down for 10 April 1984, the hearing was adjourned, on a motion by the Province of British Columbia, to 20 November 1984.

Between the time of the original hearing date and the commencement of the hearing, the Government of British Columbia accepted certain recommendations made in the report by the provincial study group into the marketing of natural gas in British Columbia ("the Govier Report"). Some of these recommendations were referred to during the hearing.

In addition to a review of the method of regulation, the Board also examined the principles applied by Westcoast when preparing a depreciation study submitted in response to a previous Board requirement.

### **Decisions**

The major decisions are summarized below:

#### **The Board's Jurisdiction**

During the hearing, Westcoast and the BCPC suggested that any funds which the Company might obtain under the terms of the BCPC Agreement which are in excess of those allowed pursuant to Board-approved tolls, may be retained by Westcoast and are outside of the jurisdiction of the NEB. This matter is similar to one previously raised before the Board and which was dealt with in the September 1979 Westcoast Reasons for Decision.

The Board rejects this argument because accepting it would result in an infringement of its jurisdiction respecting traffic, tolls and tariffs under Part IV of the NEB Act.

Part IV gives the Board jurisdiction, through the setting of just and reasonable tolls, to determine what constitutes fair compensation to a company such as Westcoast, in the provision of its pipeline services. To accede to the argument of Westcoast and the BCPC would result in the assignment of the Board's jurisdiction to private contractual agreement, which would contravene the intent of Part IV.

The Board also regards the authority to determine the structure or design of any toll allowed pursuant to Part IV as a necessary component of its toll-setting jurisdiction.

## **The Method of Regulation**

Westcoast advocated retaining the present variable cost of service method of regulation arguing that circumstances had not changed significantly since the Board's 1979 decision. The Company also stated that the present cost of service toll could be adapted to satisfy the requirements of British Columbia's new gas marketing policy.

Interested parties advocated a fixed toll method of regulation based on a forward test year incorporating a demand and a commodity component. Such a method of regulation, according to the interested parties, would facilitate the setting of a transportation toll for direct sales of gas and would provide all parties with predictability, certainty and simplicity and thus would aid in the implementation of the Province's gas marketing policy.

The Board has decided that Westcoast should change to a fixed toll method of regulation based on a forward test year, effective 1 January 1986. The Company is, therefore, required to submit a toll application, pursuant to Part IV of the NEB Act, to reflect all the Board's decisions set out in these Reasons for Decision. The proposed tariff shall include:

- (i) fixed tolls based on a forward test year, and containing a demand component and a commodity component;
- (ii) 100 percent of the Company's fixed costs in the demand component by 1 November 1986;
- (iii) a toll for the transmission function based on volume adjusted for distance;
- (iv) a Board-approved transportation toll for direct sales between producers and consumers; and
- (v) separate postage stamp tolls for gathering and gas processing functions.

The Board has not commented on the treatment of by-products resulting from Westcoast's gas processing operations because this issue is beyond the scope of these proceedings.

## **Depreciation**

In March 1984, Westcoast filed a depreciation study which had been undertaken in response to a Board directive. The study approached the subject in a manner similar to previous Westcoast studies with the exception that it provided for the recovery of negative salvage in the resulting depreciation rates. The study allocated the economic life of the pipeline between the export and domestic markets, but excluded certain proven reserves and trend gas when calculating the estimated economic life.

The Board has decided that Westcoast must submit a revised depreciation study as part of its toll application. The revised study should not differentiate between the export and domestic markets when estimating the remaining economic life of the pipeline. It should, however, take into account unconnected proven reserves and trend gas.

The Board has also decided that a provision for negative salvage should be omitted from the revised depreciation study. The Board believes that further study of this subject is required.



# Chapter 1

## Introduction

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### 1.1 Background

Westcoast is a federally incorporated company that sells natural gas to local distribution companies ("LDCs") for delivery to residential, commercial and industrial customers in British Columbia and to a mainline gas pipeline company in the Pacific Northwest area of the United States. The Company gathers, processes and transports the gas which comes largely from fields in British Columbia, supplemented by supplies from fields in Alberta and the Territories.

The Company's gathering facilities include 2,104 kilometres of pipeline and thirteen field compressor stations.

The processing facilities include four gas processing plants located in British Columbia near Fort Nelson, Taylor, Boundary Lake and Chetwynd, with a total marketable gas capacity of approximately 45 10<sup>6</sup>m<sup>3</sup> per day. There are three sulfur plants located near Fort Nelson, Taylor and Chetwynd, with sulfur recovery capacity of approximately 2,300 tonnes per day.

The main transmission facilities include 2,331 kilometres of mainline pipe and seventeen compressor stations. The pipeline runs from Fort Nelson and Taylor in northeastern British Columbia to a point on the international boundary near Huntingdon, B.C. where it connects with the pipeline system of Northwest Pipeline Corporation.

From the time it commenced operations in 1957 and until 1 November 1973, Westcoast purchased or produced and then sold the B.C. natural gas transmitted by it. Effective 1 November 1973, Westcoast entered into an agreement with the British Columbia Petroleum Corporation ("BCPC") under which it assigned to the BCPC its contracts for the purchase of natural gas from producers in British Columbia. The BCPC, as part of this agreement, sells to Westcoast those volumes of gas required by the Company at a price equal to Westcoast's gross revenues allocated to the BCPC from the sale of the gas less the associated cost of service of Westcoast's utility operations. These operations, in addition to the usual gas transmission activities, include natural gas gathering lines and processing plants.

Prior to this hearing into the method of regulation, the Board has held three major hearings involving Westcoast's tolls. In September 1977, Westcoast applied to the Board for an order or orders under sections 50 and 53 of the National Energy Board Act ("NEB Act") to give effect to the tolls which Westcoast proposed to charge for its transmission services.

The 1978 hearing with respect to this application dealt with depreciation and income taxes. In May 1978, the Board established the rates of depreciation to be used by Westcoast and required the Company to use the normalized method of accounting for corporate income taxes. The Decision also required Westcoast to recover deferred income taxes arising from past operations of the Company ("catch-up" income taxes) in the cost of service.

Several intervenors applied to the Board for a review of the May 1978 Decision, and in November 1978, the Board issued its Decision on the applications for review. The Review Decision upheld the

Board's original Decision requiring Westcoast to use the normalized method of accounting for corporate income taxes. However, it rescinded the Board's original decision to require Westcoast to recover "catch-up" income taxes in the cost of service, and deferred reconsideration of the depreciation rates for the Company's main transmission plant to the next phase of the hearing.

This hearing continued in 1979 and the Board established that Westcoast's tolls would be of the variable cost of service type, calculated monthly in accordance with Order No. TG-5-79. This Order details the method of regulation, specifies the determination of the monthly cost of service and details the allocation of the monthly cost of service between the BCPC and the out-of-province natural gas producers. The Order also revised the rates of depreciation applicable to the transmission plant. The effective date for the cost of service toll was 1 November 1979.

In 1980, Westcoast applied for certain changes in the manner in which its tolls were calculated and for an increase in the before-tax rate of return on rate base. In November 1980, following a public hearing, the Board, *inter alia*, varied Westcoast's before-tax rate of return on rate base and the basis of allocating items of income and expense between Westcoast's utility and non-utility operations for the purpose of determining the deferred income taxes to be deducted from rate base.

In December 1982, Westcoast applied to the Board for an increase in its before-tax rate of return on rate base and for interim tolls, effective 1 January 1983. In Reasons for Decision issued in August 1983, Westcoast was, *inter alia*, ordered to revert to the flow-through method of calculating income taxes included in the cost of service and was granted an increase in its after-tax rate of return on rate base. In addition, the Company was authorized to include in rate base certain capital cost overruns and was directed to remove from rate base the Grizzly Valley replacement line costs pending the resolution of litigation.

## **1.2 Request for a Review of the Method of Regulation**

During the 1983 toll hearing, the Canadian Petroleum Association ("CPA") and the Independent Petroleum Association of Canada ("IPAC") jointly moved to have the method by which the Board regulates the tolls of Westcoast included as a hearing issue. CPA and IPAC were opposed to the existing actual cost of service method of regulation and advocated that the Company be regulated on the basis of a fixed toll, based on a forward test year.

Westcoast objected to the method of regulation being included in the hearing on the grounds that a review of the method of regulation had not been identified as an issue in the Board's hearing order and the Company had not, therefore, made provision for such an issue when preparing its application.

After considering the views of all parties to the hearing, the Board concluded that it would be desirable to review the method of regulation but, to respect the interests of all parties, it was desirable to defer it to a separate proceeding. Accordingly, Order No. RH-5-83, dated 22 December 1983, set the matter down for public hearing commencing on 10 April 1984, in Vancouver.

On 31 January 1984, the Attorney General of British Columbia ("AGBC") served a Notice of Motion requesting a general adjournment of the method of regulation hearing. The AGBC requested a delay in order that outstanding issues resulting from recommendations in the Govier Report (refer to Section 1.3) might be resolved. After hearing the arguments of interested parties in a one-day proceeding on 17 February 1984, the Board concluded that a decision on tolls might have an impact on domestic

natural gas prices established by the Province. The Board also concluded that some parties would require additional time to adequately prepare for the hearing. The Board, therefore, granted an adjournment to 25 September 1984, which date was subsequently changed to 20 November 1984.

### **1.3 Provincial Policy for Marketing British Columbia Natural Gas**

In September 1982, the Minister of Energy, Mines and Petroleum Resources of British Columbia commissioned a study group, under the chairmanship of Dr. G.W. Govier, a Calgary consultant, to inquire into, and report on, a broad range of issues relating to the marketing of British Columbia natural gas. Early in 1983, the study group submitted to the Minister its report commonly referred to as "the Govier Report", on the marketing of British Columbia natural gas.

In September 1983, the Provincial Government released a paper entitled "A Report on the Marketing of British Columbia's Natural Gas - Decisions and Comments". In that paper the Province stated that it accepted some of the study group's recommendations, rejected others and was soliciting written comments from interested parties prior to making a decision on the remainder.

