

Case Name:

Consumers' Gas Co. (Re)

**IN THE MATTER OF the Ontario Energy Board Act, R.S.O. 1980,
Chapter 332;
AND IN THE MATTER OF subsection 13(5) and subsection 19 of the
said Act;
AND IN THE MATTER OF a hearing to
inquire into, hear and determine
certain matters relating to contract
carriage arrangements on the
Consumers' Gas Company Ltd.'s ICG
Utilities (Ontario) Ltd.'s and
Union Gas Limited's Ontario distribution systems.**

1986 LNONOEB 3

Nos. E.B.R.O. 410-I, E.B.R.O. 411-I, E.B.R.O. 412-I

Ontario Energy Board

Panel: R.W. Macaulay, Q.C., Chairman;

J.C. Butler, Vice-Chairman;

D.A. Dean, Member; M. Jackson, Member; C.A. Wolf, Jr., Member

Decision: December 12, 1986.

(257 paras.)

REASONS FOR DECISION

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1. INTRODUCTION

Overview

1 1.1 This Decision concerns the question of bypass. The term bypass is used to describe the means by which an end-user of natural gas in Ontario avoids using the Local Distribution Company (LDC) to deliver gas to its consumption point. The typical form of bypass would involve a direct purchaser tapping directly into the TransCanada PipeLines (TCPL) system (see Chapter 5 for a complete description of bypass).

2 1.2 This Decision consists of twelve chapters. The Introduction summarizes the regulatory and government activity that has led to this hearing. It also addresses some of the particulars of this hearing and provides an overview of the significance of natural gas to Ontario's economy. Chapter 2 summarizes the transmission and distribution of natural gas. Chapter 3 focuses on the changes to the custody, control and ownership of gas arising from the recent attempts to initiate deregulation of the industry. Chapter 4 defines the public interest and provides the theory relevant to the previous es-

establishment of natural gas monopolies in Ontario. Chapter 5 provides a description of bypass. Chapter 6 briefly discusses the criteria for bypass. Chapter 7 deals with ratemaking considerations. Chapter 8 discusses the jurisdictional aspects of bypass in Ontario. The question of a stated case is dealt with in Chapter 9. The Board's decision is summarized in Chapter 10. A glossary of terms is provided in Chapter 11. The completion of this portion of the Main Hearing is dealt with in Chapter 12.

The Hearings

3 1.3 On December 9, 1985, the Ontario Energy Board (the OEB or the Board) called hearings on its own motion, to inquire into matters relating to interim contract carriage arrangements on the distribution systems of each of The Consumers' Gas Company Ltd. (Consumers'), ICG Utilities (Ontario) Ltd (ICG) and Union Gas Limited (Union). The three hearings were combined. They commenced on January 27, 1986 and lasted for thirteen days. The Board issued its Reasons for Decision on April 4, 1986 (the Interim Decision).

4 1.4 The Board on its own motion, by Notices of Public Hearing dated July 24, 1986, called further hearings to inquire into, hear and determine certain matters relating to contract carriage arrangements on Consumers', ICG's and Union's distribution systems in Ontario. The hearings commenced on Monday, September 22, 1986 (the Main Hearing). The changes that have occurred and the new issues that have arisen since the Interim Decision as well as the design and feasibility of permanent contract carriage arrangements in Ontario are the subject of the Main Hearing.

5 1.5 The Board decided that common elements of contract carriage and direct purchase arrangements should be dealt with first and a decision rendered before utility-specific rates and tolls were considered. The bypass issue was differentiated from the other generic issues because of its potential impact on Ontario and jurisdictional concerns. The bypass issue was heard first and because of its significance, separate Reasons for Decision are being issued as E.B.R.O. 410-I, 411-I and 412-I.

Background

6 1.6 The Governments of Canada, Alberta, British Columbia and Saskatchewan recognized a need for a more flexible and market-oriented environment in the Western Accord of March 28, 1985 on energy pricing and taxation. Pursuant to this need, an Agreement on Natural Gas Markets and Prices (the Agreement) was signed on October 31, 1985 by those Governments.

7 1.7 The intent of the Agreement was to create the conditions necessary for market-oriented pricing. The implementation, however, was left to the affected parties:

"It is the intention of the parties to the Agreement to foster a competitive market for natural gas in Canada, consistent with the regulated character of the transmission and distribution sectors of the industry ..."

8 1.8 The Agreement recognized the importance of the pipeline linkage between the producer and consumer when it stated:

"Effective November 1, 1985, consumers may purchase natural gas from producers at negotiated prices, either directly or under buy- sell arrangements with distributors, provided distributor contract carriage arrangements are available in re-

spect of such purchases. This provision is in no sense intended to interfere with provincial jurisdiction in regard to regulation of gas distribution utilities."

9 1.9 The twelve-month period from November 1, 1985 to October 31, 1986 was designated as a transitional period to a fully market sensitive pricing regime. During this interim period, prices were prescribed by governments but industrial customers were free to negotiate prices for the purchase of natural gas directly from producers. The availability of direct purchase was, however, conditional upon contract carriage arrangements being available from the LDC. To enable TCPL producers to meet the competition of direct purchase, Competitive Marketing Programs (CMPs) negotiated between the end-use customer, the distributor and TCPL and its producers were permitted, effective November 1, 1985.

10 1.10 Direct purchase is defined as an arrangement whereby an end-user of natural gas purchases gas directly from a producer or broker rather than from an LDC. The gas is transported to Ontario by TCPL and is handled by the LDC in one of two ways :

- i) Buy/Sell: Wherein the Ontario LDC purchases the direct purchaser's volumes, commingles them with its other purchased gas while selling to the direct purchaser as a sales customer under the appropriate rate schedule.
- ii) Contract Carriage: Wherein the Ontario utility does not take title to the direct purchaser's supply of gas but the volumes of gas are transported from the point of receipt through the utility's system (under contract with the end-user) to the direct purchaser's plant.

11 1.11 CMP discounts are provided by system producers (i.e. those producers from whom TCPL purchases gas) to individual end-users of gas. The contractual gas supply arrangements between the system-producers, TCPL, and the LDCs are unaffected. TCPL delivers and sells to the LDC at approved prices. The LDC delivers and sells to the individual end-users at OEB approved sales rates. The LDC provides TCPL with details each month of the sales made to each customer. TCPL rebates to the utility the discount on those volumes. The LDC flows the rebate to the customer through a credit on the following month's invoice.

12 1.12 Shortly before the Agreement was entered into Cyanamid Canada Pipeline Inc. (CCPI) applied to the National Energy Board (NEB) for permission to construct and operate a 6 kilometre pipeline in Southern Ontario and connect it to the TCPL pipeline. This CCPI application is the first bypass application in Ontario. The NEB hearing in this regard commenced August 25, 1986. No Decision has yet been issued.

13 1.13 On December 3, 1985 the Ontario Ministry of Energy announced Ontario support for the introduction of interim contract carriage arrangements during the transitional period ending October 31, 1986. The Minister expressed his intention that, during the interim period, rates to other customers would not be adversely affected by the introduction of contract carriage arrangements.

14 1.14 In his statement of December 3, 1985, the Ontario Minister of Energy also requested the Board to carry out intensive studies during the transitional year to determine whether contract carriage rates could be continued beyond the transitional period without adverse impacts on other gas customers or on the integrity of the gas distribution systems.

15 1.15 These studies, which have been carried out, considered the impact of contract carriage on the cost allocation and rate design practices of the Ontario LDCs and surveyed the requirements of industrial gas users in Ontario.

16 1.16 Since the Interim Decision, numerous contract carriage agreements and CMP agreements have been approved on an interim basis by the Board with and without public hearings. Buy/Sell agreements have also been approved by the Board.