After considering the submissions of interested parties, the Government of British Columbia, in July 1984, issued "A Report on the Marketing of British Columbia Natural Gas - Final Decisions and Comments". When announcing those recommendations of the study group which it had accepted, the B.C. Government stated that it desired to stimulate exploration, development and marketing of B.C. natural gas through:

- reduction of government participation in the marketing system to encourage more competitive and aggressive marketing;
- higher, more predictable netbacks to producers to revitalize the industry and attract greater exploration activity;
- reasonable prices to British Columbia consumers;
- increased revenues to the Province; and
- decreased financial risk to the BCPC.

The following are some of the recommendations which were accepted:

1. a wholesale pricing policy will be established which will tie the price of gas to that of oil through the implementation of a long-term wholesale pricing policy linking the price of gas to the refinery gate price of crude oil at Vancouver;
2. the average wholesale price of gas will be phased in to reach a target level of 65 percent of the energy equivalent cost of crude oil at the Vancouver refinery gate by 1990;
3. the field price for natural gas will be based on a netback system with the producers' netback being determined by deducting the appropriate cost of service from the system average wholesale price;
4. the BCPC will no longer be the sole purchaser of gas within the Province;

5. the BCPC will continue to represent the Province's interests with regard to Westcoast's cost of service before the NEB;
6. the BCPC will have a non-exclusive right to purchase future contracted gas and will continue to be a marketer of natural gas;
7. the BCPC will continue to act as the purchaser of raw gas under existing contracts and as the seller to Westcoast under the BCPC Agreement;
8. the Government wishes to reduce the amount of risk to which the BCPC is exposed with respect to take-or-pay clauses in its purchase contracts and its guarantee of Westcoast's cost of service. To accomplish this, producers will be required to reduce the load factors in their contracts in exchange for a share of future price increases under the new royalty and marketing system and the Province will withdraw the "Hewitt Letter" (see Appendix IV) after the NEB establishes Westcoast's tolls and tariffs;
9. Westcoast will act as a common carrier and processor for future contracted gas;
10. producers will have the opportunity to gather, process, transmit and market future contracted gas;
11. producers will be allowed to sell raw or marketable gas to any eligible buyer;
12. the Province will establish a formula-based explicit royalty system;
13. a method will be developed by which revenue from both by-product sales and the cost of service can be allocated to producers and included in the total field price for royalty purposes; and
14. an export flowback scheme will be instituted to allow all producers to share in the benefits from the export market ratably in proportion to their production of marketable gas.



# Chapter 2

## Regulation Of The Tolls And Tariffs Of Westcoast

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### 2.1 The Board's Jurisdiction

The question of the extent and nature of the Board's jurisdiction respecting the tolls and tariffs of Westcoast was discussed on several occasions during the proceedings.

One matter which was raised related to the question of whether any funds which Westcoast might retain under the terms of its Agreement with the BCPC, which were in excess of those provided for under tolls approved by the Board, might be retained by Westcoast and be outside the Board's jurisdiction.

A policy witness for Westcoast was uncertain whether the provisions of a toll order of the Board, or a provision of a contract between Westcoast and the BCPC, would prevail where a conflict between the two was apparent. He indicated that this was a complex question of law on which he was unable to comment. During final argument, counsel for Westcoast expressed the same view; that these questions are extremely complex, that the law is unclear, and he was, therefore, unable to assist the Board by stating his view of the Board's jurisdiction in this area. The BCPC took the position that where the Board has approved a particular toll or group of tolls pursuant to paragraph 51(l)(b) of the NEB Act and where the Board has issued an order giving effect to such toll or tolls under section 50, the Board's jurisdiction is exhausted. In the BCPC's view, if Westcoast, as a result of the BCPC Agreement, were to recover revenues over and above those contemplated in the Board's relevant toll orders, the retention of such funds would not be subject to the Board's jurisdiction, since those funds do not come within the meaning of the word "toll" in section 2(c) or within the scope of section 61 of the Act.

The matter which was raised before the Board is similar to that which was dealt with by the Board in the September 1979 Westcoast Reasons for Decision. The Board's views on the subject remain essentially as expressed in the September 1979 Westcoast Reasons for Decision.

In summary, the Board rejects the argument that any funds which Westcoast might obtain under the terms of its Agreement with the BCPC which are in excess of those provided for in tolls set or approved by the NEB might be retained by Westcoast and be outside the Board's jurisdiction. The objective of Part IV of the Act is to grant to the Board sole jurisdiction over the determination of what, in a particular instance, constitutes reasonable compensation to a company, such as Westcoast, in the provision of its regulated utility services. To accede to the arguments submitted on behalf of the BCPC, and suggested by Westcoast, would, in the Board's view, result in an infringement of the Board's toll-setting jurisdiction and its assignment to private contractual agreement, a circumstance which would contravene the clear intent of Part IV.

Another matter which was raised during the proceedings was the matter of toll design. Westcoast's witnesses were of the view that parties other than the Board could, if the occasion warranted,

participate in some manner in the development of the design of tolls for Westcoast. They proposed that such other parties could be either the British Columbia Utilities Commission ("BCUC"), the Company or even some third party, such as an arbitrator.

The Board regards the authority to determine the structure of any toll allowed pursuant to Part IV as being a necessary component of its toll-setting jurisdiction. Part IV of the NEB Act empowers the Board to make orders with respect to all matters relating to traffic, tolls and tariffs, and inherent in this authority is the jurisdiction to determine the structure of any toll it may authorize.

The fact that in issuing Order TG-5-79, which specifies how Westcoast may charge for its transportation services, the Board did not establish a detailed toll structure, should not be taken as indicative that the Board does not have authority to do so. Because of the particular circumstances which existed at that time, the B.C. Government, generally on the advice of the BCUC, fixed the unit price each LDC paid for gas. The amount that Westcoast paid the BCPC for the gas was the difference between its revenues from the sale of the gas and its actual cost of service as approved by the Board. In these circumstances, a detailed toll design was judged by the Board to be unnecessary. The Board did, however, establish the basis on which Westcoast's cost of service would be allocated as between the BCPC and out-of-province producers. This ensured that gas from Alberta and the Northwest Territories bore an appropriate share of the total cost of service.

The Board specifically rejects Westcoast's concept that some other agency or some independent arbitrator could play any useful and acceptable role in the establishment of such contracts or tolls. It is to be noted that the B.C. Government, in its policy paper of July 1984 "A Report on the Marketing of British Columbia Natural Gas - Final Decisions and Comments", rejected Recommendation No. 31 of the Govier Report that detailed toll design should be undertaken by the BCUC. The B.C. Government witness confirmed this rejection and indicated that the B.C. Government expected the Board to perform this function should it be found necessary.

## **2.2 The Method of Regulation**

### **2.2.1 Essential Elements of the Methods**

The first issue to be determined is whether Westcoast should continue under the present method of regulation, known as the Variable Cost of Service Method (VCSM), details of which are set out in Order TG-5-79, as amended, or whether the method of regulating Westcoast's tolls and tariffs should be changed to a Fixed Toll Method (FTM) based on a forward test year. In order to assess the relative merits of these two methods, it is desirable to have an understanding of how the present system operates and the generally accepted features of a Fixed Toll Method of Regulation.

Such matters as the determination of those facilities which are used and useful and should be included in rate base, the rate of depreciation, working capital allowance, capital structure, return on rate base, etc., are common to both methods of regulation.

Under the VCSM, the inclusion in rate base of the cost of approved projects, within specified limits, occurs automatically as projects are completed, in accordance with Order TG-5-79. Cost overruns above specified limits require Board approval prior to their inclusion in rate base.

Each year the Company is required to prepare an Operating and Maintenance Budget which becomes effective following Board approval. Contingencies built into this budget allow for a certain degree of flexibility. However, where O & M expenses exceed the approved budget, the Company must apply for Board approval prior to their recovery in the cost of service toll. The actual O & M expenses up to the approved budget amounts plus the revenues required for the return on rate base, depreciation charges, income tax, other taxes, etc., together make up the total of the cost of service Westcoast may recover and retain out of the revenues it receives for the gas it sells. Thus, except for overruns, Westcoast is assured in any one year of recovering all of the actual cost of service incurred for the provision of utility services. Most overruns experienced to date have been approved and recovered in a subsequent year. Under the VCSM, the Company's recovery of its cost of service is independent of the volumes of gas that are actually gathered, processed and transported.

In contrast, the FTM, while requiring an estimate of throughput plus all of the elements that make up the cost of service, fixes the toll a company may charge for its services. Thus, throughput, additions to rate base as approved, operating and maintenance costs, etc. must be estimated for a forward test year and, after tolls are set, the pipeline company is then exposed to the effects of variations between actual and forecast revenues and expenses.

## **2.2.2 General Advantages and Disadvantages of the Methods**

The primary advantage of the VCSM is that in an uncertain environment, where cost increases and throughputs are difficult to forecast, VCSM provides greater assurance that the cost of service will be recovered either within the year or in the following year, given Board approval of O & M cost overruns. This greater assurance should result in an assessment of lower risk, and therefore the provision of both debt and equity funds at lower interest and return rates, thus benefiting the users of the system.

The advantage of the FTM is that once the unit toll has been established, there is an incentive for the company to strive for greater efficiency. Under the FTM a company generally retains any toll revenues over and above its actual cost of service and, alternatively, incurs a shortage if its actual cost of service exceeds its revenues. There can also be an incentive for the company to participate or take the lead in developing new markets for natural gas.

In a situation of economic stability both VCSM and FTM tend to produce similar results.

The VCSM has the disadvantage of lacking incentives to improve efficiency and effectiveness, and reliance must be placed on the "professionalism" of the management and staff, since any savings effected, while reducing the cost of service, do not improve the profits. Although the FTM in theory has inherent incentives to greater effectiveness and efficiency, the use of deferral accounts has tended, in other circumstances, to reduce those incentives to some extent.

The VCSM has a further disadvantage in that the monthly cost of service varies each month, and the amount of this variation cannot accurately be determined in advance. For the Westcoast system, since selling prices are fixed for domestic and export customers, the effect of the monthly cost of service variation is absorbed by the BCPC and out-of-province producers.

The FTM has the advantage of a predictable toll for some future period which enables the users of the system to plan, with a greater degree of assurance, with respect to the cost of transportation of gas.

Under conditions of stable and predictable tolls resulting from FTM, marketers of B.C. gas would be able to forecast, with some degree of precision, the market price of gas moved through the Westcoast system.

Therefore, the Board concludes that, while there may be no significant advantages to the pipeline company from the FTM, there are benefits to its users.

### **2.2.3 Assessment of Changed Circumstances**

The Board considers the FTM to be the more conventional approach, with the VCSM being applied to situations possessing unique aspects. Thus, it is necessary to determine whether the circumstances which led to the 1979 decision to apply the VCSM to Westcoast still prevail, or whether circumstances have changed sufficiently to warrant consideration of a change in the method of regulation.

The adoption of most of the recommendations of the Govier Report by the B.C. Government will have a substantial and lasting effect on the manner in which gas is bought, sold and transported in the Province.

By removing the BCPC as the sole purchaser of gas from B.C. producers, the way has been opened for producers, brokers, Westcoast or large gas consumers to arrange for the purchase, processing, transportation and sale of B.C. gas. This in turn means that there will probably be other shippers of gas on the Westcoast system. During the hearing Westcoast was asked under what conditions others should have access to pipeline service; i.e. should others be required to negotiate with Westcoast, which might result in a possible conflict of interest, since Westcoast is an owner/shipper and would wish to expand its own activities? If access were to be negotiated with Westcoast, to whom would an appeal lie if satisfactory arrangements could not be made? In the Board's view no satisfactory answer was provided by Westcoast in this regard.

The Govier Report also contemplated the possibility of approved industrial users negotiating gas purchases at incentive prices and requiring interruptible or firm transportation service at known unit rates.

Consideration should also be given to the B.C. Government's desire to re-establish a formula-based explicit royalty system, which would probably be easier to manage if wellhead unit prices were more stable.

Another important change requiring consideration is the new pricing system in B.C. which requires the establishment of an Average Domestic Cost of Service, probably on an annual basis.

The significance of the proposed withdrawal of the Hewitt letter also needs to be taken into account. (Refer to section 2.2.5.)

With regard to exports, the substantial policy changes associated with marketing gas in the U.S. cannot be ignored. For example, FERC Order 380, as amended, which modifies minimum billing, and has the effect of discouraging take or pay, and take and pay, arrangements is of major significance. Natural gas export prices are now subject to negotiation between the buyer and the seller and subject to the Export Pricing Policy Criteria established by the Government of Canada.

The Board is of the view that there have been major changes in a number of the circumstances affecting the B.C. natural gas industry and disagrees with Westcoast's position that the present situation is indistinguishable from that which prevailed in 1978 and 1979.

#### **2.2.4 Determination of Price to Producers and Customers for B.C. Gas Under the Existing System**

The Board is required to determine, given the changed conditions, which method of regulation would be most appropriate in the present circumstances. This requires a more detailed examination of the manner in which the present system operates and whether it could be adapted to the changed circumstances or whether the FTM would be more appropriate. Currently, Westcoast purchases all B.C. gas entering its system from the BCPC. The BCPC assumes ownership of the gas at the "wellhead" and sells the gas, excluding natural gas liquids ("NGLs") or sulfur, to Westcoast.

Westcoast gathers, processes and transports the gas for delivery to three major domestic customers: Pacific Northern, Inland, and B.C. Hydro and one export customer in the United States - Northwest.

Until now, the price at which Westcoast sells gas to its three major domestic customers has been determined by the B.C. Government, usually on the advice of the BCUC. The price charged to the export customer was established by the Federal Government. Thus, neither the Board nor Westcoast was instrumental in establishing the price paid for the gas. Each month, Westcoast pays to the BCPC the difference between the revenues it receives from the sale of gas and its cost of service. To this amount, which includes the export flowback, the BCPC adds revenues received from the sale of NGL's and sulfur and from the resulting total deducts its administrative expenses. The BCPC then pays the producers for the gas it has purchased based on a unit field price established by the B.C. Government. This leaves the BCPC a sum of money that, in concept, is in lieu of, or equal to provincial royalties and which is remitted to the B.C. Government.

As a result of this methodology the unit price paid to the BCPC and out-of-province producers varies each month, being at its lowest in the summer when Westcoast's throughput and revenues are low and at its highest in the winter when they are highest. This lack of stability in producer revenues is exacerbated by the large "commodity charge" component which presently exists in the sales contracts between Westcoast and the LDCs.

#### **2.2.5 The Hewitt Letter**

It is at this point that the significance of the Hewitt letter (See Appendix IV) can be appreciated. As noted in the previous paragraph Westcoast's revenues vary with the season, and it is therefore conceivable that, in the summer months, Westcoast's revenues might not cover its costs of service. The B.C. government, possibly recognizing this eventuality and also not wanting an increase in the price of gas in the Westcoast/LDC contracts at that time (1979), agreed in the letter that the Province, "through its agent, the B.C. Petroleum Corporation, (it) will absorb any increase in the cost of service finally determined by the Board in these proceedings<sup>1</sup> applicable to Intra-Provincial gas through the

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<sup>1</sup>. 1979 Toll hearing held pursuant to Order No. RH-2-77.

operation of the Petroleum Corporation/Westcoast contract in order to permit the Board to leave the existing tariff in the British Columbia distributor contracts unchanged".<sup>1</sup>

The intended withdrawal of the Hewitt letter, insofar as it would have applied to intraprovincial gas transported by Westcoast for others, is an understandable action on the part of the B.C. government. However, the B.C. government has recognized that the letter should not be withdrawn until a transportation tariff is developed with a demand component which includes 100 percent of Westcoast's fixed costs thus ensuring a more stable and predictable netback to producers.

### **2.2.6 Determination of Price Paid to Out-of-Province Producers Under the Existing System**

It is also desirable to understand how out-of-province gas is treated. Such gas is purchased by Westcoast from producers in the Territories and from the APMC at the Alberta/B.C. border, and is deemed to be sold in the export market. The price paid is the export price less Westcoast's allocated cost of service. To arrive at the allocation, Westcoast takes the Maximum Daily Volume Obligations (MDVOs) for all B.C., territorial and Alberta producers and allocates its fixed costs in the same proportion that the MDVOs for each section of its system bear to the total after applying, for some sections, a distance adjustment. Variable costs are allocated on the basis of throughput after applying, for some sections, a distance adjustment. This means that the cost of service allocated between the three producing areas is essentially insensitive to changes in volume. During any period when the volumes for export decline proportionately more than the volumes for the domestic market, the out-of-B.C. producers pay a higher proportion of the allocated costs than they would, had the costs been volume-related.

### **2.2.7 The Demand Charge**

Another aspect respecting the present system should be noted. Since all the prices for gas sold within B.C. were administered and the Hewitt letter ensured that Westcoast would recover its cost of service, there was no requirement to allocate precisely the fixed portion of the cost of service included in the demand charge. Prior to the establishment of the BCPC in 1973, Westcoast had established a demand charge which recovered all or most of its fixed costs, and a commodity charge which recovered variable costs such as fuel gas and other gas-related costs. Since that time, there has been little adjustment in the demand charge so that at the moment it only recovers approximately 12 to 16 percent of the fixed costs. Recent renegotiations with Northwest have resulted in an increased demand charge equal to approximately 50 percent of the fixed costs. Most parties, including Westcoast, agreed on the need to move towards a demand charge that would include 100 percent of the fixed costs in order to accommodate the new approach contemplated by the Government of British Columbia, i.e. that Westcoast in addition to moving gas for itself, would transport gas for others. Once the demand charge includes 100 percent of the fixed costs, the Hewitt letter will be withdrawn.

A move to include 100 percent of the fixed costs in the demand charge, coupled with the possibility, over time, of others seeking to move gas on a firm basis should also be taken into account. This

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<sup>1</sup> James J. Hewitt letter, which is Appendix V to the September 1979 Westcoast Reasons for Decision.

would appear to require an allocation of fixed costs among firm customers on the basis that their contract demand bears to the total contract demand together with an adjustment for distance.

### **2.2.8 The New Pricing System to LDCs and Producers**

There are other changes brought about by the B.C. Government's policies which need to be examined to determine which method of regulation may best accommodate the changed circumstances. Both the derivation of the wellhead price and the desire of interested parties to include fuel gas costs in the cost of service have an important bearing on which method of regulation is most appropriate.

The new policy contemplates that the B.C. Government will establish an average domestic wholesale price. This will be a percentage of the heat equivalent of the Vancouver refineries' acquisition cost (VRAC) of crude oil. The present level is approximately 43 percent and by 1990 this will move to 65 percent of the heat equivalent of the VRAC. A commodity value for the gas (CVG) is then to be determined by subtracting from the average domestic wholesale price, Westcoast's average domestic cost of service as approved by the Board. This value would need to be redetermined for each change in the average domestic wholesale price and in the average domestic cost of service. It would be desirable that these changes coincide.

The field price would be determined by deducting from the CVG, where appropriate, the BCPC administrative charge and adding the export flowback and, for those producers providing a sufficiently wet gas, the gas liquids revenue.

It is this unit price which the B.C. Government contemplates would be relatively stable, varying in response only to variations in the BCPC administrative charges, export flowback and liquids revenue in any one period, and against which the B.C. provincial royalties would be levied. Producer revenue will still vary but this will not be due to the effects of volume variations on the per unit cost of transportation.

It should be emphasized that the Board does not exert any jurisdiction with respect to pricing as such; however, it has to be and should be aware of the effects that its decisions respecting tolls may have, both on how prices are developed and, in this case, on the ease with which royalties may be collected.

### **2.2.9 Decision on the Method of Regulation**

According to Westcoast witnesses, the VCSM can be adapted to accommodate the B.C. Government's new gas marketing policy and interested parties' desire for a toll containing a demand and a commodity component. Westcoast indicated that it could make its own estimates of throughput and of the other factors such as additions to rate base, so as to arrive at a projected average domestic cost of service. Westcoast provided evidence to demonstrate that its cost of service varied little from one month to another, and that the large swings in revenue to the BCPC and out-of-province producers resulted from relatively large changes in throughput over the period of a year. This situation causes Westcoast's purchase cost of gas, on a per unit basis, to increase during the summer and decrease during the winter. Westcoast was of the view that having estimated throughput for a year and having moved all its fixed costs into a demand charge, it could, under the present system, achieve the desired results of stable unit gas prices and facilitate the transportation of gas for direct sales.