17 1.17 In May 1986 the NEB released its decision on the availability of transportation services on the TCPL system (RH- 5-85).

18 1.18 In that Decision changes were made to the tariffs of TCPL that would enhance access to the pipeline for volumes of natural gas purchased directly from producers by end-users. The displacement proviso in TCPL's transportation toll schedules, which prevented direct purchasers from obtaining transportation services when those direct purchasers would displace volumes previously supplied by TCPL, was removed. In addition, the NEB determined that the duplication of demand charges paid by direct purchasers is inappropriate (the question of demand charges is further discussed in Chapter 5).

19 1.19 The NEB's decision was appealed by TCPL. On November 14, 1986, the Federal Court of Appeal issued its Decision in this matter which confirmed the jurisdiction of the NEB to implement its Decision in RH-5-85.

20 1.20 Pursuant to the Agreement, an impartial Pipeline Review Panel (the Panel) was appointed to carry out a review of the role and operations of interprovincial and international pipelines engaged in the buying, selling and transmission of gas. The Panel, in its Report submitted on July 10, 1986, found that market sensitive pricing is feasible for both government and industry by November 1, 1986.

21 1.21 The Panel also made recommendations supporting the sanctity of contracts and endorsing contract renegotiation. It recommended that the marketing function of pipeline companies be separated from the provision of transmission services. Support was also expressed for the availability of the option to bypass the LDCs in the absence of reasonably competitive alternatives, subject to the approval of the provincial regulatory authority.

22 1.22 Revised pricing agreements between the system producers, TCPL and the LDCs in Ontario and Quebec were reached in September 1986. The new agreements provide for a variety of discounts in the price of natural gas. These discounts are said to allow the distributors to compete more effectively in the gas markets serving large volume commercial and industrial customers. Other Decisions of the OEB deal with these proposed pricing arrangements.

Procedural Orders

23 1.23 On July 24, 1986 Procedural Orders - 1, as to how the matter would proceed and what issues should be raised, were issued to each of Consumers', ICG and Union. Procedural Order - 2, issued July 24, 1986, provided for the combining of the three hearings to consider the elements of final contract carriage arrangements which are common to the three distributors.

24 1.24 On August 21, 1986 the Board issued Procedural Order - 3 requiring that the factual and legal issues concerning bypass be heard and argued as the first issue of the hearing and that all the other issues raised in Procedural Orders - 1 be dealt with after the bypass issue had been completed.

25 1.25 On September 16, 1986 the Board issued Procedural Order - 4 to extend the time originally provided for receipt of Notices of Intervention.

26 1.26 On September 19, 1986 the Board issued Procedural Order - 5 to ensure that Cyanamid Canada Inc.'s (Cyanamid's), CCPI's and TCPL's witnesses would appear to give testimony with respect to the bypass issue.

The Bypass Portion of the Main Hearing

27 1.27 As indicated earlier, the bypass portion of the Main Hearing commenced on September 22, 1986. It lasted for thirteen days ending on Wednesday, October 8, 1986. The Main Hearing reconvened on November 12, 1986 to consider the remaining matters. It is ongoing as of the date of this Decision.

28 1.28 During the bypass portion of the hearing, one thousand eight hundred and fifteen (1,815) pages of transcript were taken. Twenty witnesses gave testimony before the Board including witnesses from Cyanamid, CCPI and TCPL, who were directed by the Board to appear and give testimony pursuant to summons issued by the Board. Other witnesses represented Consumers', ICG, Union, Polysar Limited (Polysar), Northridge Petroleum Marketing, Inc. (Northridge), Canadian Gas Association (CGA) and an independent consultant engaged by the Board to carry out part of the intensive study.

29 1.29 The following is a list of the participants in the hearing:

Special Counsel on behalf of Board staff

J.A. Campion

Distributors

The Consumers' Gas Company Ltd.

R.S. Paddon, Q.C.