It was not clear what would happen if Westcoast remained on the VCSM and throughput estimates, for example, were incorrect. Presumably Westcoast would not recover its full cost of service within a budget year. Producers could be faced with the possibility of an 'adjustment charge' from time to time which would detract from the desire to minimize variations in the unit field price.

A more difficult question to be resolved is how a system, as proposed by Westcoast, would allow interested parties to examine and challenge Westcoast's estimates. Westcoast suggested that this could be accomplished by discussion between an interested party and the Company, but gave no firm answer to the question - what would happen if the interested party wished to take exception to the estimate made by Westcoast and could not agree, even following discussions, to that estimate?

There also appears to the Board to be a need to establish a toll for transportation service to accommodate future direct sales on both firm and interruptible bases. Again, according to Westcoast, this could be accomplished under the VCSM, provided the Board were prepared to leave to Westcoast the negotiation of the necessary contracts with its customers. Again, the question would be to whom the customers could appeal if they did not agree with Westcoast's proposals, particularly should Westcoast seek to justify discriminatory service charges on the basis of the economic value of the service to the customer.

The Board accepts that under the VCSM Westcoast could devise approaches that would approximate, but only approximate, the systems that can be established under a FTM. The Board is further of the view that the Westcoast proposal would not allow adequate opportunity to interested parties to question and/or to appeal the estimates, decisions and charges of Westcoast. The Board concludes that a fixed toll or tolls would respond better to the new circumstances that will prevail in British Columbia as a result of the Govier Report, and to the changing circumstances in the export market such as increased competition and direct sales by producers.

It would not be appropriate to deny interested parties an explicit and understandable means of questioning or appealing any estimates or decisions that may have to be made in order to arrive at appropriate tolls. The Board is of the opinion that given the changing circumstances, it should have an overview, not only of the total cost of service that Westcoast will need to recover in its tolls, but also of the detailed allocation and toll design that will be developed to recover those revenues, and that VCSM is not as conducive or appropriate to these needs.

The Board, therefore, concludes that the method of regulating the tolls of Westcoast shall be changed from the present Variable Cost of Service Method to a Fixed Toll Method effective 1 January, 1986. To implement this decision Westcoast is required to submit an application pursuant to Part IV of the NEB Act which will include all of the information necessary to implement the Board's decisions on the method of regulation, toll design and depreciation which are incorporated in these Reasons for Decision.



# Chapter 3

## Toll Design

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### 3.1 Introduction

As previously explained in Chapter 2, it is the Board's opinion that it has the jurisdiction, pursuant to Part IV of the NEB Act, to determine the method by which the tolls and tariffs of Westcoast will be regulated, as it relates to both gas owned by the Company and gas transported by it for other parties. The Board, moreover, considers it has the authority to decide upon the appropriate toll design for all types of service, under a fixed toll regime.

However, having said that, the Board reiterates that it was not its intention to give approval to a toll design for the Westcoast system during this hearing. Instead, it was the Board's intention to solicit the views of all parties to the hearing on the principles which should be incorporated in the design of tolls in the event that a decision was made to change the method of regulation to that of a fixed toll regime.

What follows, therefore, are the Board's decisions concerning the principles which Westcoast is to apply when designing fixed tolls as part of its toll application. The proposed tolls and tariffs will then be reviewed through the public hearing process.

### 3.2 Tolls for Firm Service

#### 3.2.1 Fixed Toll with Demand and Commodity Components

There was general agreement that a fixed toll for Westcoast should include a demand/commodity structure, with those costs in Westcoast's cost of service which are fixed being included in the demand component and the variable costs being included in the commodity component.

There was also agreement that the tolls for gathering and processing gas should be of the postage stamp variety, with a single toll for the particular service provided while the tolls for transmission should be based on volume adjusted for distance to reflect the extent of the service being provided to each customer.

Westcoast and several interested parties recognized that designing the tolls in such a manner would overcome problems associated with the current structure of the wholesale price of gas charged to the LDCs within British Columbia. It was argued that the low percentage of Westcoast's fixed costs presently included in the demand component of the wholesale price is largely responsible for the high variability, on a monthly basis, in the netbacks to the BCPC and the out-of-province producers. However, the variability could be considerably reduced if the demand component of a fixed toll included 100 percent of Westcoast's fixed costs.

In addition, while there was general agreement that the demand charge should include 100 percent of Westcoast's fixed costs, the B.C. distributors felt that with the inclusion of such a high demand charge they should be relieved of any annual minimum bill or take-or-pay clauses in the gas purchase contracts.

### **3.2.2 Phasing-In of the Demand Component**

Presently, the fixed costs included in the demand charge in the various Westcoast/LDC contracts amount to only 12 to 16 percent of the Company's fixed costs. If the fixed costs included in the demand component were increased to 100 percent it would cause a sudden increase in the monthly demand charge payable by the LDCs. To lessen the impact of such a large increase on the local distribution companies, the BCPC proposed phasing-in the demand component of the wholesale price over a period of three years. Any fixed costs not recovered in the demand component during the phase-in period would be included in the commodity component.

Westcoast thought the proposal was reasonable, whereas intervenors had opposing points of view. The LDCs viewed the proposal almost as a necessity, whereas producers saw it as a deterrent to the marketability of gas. Northwest, however, viewed the proposal to recover 100 percent of the fixed costs in the demand charge as an impediment to the continuation of its current level of contractual volumes negotiated with Westcoast.

Inland explained that the LDCs would incur a cash flow problem if the demand charge were increased to 100 percent of the fixed costs too rapidly. The problem would arise in times of low sales by the LDCs when their cash inflows would be insufficient to cover the demand component of the tolls and would necessitate short-term borrowing.

Both CPA and IPAC favored a lower commodity component to improve the marketability of the gas. IPAC further added that it might provide an incentive for the LDCs to increase their load factor, and cautioned that the interruptible market was sensitive to the level of the commodity component.

Dome supported the phasing-in proposal, but only if Westcoast is committed to paying a unit or transaction price for the gas; otherwise, it was opposed to it. Dome also argued that a full demand component would allow B.C. Hydro to realize substantial savings because of its peak shaving ability resulting from its storage facilities.

According to a witness for the Province, the Hewitt letter will not be withdrawn until the demand component includes 100 percent of Westcoast's fixed costs.

### **3.2.3 Decision**

In view of its decision in Section 2.2.9 on the method of regulation, the Board has decided that the fixed toll should be based on a forward test year and contain a demand and a commodity component. The demand component should include 100 percent of Westcoast's fixed costs and, for the transmission function, should be based on volume adjusted for distance. The toll for gathering should be a postage stamp toll and, in relation to this function, the Board believes Westcoast should examine the question of recovering the fixed costs by means of a demand charge. In the Board's opinion, a fixed toll with a demand component as described above will give stability to the producer's netback and aid in the implementation of the new B.C. fixed royalty scheme.

With regard to phasing-in the demand charge the Board is not opposed to this but is not convinced that it will require a three-year period. Accordingly, Westcoast is required to include 100 percent of its fixed costs in the demand charge by 1 November 1986. This will coincide with the hearing-year date specified in the contracts between Westcoast and its customers.

The method by which the Company proposes to implement these decisions, for example, whether to include 100 percent of the fixed costs in the demand component in a single step or in increments, will be examined during the forthcoming toll hearing.

### **3.3 Transportation Toll for Interruptible Service**

Westcoast proposed that the toll for interruptible service should be a negotiated toll that would reflect the market conditions in each case. In Westcoast's opinion the toll should recover at least the incremental cost of providing service; should not exceed the value of service to each shipper; and should reflect the degree of interruptibility of the service.

Discussions at the hearing centred on the distribution of any revenues in excess of Westcoast's incremental cost of providing service, i.e. how would these revenues be shared among the various parties? Opinions ranged all the way from the producers taking all of the revenues to a sharing between all parties. There were also discussions about the concept of a negotiated toll: distributors agreed with the concept whereas some producers preferred a Board-approved toll.

The Board believes that all tolls for services provided under substantially similar circumstances and conditions, with respect to all traffic of the same description carried over the same route, should be charged equally to all customers of a pipeline. The value of service toll proposed by Westcoast would result in different tolls being charged to different customers for the same service based solely on differences in the customers' valuation of the service provided. In the Board's opinion such a toll is unjustly discriminatory and would result in tolls which are not just and reasonable.

#### **3.3.1 Decision**

The Board has decided that in the long term it is in the public interest that the tolls Westcoast will charge for interruptible transportation service should be a Board-approved toll and not a toll negotiated between Westcoast and producers.

Such tolls should make provision for the various types of interruptible transportation services which Westcoast anticipates being requested to provide. In addition to the general terms and conditions, the tariff should also indicate the availability of the service and the method of allocating capacity.

The Board believes that Westcoast should retain out of the revenues received from the transportation toll only the incremental costs it has incurred to provide the service and that revenues in excess of this amount, if any, should be credited to the cost of service for the benefit of all users of the pipeline.

As to the setting of just and reasonable tolls for interruptible transportation service, this matter, including the question of whether or not such tolls should incur a portion of the fixed costs, will be examined during the forthcoming toll hearing.

### **3.4 Toll for Gas Processing**

As a result of the processing of raw gas to pipeline quality, significant revenue is obtained from the sale of natural gas liquids and sulfur which are extracted as by-products. Under current arrangements, such by-products accrue to the BCPC which sells them and retains the revenue. Some interested

parties objected to the revenues from by-product sales accruing to the BCPC while the cost of extraction is charged to the cost of service.

B.C. Hydro and Inland argued that all revenue resulting from the sale of the by-products should be credited to the cost of service. The BCPC and the CPA favored crediting the cost of service with the revenue from sulfur sales because this revenue is less than the cost of extracting the sulfur. Revenue from the sale of the NGLs, however, exceeds the cost of extraction and, in their opinion, should flow back to those producers who supplied the wet gas.

Westcoast stated that it had no interest in the by-product revenue because, under the terms of the BCPC Agreement, revenue from the sale of the by-products is collected by the BCPC and subsequently flows back to those producers who supplied the sour and/or wet gas. The Company believed the matter must be resolved jointly by the B.C. Government, the BCPC and the producers.

### **3.4.1 Decision**

The Board notes that there was general agreement that the appropriate toll for Westcoast's gas processing operations should be of the postage stamp variety. The Board, therefore, expects that such a toll will be included in the toll design section of Westcoast's application. The proposed toll should address both gas owned by the Company and gas processed for direct sale by other parties. In similar fashion to the gathering function, Westcoast should examine the question of recovering the fixed costs of processing by means of a demand charge.

With regard to the by-products, the Board believes that in the present circumstances ownership of the sulfur and the NGLs is beyond the scope of these proceedings; accordingly, it sees no need to comment.

### **3.5 Other Toll Matters**

There were other toll matters raised during the hearing which have not been previously addressed in this Decision. While the Board does not consider that these were major issues it does, nevertheless, consider them to be worthy of mention.

Westcoast, in response to Appendix V of the Hearing Order relating to Toll Design, filed a submission containing the Company's proposal to segment the system into five zones for toll design purposes. The proposed zones, by major type of function were:

1. the gathering facilities;
2. the gas processing facilities;
3. the transmission system north of compressor station 2;
4. the transmission system south of station 2; and
5. the facilities within Alberta.

Most of the interested parties proposed a simpler segmentation requiring only three zones. These zones were gathering, gas processing and transmission.

Inland stated that it took delivery of gas from the Westcoast system at several points within the Inland franchise area. It proposed that, if the transmission toll were to be based on volume/distance, a single average toll should be established for the transmission of gas which Inland purchases rather than an individual toll for each delivery point.

There was also a discussion concerning the cost, for toll purposes, of compressor fuel and unaccountable gas losses. While there was general agreement that fuel gas and unaccountable gas losses should be included in any fixed toll design, there were various suggestions put forward for calculating the cost of such gas.

### **3.5.1 Decision**

While the Board agrees that it will be necessary for toll design purposes to segment the system and also agrees that fuel costs and unaccountable gas losses should be included in the Company's fixed tolls, it believes that such matters would be best decided after hearing evidence on Westcoast's specific proposals. Accordingly, these matters will be dealt with as part of the forthcoming toll hearing.

When Westcoast submits its toll design proposal, provision should be made and tolls designed, to provide for each and every type of service, both firm and interruptible, which Westcoast anticipates will be required during the test year.

# Chapter 4

## Depreciation

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### 4.1 Background

The depreciation rates which are currently authorized for use by Westcoast resulted from hearings held by the Board in 1978 and 1979. They were established after the Board had considered each of the following factors: the gas reserves (connected and unconnected), trend gas, and deliverability estimates as well as the export licence life and practical service life considerations.

During those hearings the Board found Westcoast's method of determining depreciation rates generally acceptable. According to that methodology the reserve base that was accepted by the Board was divided by the production rates and converted to annual depreciation rates. The Board, however, disagreed with the absence of any weight being given to trend gas in the Fort Nelson area for the calculation of the reserve base.

At the time of the 1979 decision the Board dealt with the issue of the limited export license life by recognizing that, in the prevailing export market environment, it would be prudent to provide for slightly higher early depreciation rates to offset the risk of potentially lower throughputs in the future. The depreciation rates approved at that time reflect this consideration. Therefore, dealing with this issue by allocating assets between the export and domestic customers, was deemed unnecessary.

In view of the fact that depreciation rates are estimates based on the circumstances that exist at a particular point in time, they cannot be held to be the most appropriate rates indefinitely into the future. Therefore the Board currently has a policy of reviewing depreciation rates every five years or less. In accordance with this policy, the Board, in the August 1983 Westcoast Reasons for Decision, required the Company to submit a new depreciation study. After the Company had complied, the Board solicited the views of interested parties and decided to review the principles incorporated in the March 1984 depreciation study during the method of regulation hearing. It was not, however, the purpose of this hearing to approve depreciation rates.

### 4.2 Westcoast's Depreciation Study

The depreciation study filed by Westcoast approached the subject in a manner similar to the one submitted to the Board in a previous hearing, except that it included provision for the collection of negative salvage funds (see section 4.5).

Specifically, the depreciation amount was calculated by adding the negative salvage cost to the undepreciated plant balance and dividing by the composite economic remaining life. The depreciation rate was then determined by dividing the annual depreciation amount determined above, by the gross plant balance. This procedure was followed for each of Westcoast's thirteen rate base sections.

When calculating its depreciation rates the Company ensured that the service life of all of the components within each section of the pipeline system exceeded the economic life derived for that section. Where that was not the case, a specific allowance was made by the Company to provide for the recovery of capital costs within the expected service life of the component. Having dealt with its

facilities in this manner, a Westcoast witness suggested that the depreciation rates for the accounts (excluding the miscellaneous and general plant accounts) within each section, could be depreciated using a composite rate.

The depreciation rate for general plant was calculated after studying the retirement experience of each component of that account. A category of miscellaneous plant was established for facilities such as warehouses and field offices and the depreciation rate for these facilities was assumed to equal the average for the rest of the pipeline system.

The balance of Westcoast's depreciation study dealt with the determination of the composite economic life of the pipeline and with the reserves upon which the economic life was based. These latter two subjects (as well as negative salvage) were the focal points of cross-examination during the hearing.

### **4.3 Determination of the Composite Economic Life of the Pipeline**

The composite economic life assumed for the facilities outside of British Columbia was equated to the remaining lives of the appropriate contracts on a straight-line basis. The composite economic life for the facilities located within British Columbia was calculated in a manner that amounted to weighting the average of the domestic and export economic lives, to account for the allocation of the depreciation base between export and domestic markets. As both the domestic economic life and the allocation of the depreciation base between export and domestic markets varied, individual calculations were required for each section of the pipeline system. The export economic life was, however, consistently equated to the maximum remaining life of the export contract of twelve years.

The calculation of the domestic economic life was done separately for each section of the system in British Columbia by deducting the forecast export volumes from the reserve base which Westcoast determined for each section of its pipeline (see section 4.4). The balance represents the reserve base allocated to domestic markets and this amount was divided by annual production estimates to arrive at the domestic economic life.

### **4.4 Determination of the British Columbia Reserves Base**

An issue discussed during the depreciation phase of the hearing was the methodology employed by Westcoast to determine the reserves base for B.C. gas which was utilized in the determination of the economic life. The procedure which Westcoast utilized involved the division of reserves into five categories as follows: B.C. trend gas, gas beyond economic reach, unconnected reserves beyond 10 miles from the pipeline, unconnected reserves within 10 miles of the pipeline, and connected reserves. All of these categories except trend gas involve proven gas reserves.

Trend gas is gas that has not yet been found but is anticipated to be found in the future. Estimates of trend gas are generally a function of future drilling rates which in turn are a function of the future economic climate.

Gas beyond economic reach includes reserves which are considered too small or too remote to be economically attached. Again, this category is a function of the perceived future economic climate.

Unconnected gas reserves were divided into two categories by Westcoast according to their distance from the pipeline. The distance of 10 miles, selected by Westcoast to subdivide unconnected gas

reserves, was determined judgementally. In Westcoast's view, the unconnected gas beyond 10 miles of the pipeline carried substantial uncertainty as to the capital expenditures to connect the reserves, the location at which the reserves were to be connected, and indeed, whether the gas would flow through the Westcoast pipeline. Only the first of the above uncertainties was judged to apply to unconnected reserves within 10 miles of the pipeline.

The final category of connected reserves includes proven reserves which are connected to the Westcoast system.

Of the above categories, Westcoast included only connected reserves and unconnected reserves within 10 miles of the pipeline in the reserves used to calculate the depreciation rates for the gas processing and transmission facilities (with the exception of the facilities in sections 10 and 11). The reserves used for the gathering facilities located in British Columbia were calculated on the basis of connected reserves only.

#### **4.5 Negative Salvage**

As mentioned above, Westcoast included provision, in the composite depreciation rates derived in its study, for the future cost of abandoning and in most cases removing its facilities when the useful life of the pipeline is exhausted. This hearing marked the first time that the issue of negative salvage was examined by the Board. In light of this and partly in response to concerns raised by some of the interested parties, the Board agreed to limit the discussion of the negative salvage component of the depreciation study, to the relevant principles only. Some insight into the general assumptions employed by Westcoast to compute the negative salvage cost estimates, was provided when the working papers from which the estimates were derived were filed as exhibits.

Initially Westcoast estimated that the cost of negative salvage in January, 1984 dollars would be \$268 million. This estimate provided for the removal of all pipe, compressor stations and processing plants. Subsequently, in response to a Board request for additional information, Westcoast indicated that under the constraint of minimizing costs, negative salvage could be reduced to \$119 million (plus perpetual annual maintenance costs of \$577,000). This estimate also provided for the removal of compressor stations, processing plants, and aerial pipeline crossings but anticipated the abandonment in place of all of its pipelines. In response to another Board request, Westcoast provided an estimate of the cost of negative salvage under constraints of least cost and land use, environmental, and safety criteria. In its response the Company submitted an estimate of \$127 million (plus perpetual annual maintenance costs of \$577,000). This estimate was arrived at in essentially an identical manner to the \$119 million estimate discussed above, except that all above ground facilities were to be removed including valves and other above ground pipe assemblies. It should be noted that Westcoast submitted the latter two estimates under the assumption that the Board would relieve the Company from the pipeline removal obligations included in the gas pipeline regulations.

During the hearing the Company did not put forward any of its cost estimates as being its "base case". Neither did it submit studies to demonstrate the feasibility of abandoning any or all of its pipelines in the ground with perpetual maintenance. It would appear that concerns relating to land use, environmental and safety criteria may ultimately have to be addressed on a site-specific basis for each gas and oil pipeline.



Westcoast indicated that it was not opposed to the principle of having a third party act as trustee for any negative salvage funds which might be collected. However, interested parties with one exception, were generally opposed to the collection of negative salvage funds at this time.

## **4.6 The Unit of Throughput Method of Depreciation**

The CPA proposed using a unit of throughput method of depreciation which would express the remaining economic life of the pipeline in units of gas to be transported rather than in composite years of remaining life. Under this method the cost of the facilities would be recovered by determining the number of units of throughput to be transported over the remaining economic life of the pipeline and dividing that number into the depreciation base. The result is then applied to each unit of throughput with the capital costs being recovered through the units which are transported.