ICG Utilities (Ontario) Ltd

J.M. Roland, O.C.

Union Gas Limited

B.H. Kellock, Q.C.

D. Sulman

E.J.B. Hore

Associations

Ontario Association of Physical Plant Administrators

H. Arndt

Ontario Hospital Association

J. Platt

Industrial Gas Users Association

P.C.P. Thompson, Q.C.

Independent Petroleum Association of Canada

A. Hollingsworth

Canadian Gas Association

R.J. Howe

Canadian Petroleum Association

A.L. McLarty, Q.C.

Residential Apartment Association (Jeffrey Kerbel)

A. Schwartz

G. Grierson

Other Intervenors

Alberta Petroleum Marketing Commission

W.M. Smith

Allied Chemical

M. Peterson

K. McFarland

ATCOR LTD.

M. Hopkins

M. Kay

Canadian Gypsum Company, Ltd.

D. Gibson

C-I-L Inc.

P. Jackson

R. van Banning

City of Kitchener

J.A. Ryder, Q.C

Consoligas Management Ltd.

S. McAllister

Cyanamid Canada Inc. and Cyanamid Canada Pipeline Inc.

E.A. Goodman, O.C.

J. Ryan

R. Storrey

Dow Chemical Canada Inc.

L. Ricchetti

J. Sibley

Eastern Natural Gas Management Ltd.

W. Zboroluk

Energy Probe

G. Watkins

K. McLeod

Federation of Northern Ontario Municipalities

B. Cameron

Great Lakes Forest Products

C. Bredt

J. Davies

Gulf Canada Corporation

J. Nozick

Imperial Oil Limited-Esso Resources Canada

J. Hughes

Inco Limited

T.W. Leishman

Nitrochem Inc.

R. van Banning

P. Jackson

Northridge Petroleum Marketing, Inc.

M. Hopkins

M. Kay

Ontario Hydro

C.S. Stevenson

Pan Alberta Gas Ltd.

T.J. Ebbels

Polysar Limited

J.H. Francis, Q.C.

G.P. Sadvari

Rio Algom Limited

S. Koskie

Shell Canada Limited

L. Zaidler

P. Walker

TransCanada PipeLines Limited

M. Brown

Urban Development Institute-Apartment Group and Certain Named Industrial Gas Users

S. Kawalec

30 1.30 The following is a list of witnesses who appeared at the hearing.

Cyanamid Canada Pipeline Inc./Cyanamid Canada Inc.

J.D. Day	President (CCPI); General Manager, Plant Food Division (Cyanamid)
H.C. Cox	Manager, Administrative Services (Cyanamid)
H.D. Dawson	Manager, Engineering Main- tenance and Utilities (Cyanamid)

TransCanada PipeLines Limited

I.R. Feldman	Manager, Facilities Plan- ning
I.R. Cameron	Manager, Regulatory Admin- istration
F.R. Wigle	Manager, Domestic Trans- portation

Northridge Petroleum Marketing, Inc.

D.W. Minion	Chairman
R.D. Hall	Vice President of D. W. Minion Consultants

The Consumers' Gas Company Ltd.

F.D. Rewbotham	Director, Rates
J.R. Hamilton	Assistant to Vice President Marketing
K.A. Walker	Director, Financial Planning and Regulation

Union Gas Limited

W.G. James	Manager, Facilities Planning
G.D. Black	Manager, Gas Supply
W.J. Cooper	Senior Vice President, Marketing and Supply

ICG Utilities (Ontario) Ltd.