Straight-line depreciation averages the amount of depreciation which is required to be recovered each year during the estimated remaining life of the pipeline. The use of this method makes no provision for the actual annual consumption of service value based on the actual quantity of gas processed or transported.

An expert witness for the CPA stated that the unit of throughput method is more suitable for a system such as Westcoast's whose estimated remaining economic life is shorter than its physical life. He also said that because Westcoast allocated facilities between the export and domestic markets on the basis of demand and because the depreciation charge allocated to export sales is recovered over 12 years as opposed to 35 years for domestic sales, the unit depreciation charge for exports is significantly higher than that for domestic deliveries.

Interested parties were of the view that the unit of throughput method is volume-related with no recognition being given to the maximum day demand of the Westcoast system. Furthermore, they argued that facilities which were constructed for export sales should be fully depreciated when the export licences expire.

## **4.7 Decision**

The Board has decided that it will be necessary for Westcoast to file a revised depreciation study as part of the Part IV toll application which the Company is required to submit in conformity with the Board's decision in Chapter 2 respecting the method of regulation. The revised study should incorporate each of the principles which follow.

Westcoast proposed allocating depreciation between the export and domestic markets on the basis of demand. Evidence adduced during the hearing demonstrated that an alternative, but very complex, method of allocation involves the division of booked depreciation costs, the vintaging of historical facility additions, and the assignment of the undepreciated cost of these facility additions to the export and domestic markets. The Westcoast system has evolved from initially being a pipeline predominantly serving the export market to one serving both the domestic and export markets, and the Board does not believe that the remaining life of the export licences should be regarded as a constraint in the calculation of the pipeline's remaining economic life. Accordingly the Board has decided that the principle of allocating depreciation between the domestic and export markets is not appropriate for the Westcoast system. Therefore, Westcoast should not differentiate between reserves allocated to

domestic and export markets and should not be bound by the export licence life when preparing the revised study.

The Board also directs Westcoast to include, in the British Columbia reserves base, an allowance for both unconnected gas reserves (within and beyond ten miles) and trend gas.

With respect to the principle of negative salvage, Westcoast should not include an allowance for negative salvage in the revised depreciation study. After considering all of the evidence adduced on negative salvage, the Board has concluded that, because of the complexity of this subject, further study and assessment is required.

With respect to the method of depreciation, it is the Board's decision that because of the unique circumstances of the Westcoast system - it not only transports natural gas but also gathers it and processes it, and the fact that it was designed and constructed on the basis of maximum day volumes - the straight-line method of calculating depreciation rates continues to be appropriate.

# **Chapter 5**

## **Matters Relating To Order No. TG-5-79**

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In Appendix IV to Hearing Order No. RH-5-83 (refer to Appendix 1 to these Reasons), the Board indicated its intention to review specific questions relating to the present method of regulating Westcoast's tolls.

### **5.1 Decision**

The Board has previously determined in Chapter 2 of these Reasons that the appropriate method of regulation for Westcoast is a fixed toll based on a forward test year. The Board has also determined that this method of regulation should become effective from 1 January 1986. Accordingly, the Board finds that amendments to Order No. TG-5-79 are not required.

# Chapter 6

## Disposition

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The foregoing chapters, with the exception of the Executive Summary, constitute our Reasons for Decision and our Decision.

---

A.D. Hunt  
Presiding Member

---

J. Farmer  
Member

---

A.B. Gilmour  
Member

Ottawa, Canada  
April 1985.

# Appendix I

## Hearing Order No. RH-5-83

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### ORDER NO. RH-5-83

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

AND IN THE MATTER OF the method of regulation of the tolls of Westcoast Transmission Company Limited (hereinafter called "Westcoast") prescribed by Order No. TG-5-79, as amended. Board File Nos. 1562-W5-3 and 1562-W5-5.

BEFORE the Board on Thursday, 22 December 1983.

UPON evidence having been tendered during the public hearing respecting Westcoast's tolls, held pursuant to Order No. RH-1-83, questioning the variable cost of service method of regulating the tolls of Westcoast prescribed by Order No. TG-5-79, as amended, and advocating a change to the fixed-toll method;

AND UPON the Board, in a decision dated 20 April 1983, found at page 169 of the transcript of the public hearing held pursuant to Order No. RH-1-83, having announced its intention to examine this issue in a separate proceeding;

AND UPON the Board, in Chapter 3 of its Reasons for Decision, dated August, 1983, in respect of the proceeding conducted pursuant to Order No. RH-1-83, having identified certain additional matters which it intends to examine in the said separate proceeding;

AND UPON the Board, in Chapter 8.5 of its Reasons for Decision dated August, 1983, having directed Westcoast to submit a complete depreciation study by 31 December 1983;

IT IS ORDERED THAT:

1. The Board will hold a public hearing commencing at the Conference Centre, Sheraton Landmark Hotel, in Vancouver, British Columbia, on Tuesday, 10 April 1984, at 9:30 a.m. local time.
2. The Board will examine
  - (a) the variable cost of service method versus the fixed-toll method of regulating Westcoast's tolls as a question of principle and as a matter of practice with respect to, *inter alia*, the control of construction costs and operating and maintenance costs, the effect of either method upon the control of such costs, and the simplification of regulatory procedures;
  - (b) specific questions with respect to the present method of regulating Westcoast's tolls as identified in Appendix IV;
  - (c) questions with respect to a possible fixed toll tariff, including those identified in Appendix V; and

- (d) other issues as identified in Appendix VI.
3. It is not the Board's intention at this hearing to set specific tolls or tariffs.
  4. The proceedings will be conducted in either of the two official languages, and simultaneous interpretation will be provided should a party to the proceedings request such facilities in its intervention.
  5. Westcoast shall, forthwith serve a true copy of this Order upon the Attorneys General of the Provinces of British Columbia and Alberta, the Secretary of the British Columbia Utilities Commission, the Canadian Gas Association and those parties listed in Appendix I to this Order, and, as soon as possible on those parties who intervene pursuant to paragraph 7 hereof.
  6. Westcoast shall arrange to have the Notice of Public Hearing as set out in Appendix II to this Order published by 14 January 1984 or as soon thereafter as possible, in one issue each of the "Times Colonist" in Victoria, "The Sun", the "Vancouver Province" and "Le Soleil de Colombie" in Vancouver, the "Alaska Highway News" in Fort St. John, British Columbia; "The Edmonton Journal" and "Le Franco-albertain" in Edmonton, the "Calgary Herald" in Calgary, Alberta; the "Globe and Mail", and "Le Toronto Express" in Toronto, Ontario; and as soon as possible, in the Canada Gazette.
  7. Any person intending to intervene in the hearing shall, by 3 February 1984, file with the Secretary of the Board thirty-five (35) copies of a written statement, in either of the two official languages, containing his submission, together with any supporting material. This submission shall contain the following:
    - (a) a concise statement of the facts from which the nature of the intervenor's interest in the proceedings may be determined;
    - (b) a clear statement of the intervenor's position with respect to the issue identified in paragraph 2(a) hereof,
    - (c) the intervenor's views, if any, with respect to the other issues identified in paragraph 2 (b), (c), and (d) hereof,
    - (d) a clear statement of any specific question with respect to the method of regulating Westcoast's tolls which the intervenor wishes to raise but which is not identified in paragraph 2 hereof,
    - (e) the name and address of the intervenor or his solicitor to whom communications may be sent, and
    - (f) a statement with respect to the official language in which the intervenor wishes to be heard.

Intervenors shall, by 3 February 1984 serve three (3) copies of their submission on Westcoast, one (1) copy each upon the parties listed in paragraph 5 to this Order and, as soon as possible, upon each other party who intervenes pursuant to this paragraph and shall file written proof of

service thereof at the opening of the hearing. A list of the intervenors will be distributed to all parties by the Board on or shortly after 7 February 1984.

8. Any party who wishes to file a submission after 3 February 1984 must file and serve a notice of motion requesting leave to file a late submission. Such notice shall be filed and served in accordance with paragraph 4 of the Rules and Procedures set out in Appendix III to this Order.
9. Any party who wishes to present direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare written direct evidence, and, by 20 February 1984, file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties.
10. Any party, including Westcoast, who has filed written direct evidence pursuant to paragraph 9 hereof and who wishes to present additional or supplementary direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare further written direct evidence, and, by 12 March 1984 file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties.
11. Any party who has prepared written direct evidence pursuant to paragraphs 9 and 10, shall file written proof of service thereof at the opening of the hearing.
12. The Rules and Procedures set out in Appendix III to this Order shall govern the conduct of the hearing.
13. Should the Board consider a pre-hearing conference to be necessary, it will be held at a place and date to be fixed by the Board. Following receipt of interventions, the Board will advise parties with respect to whether a pre-hearing conference is to be held.
14. During normal business hours, any person may examine copies of the submissions and all other material filed at:

Library  
National Energy Board  
9th Floor  
473 Albert Street  
Ottawa, Ontario  
K1A 0E5

or

National Energy Board  
4500 16th Ave. N.W.  
Calgary, Alberta  
T3B 0M6

or

Westcoast Transmission Company Limited  
1333 West Georgia Street  
Vancouver, British Columbia  
V6E 3K9

Dated at Ottawa, Ontario on Thursday, 22 December 1983.

NATIONAL ENERGY BOARD

G. Yorke Slader,  
Secretary



**Appendix I**  
**Order No. RH-5-83**

Mr. D.C. Hetland,  
Secretary and Solicitor,  
Alberta Petroleum Marketing Commission,  
1900, 250 - 6th Ave. S.W.,  
Calgary, Alberta  
T2P 3H7

Mr. W.D. Mitchell,  
General Solicitor,  
British Columbia Hydro and Power Authority,  
18th Floor,  
970 Burrard Street,  
VANCOUVER, British Columbia  
V6Z 1Y3

Mr. E.C. Eddy,  
Supervisor of Gas Hearings and Regulation,  
British Columbia Hydro and Power Authority,  
3777 Lougheed Highway,  
Burnaby, British Columbia  
V5C 3Y3

Mr. G.S. Thomas,  
Comptroller,  
British Columbia Petroleum Corporation,  
6th Floor,  
1199 West Hastings Street,  
VANCOUVER, British Columbia  
V6E 3T5

Mr. P. Fournier,  
Manager, Regulatory Affairs,  
Canadian Petroleum Association,  
1500-633, 6th Avenue S.W.,  
CALGARY, Alberta  
T2P 2Y5

Mr. T.D. Tutti,  
Group Counsel,  
Cominco Limited,  
Trail, British Columbia

Consumers Glass Company Limited,  
301, 703 Evans Ave.,  
Etobicoke, Ontario  
M9C 5A6

Mr. R.C. Bryan,  
Manager, Economics, Statistics and Energy,  
Council of Forest Industries of British Columbia,  
1500 - 1055 West Hastings St.,  
Vancouver, B.C.  
Z6E 2H1

Mr. R.S. Johnson,  
Director of Regulatory Affairs,  
Dome Petroleum Limited,  
333 - 7th Avenue S.W.,  
P.O. Box 200,  
Calgary, Alberta  
T2P 2H8

Mr. A.N. Shikaze,  
Esso Resources Canada Limited,  
500 Sixth Avenue S.W.,  
CALGARY, Alberta  
T2P 0S1

Manager, Regulatory Affairs,  
Independent Petroleum Association of Canada,  
700-707, 7th Avenue S.W.,  
CALGARY, Alberta  
T2P 0Z2

Mr. Patrick Lloyd,  
Secretary,  
Inland Natural Gas Co. Ltd.,  
23rd Floor,  
1066 West Hastings Street,  
VANCOUVER, British Columbia  
V6E 3G3

Mr. K.F. Keeler,  
General Counsel,  
Pan-Alberta Gas Ltd.,  
500, 707-8th Avenue S.W.,  
Calgary, Alberta  
T2P 3V3

Mr. M.P.F. Collins,  
Corporate Planning Division,  
Petro-Canada,  
P.O. Box 2844,  
Calgary, Alberta  
T2P 3E3

Mr. J.M. Murray,  
Solicitor,  
TransCanada PipeLines Limited,  
P.O. Box 54,  
Commerce Court West,  
Toronto, Ontario  
M5L 1C2

Mr. M.W.P. Boyle,  
Corporate Solicitor,  
Trans Mountain Pipe Line Company Limited,  
800 - 601 West Broadway,  
Vancouver, British Columbia  
V5Z 4C5

Mr. A.L. Shillington,  
Manager, Regulatory Planning,  
Union Gas Limited,  
50 Keil Drive North,  
Chatham, Ontario  
N7M 5M1

**Appendix II**  
**Order No. RH-5-83**

**NATIONAL ENERGY BOARD**

**NOTICE OF PUBLIC HEARING**

**Westcoast Transmission Company Limited**  
**Method of Toll Regulation**

The National Energy Board will conduct a hearing to determine whether the tolls of Westcoast Transmission Company Limited should continue to be regulated by a variable cost of service method or should instead be regulated by a fixed-toll method. The hearing will also consider other matters affecting the method of regulating the tolls of Westcoast.

The hearing will commence at 9:30 a.m. local time, on Tuesday, 10 April 1984, in the Conference Centre, Sheraton Landmark Hotel, Vancouver, British Columbia.

The hearing will be public and will be held to obtain evidence and hear the relevant views of interested parties, groups, organizations, and companies.

Any person wishing to intervene should write or telex the Secretary of the Board, as soon as possible, requesting a copy of Order RH-5-83 (available in English or French) which sets out the procedure for intervening. The deadline for filing interventions with the Board is 3 February 1984.

For further information, telephone the Board's Information Services at (613) 593-6936

G. Yorke Slader  
Secretary  
National Energy Board  
473 Albert Street  
Ottawa, Ontario  
K1A 0E5  
Telex No.: 053 3791

Dated at Ottawa, Canada  
22 December 1983

**Appendix III**  
**Order No. RH-5-83**

**RULES OF PROCEDURES**

1. In these Rules, "party" means Westcoast Transmission Company Limited and any intervenor who has filed with the Secretary of the Board a written statement pursuant to paragraph 7 of Order No. RH-5-83.
2. Any party who wishes to obtain additional information from another party in respect of matters raised in filings made with the Board, may request in writing that such information be provided. A copy of the request shall be filed with the Board and served on all other parties.
3. The party to whom the request is made shall, as soon as possible, either provide a written response to the request or refer the question to the Board under paragraph 4 hereof. Thirty-five (35) copies of the response shall be filed with the Board and one copy served on all other parties. The party receiving the request shall file both it and the response together as an exhibit at the hearing.
4. If any question arises upon which a decision of the Board may be required, a notice of motion with respect thereto shall be filed with the Secretary of the Board, and the motion will be disposed of by the Board in accordance with such procedures as the Board may direct.
5. The order of appearance of parties and sequence of adducing evidence and conducting cross-examination will be announced by the Board on or before the opening of the hearing.

**Appendix IV**  
**Order No. RH-5-83**

The specific questions with respect to the present method of regulating Westcoast's tolls are:

- (i) the continuing need to identify contingencies by cost centre in the operating and maintenance budget,
- (ii) whether operating and maintenance budget overruns should continue to be determined by cost centre without any off-setting adjustment to underruns which may occur in other cost centres,
- (iii) the continuing need for paragraph 9 of Schedule A to Order No. TG-5-79, as amended, respecting emergency actions,
- (iv) the continuing appropriateness of the procedures established by Order No. TG-5-79, as amended, regarding rate base additions,
- (v) the continuing appropriateness of the procedures established by Order No. TG-5-79, as amended, regarding the approval of operating and maintenance budgets, bearing in mind the desirability of dealing with such approvals in as timely a fashion as possible,
- (vi) the exclusion of by-product revenues in the determination of cost of service pursuant to Order No. TG-5-79, as amended,
- (vii) the treatment of fuel costs and the valuation of line pack in regard to Order No. TG-5-79, as amended.

**Appendix V**  
**Order No. RH-5-83**

The matters with respect to a possible fixed-toll method include:

1. The actual throughput for 1983\* for each customer and class or type of service including exports and miscellaneous sales.
2. The actual cost of service for 1983\*.
3. The appropriate toll design including:
  - (i) classes and types of service,
  - (ii) rate zones,
  - (iii) cost allocation units for deriving tolls,
  - (iv) allocation of each cost component of the cost of service to major pipeline functions, and
  - (v) classification of the functionalized costs between fixed and variable costs and the basis for such cost classification.
4. The treatment of by-product revenues and costs for accounting, cost allocation and toll design purposes.
5. The treatment of fuel costs for toll purposes.

\* This information is being sought for illustrative purposes only.

**Appendix VI**  
**Order No. RH-5-83**

1. Recently, throughputs on the Westcoast system have been substantially lower than anticipated as a result of a decline in demand in the export market. While this decline is expected to reverse in the future, the situation, as it presently exists, results in higher unit throughput costs. Therefore, the Board wishes to include in its examination:
  - (a) the appropriateness and impact upon costs of the existing relationship between contracted daily obligations and annual sales;
  - (b) the timing of the recovery of the capital costs of the system;
  - (c) the timing of the recovery of other fixed costs including return on equity; and,
  - (d) the variability of depreciation rates with increases and decreases in throughput.
2. The Board will examine Westcoast's depreciation rates in light of the Westcoast depreciation study.



# Appendix II

## Hearing Order No. AO-1-RH-5-83

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### ORDER NO. AO-1-RH-5-83

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

AND IN THE MATTER OF the method of regulation of the tolls of Westcoast Transmission Company Limited (hereinafter called "Westcoast") prescribed by Order No. TG-5-79, as amended. Board File Nos. 1562-W5-3 and 1562-W5-5.

BEFORE the Board on Wednesday, the 14th day of March 1984.

UPON the Attorney General of British Columbia having requested, by Notice of Motion dated 31 January 1984, a general adjournment of the public hearing scheduled to commence on 10 April 1984;

AND UPON the Board having heard the said motion on 16 February 1984;

AND UPON the Board having advised all parties of record, in a telex dated 17 February 1984, of the Board's decision to adjourn the hearing until 25 September 1984;

AND UPON the Board, as a result of unanticipated difficulties with the Board's fall hearing schedule, having found that it would no longer be possible to commence the hearing on 25 September 1984;

IT IS ORDERED THAT:

1. Paragraphs 1, 9 and 10 of Order No. RH-5-83 be deleted and the following substituted therefor:
  - "1. The Board will hold a public hearing scheduled to commence at 9:30 a.m. local time, on Tuesday, 20 November 1984, at the Conference Centre, Sheraton Landmark Hotel, in Vancouver, British Columbia.
9. Any party who wishes to present direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare written direct evidence, and, by 13 July 1984, file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties.
10. (a) Any party who has filed written direct evidence pursuant to paragraph 9 hereof and who wishes to present additional or supplementary direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare further written direct evidence, and, by 31 August 1984 file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties.

- (b) Any party who wishes to present direct evidence in the hearing who has not filed written direct evidence pursuant to paragraph 9 or subparagraph 10(a) hereof must file and serve a notice of motion pursuant to paragraph 4 of the Rules and Procedures set out in Appendix III to this Order requesting leave to file such evidence late."

NATIONAL ENERGY BOARD

G. Yorke Slader,  
Secretary

# Appendix III

## Hearing Order No. AO-2-RH-5-83

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### ORDER NO. AO-2-RH-5-83

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

AND IN THE MATTER OF the method of regulation of the tolls of Westcoast Transmission Company Limited (hereinafter called "Westcoast") prescribed by Order No. TG-5-79, as amended. Board File Nos. 1562-W5-3 and 1562-W5-5.

BEFORE the Board on Monday, the 9th day of July, 1984.

UPON Westcoast having requested, by letter dated 25 June 1984, an extension of the deadlines as prescribed in Order No. RH-5-83 as amended by Order No. AO-1-RH-5-83 for the filing of direct and additional or supplementary direct evidence;

AND UPON the Board having considered the representations of interested parties;

IT IS ORDERED THAT:

1. Paragraphs 9 and 10(a) of Order No. RH-5-83 as amended by Order No. AO-1-RH-5-83 be deleted and the following substituted therefor:
  - "9. Any party who wishes to present direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare written direct evidence and, by 17 August 1984, file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties.
  10. Any party who has filed written direct evidence pursuant to paragraph 9 hereof and who wishes to present additional or supplementary direct evidence in the hearing shall, unless otherwise authorized by the Board, prepare further written direct evidence and, by 28 September 1984, file thirty-five (35) copies thereof with the Board and serve one (1) copy of the same upon all other parties."

NATIONAL ENERGY BOARD

G. Yorke Slader,  
Secretary

# Appendix IV

## Letter, dated 8 March 1979, to the Board from the Minister of Energy, Mines and Petroleum Resources of the Province of British Columbia ("Hewitt letter")

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Note: Re-typed by the National Energy Board

Province of  
British Columbia

Ministry of Energy,  
Energy, Mines and  
Petroleum Resources

Parliament Buildings  
Victoria  
British Columbia  
V8V 1X4

OFFICE OF THE MINISTER

---

March 8, 1979

National Energy Board  
473 Albert Street  
Ottawa, Ont.  
K1A 0E5

**Attention: Mr. Brian H. Whittle**

Dear Sirs:

Re: In the matter of an application by Westcoast Transmission Company Limited in part of the *National Energy Board Act* - your file 1562-W5-3

I am advised that as a result of the current proceedings there will likely be an increase in Westcoast's cost of service applicable to gas sold by Westcoast to distributors in British Columbia ("Intra-Provincial Gas"). The Board would then normally face the prospect of reflecting that increase in the tariffs contained in the contract between Westcoast and the B.C. distributors, which in turn would be passed on to provincial consumers.

The Province of British Columbia recognizes the necessary relationship between the cost of service and the distributor tariff, but in order to maintain the flexibility of its wholesale gas pricing policy within British Columbia the province wishes the existing tariff in the distributor contracts to remain unchanged for the time being.

In order to permit the Board to leave these tariffs unchanged in these proceedings, the province is prepared to absorb the increased cost of service on Intra-Provincial gas out of the commodity price of the gas through the mechanism of the contract between British Columbia Petroleum Corporation and Westcoast. The increased cost of service may be passed along by the province, in whole or in part, through an increase in the wholesale price to B.C. distributors.

I therefore wish to advise the Board, on behalf of the province, that through its agent, the B.C. Petroleum Corporation, it will absorb any increase in the cost of service finally determined by the Board in these proceedings applicable to Intra-Provincial gas through the operation of the Petroleum Corporation/Westcoast contract in order to permit the Board to leave the existing tariff in the British Columbia distributor contracts unchanged.

The province contemplates the future changes in the prices set under the British Columbia distributor contracts or "wholesale prices" will be made through the base price mechanism set out in Clause 11 as amended of the Petroleum Corporation/Westcoast contract.

Yours very truly,

James J. Hewitt,  
Minister

# **Appendix V**

## **Decision by the Board concerning a request by the CPA and IPAC for a review of the method of regulation - Chapter 3 of the August 1983 Westcoast Reasons for Decision**

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### **Excerpt from the August 1983 Westcoast Reasons for Decision**

#### **Chapter 3 Method of Regulation**

Westcoast is currently on a cost of service toll as required under Board Order No. TG-5-79. Under this method of regulation, Westcoast is authorized to recover its actual cost of service in accordance with Board directives.

The CPA tendered evidence which challenged the present method of regulation and advocated a change to the fixed-toll method. Under this method, Westcoast's total cost of service for a prospective test year would be determined on the basis of forecast volumes and distances and fixed tolls would be established on a volume/distance basis. These tolls would recover the approved cost of service from actual throughput.

Westcoast objected to the introduction of the method of regulation as an issue in the proceedings on the grounds that the issue had not been included in the hearing order. Westcoast expressed the view that if it had been aware that the method of regulation was to be an issue in the hearing, the Company would have filed a significantly different case from the one actually filed and submitted that a substantial delay would result if the Board were to deal with the matter during the current hearing. On 20 April 1983, the Board announced that it would examine the method of regulation; however, because of the prejudice to Westcoast that might result from dealing with the issue in the present hearing, the Board deferred the matter to a separate proceeding. A hearing order will be issued in due course which will give all parties an opportunity to present their views on this issue.

Recognizing that one possible outcome of the proposed hearing could be a continuation of the cost of service method of regulation, the Board has also decided to defer to that hearing several questions raised during this hearing with respect to Order No. TG-5-79, as amended. These include the cost centre approach to handling operating and maintenance budget overruns and contingencies; the treatment of by-product revenues, fuel costs, and the valuation of line pack; and the clarification of paragraph 9 of Schedule A to the Order respecting emergency actions. The Board, in light of its overall concern with respect to the control of pipeline construction costs, also defers to that proceeding its consideration of the appropriateness of the procedures established by Order No. TG-5-79, as amended, regarding rate base additions.

Finally, due to the Board's concern with TG-5-79 procedures which cause delays in the approval of Westcoast's annual O & M Budgets, the Board will also include a review of those procedures in the method of regulation hearing.

# Appendix VI

## Statistical Profile of Westcoast Transmission Company Limited

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### Westcoast Transmission Company Limited Statistical Profile

#### Statistical Data

- (a) System Sales Capacity 42.5 10<sup>6</sup>m<sup>3</sup>/day (approximately)  
 (b) Sales Volumes (10<sup>6</sup>m<sup>3</sup>)

	<b>Domestic</b>	<b>Export</b>
1979	4 139	6 720
1980	4 268	4 376
1981	4 082	3 805
1982	4 449	2 608
1983	4 358	2 425

- (c) Peak Day Sales Volumes 43.5 10<sup>6</sup>m<sup>3</sup> (approximately)

**(\$000)**

- (d) Rate Base, 31 December 1983 709,088  
 Cost of Service, 1983 266,120

(Note: 10<sup>6</sup>m<sup>3</sup> = 1,000,000 cubic metres)

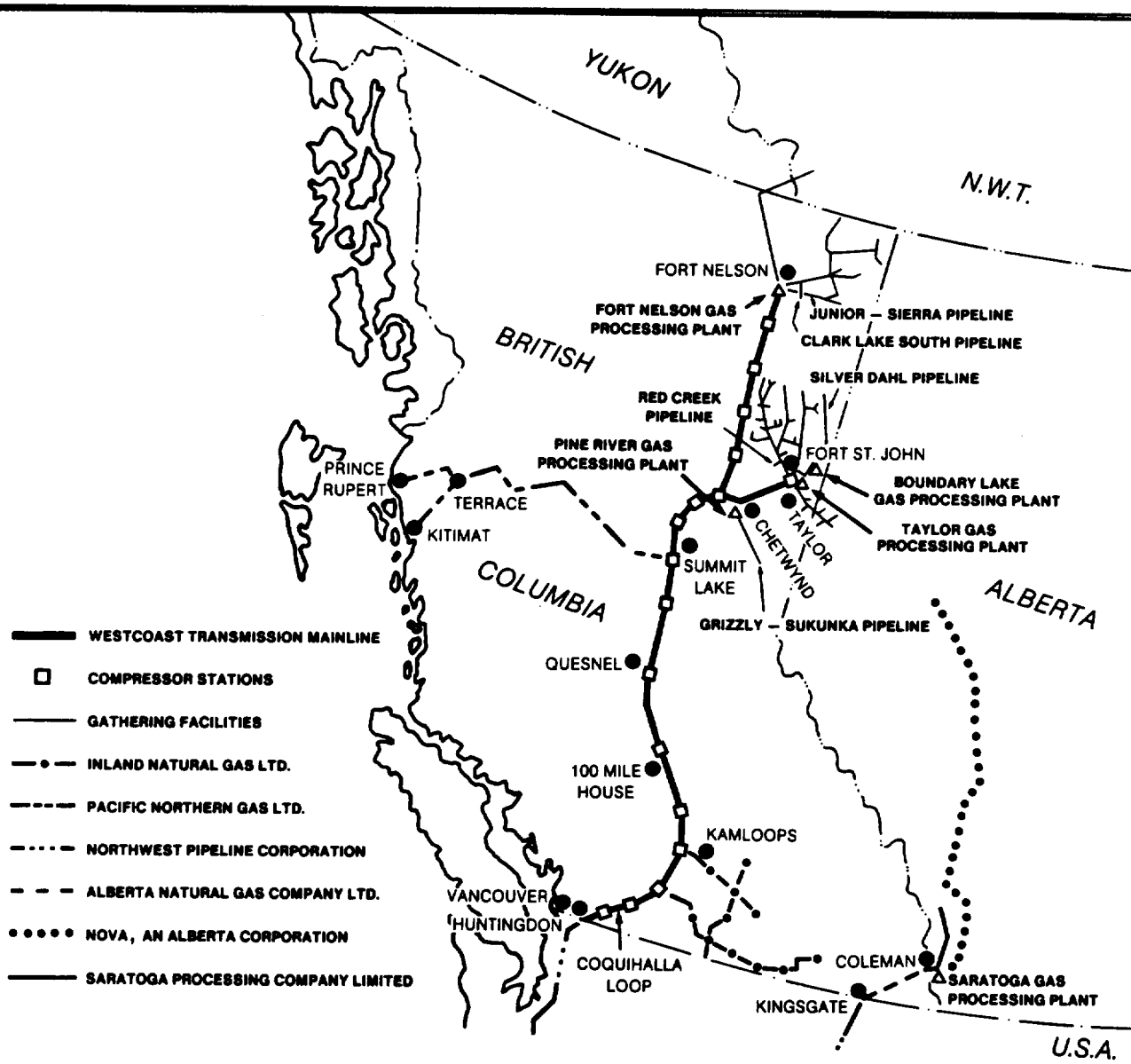
# **Appendix VII**

## **Map of Westcoast Transmission Company's Pipeline System**

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Figure a7-1  
**Westcoast Transmission Company Limited  
Pipeline System Map**





- WESTCOAST TRANSMISSION MAINLINE
- COMPRESSOR STATIONS
- GATHERING FACILITIES
- INLAND NATURAL GAS LTD.
- - -** PACIFIC NORTHERN GAS LTD.
- · - · -** NORTHWEST PIPELINE CORPORATION
- - -** ALBERTA NATURAL GAS COMPANY LTD.
- NOVA, AN ALBERTA CORPORATION
- SARATOGA PROCESSING COMPANY LIMITED

**WESTCOAST TRANSMISSION COMPANY LIMITED**  
**PIPELINE SYSTEM MAP**