H.E. Andrews	Vice President Finance, Regulatory Affairs
D.E. Gibbons	Director, Rate Administration

Polysar Limited

R.G. Drummond	Purchasing Manager, Materials and Energy
R.J. Hunt	Purchasing Specialist, Energy

Canadian Gas Association

I.C. MacNabb	President
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Special Counsel

S. Chown	Independent Consultant
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Significance of Natural Gas to Ontario's Economy

31 1.31 Natural gas is the dominant non-transportation fuel in Ontario, satisfying forty-four percent of the Province's "off the road" energy needs. Nearly sixty percent of Ontario's households are currently heated with natural gas. Fifty-four percent of the Province's commercial and institutional sectors' energy demands are met by natural gas. Ontario's industries account for forty-three percent of the Province's total energy consumption. Natural gas provides thirty percent of Ontario's industrial fuel and energy related feedstock requirements, compared with oil and coal which provide twenty-five percent and twenty-one percent, respectively.

32 1.32 Healthy economic growth and employment depend on the competitiveness of the Province's resources, manufacturing and high-technology industries in domestic and international markets. Energy intensive industries, where energy costs range from seventeen percent to eighty percent of the cost of manufacturing, provide twenty percent of the Province's manufacturing jobs and output. When taken in total, Ontario's resource-based and manufacturing industries account for almost forty percent of the economic output and provide three out of every ten jobs in the Province. The pricing of gas and the health of the Ontario LDCs is of tremendous significance to the well-being of the Province.

33 1.33 The availability of gas supplies is a significant factor in determining industrial plant sites. Ontario's established natural gas distribution system and rate schedules currently allow industries to consider remote locations and thereby bolster the Province's regional development aspirations.

34 1.34 Some of the Province's industries, such as the fertilizer industry, are inextricably tied to natural gas as a raw material. Such "feedstock" uses account for 8.3 percent of the total industrial demand for gas in Ontario. As much as forty percent of the industrial use of gas as a fuel is in "dual-fired" facilities where users can switch between an alternate fuel and gas at short notice. To maintain its share of the Ontario industrial fuel market, natural gas supply and pricing must remain competitive with alternative domestic energy forms and in line with gas and fuel costs in other competing manufacturing centres, particularly in the United States.

35 1.35 Ontario's demand for natural gas represents thirty-three percent of the total Canadian use and twenty-four percent of the combined domestic and export markets for Canada's natural gas production. Ontario's natural gas use is therefore important to the western producing provinces.

2. THE TRANSMISSION AND DISTRIBUTION OF NATURAL GAS

Introduction

36 2.1 This Chapter provides a brief summary of the transmission and distribution of natural gas in Canada. It provides the necessary background to understand the custody, control and ownership concerns discussed in Chapter 3.

37 2.2 Natural gas is a hydrocarbon consisting principally of methane. In its pure state, methane is colourless, odourless, tasteless and about half as heavy as air.

38 2.3 Raw natural gas, as it comes from a well, may contain other hydrocarbons such as ethane, propane, butane and pentane. The gas may also contain corrosive sulphur compounds which cause the gas to be sour. The removal of sulphur compounds also improves the burning characteristics of natural gas and enables the recovery of elemental sulphur which can be used to make fertilizer and other products.

39 2.4 Raw natural gas also contains water, other liquids and solid matter such as sand. These non-methane constituents are undesirable both to the pipeline transmission company and to the final customer. If not removed, they would cause excessive wear, corrosion and fouling of transmission and distribution systems, leading to equipment failure. Since the finished product is primarily used as a fuel, these impurities must be removed to avoid causing unreliable and hazardous combustion conditions.

40 2.5 The separation and removal of these unwanted materials is carried out at processing facilities normally located near the gas field. The type of processing facility required depends on the composition of the raw gas, which differs greatly from field to field. Processing will vary in com-

plexity from a simple removal of water vapour to an extensive operation to remove sulphur compounds, non-combustible gases, pentanes and heavier hydrocarbons.

41 2.6 Natural gas was first discovered in Canada near Niagara Falls in 1794. The first natural gas well was completed in Moncton, New Brunswick, in 1859, followed by Port Colborne in 1866, Kamsack, Saskatchewan in 1874 and Ontario's first commercial well near Kingsville in 1889.

42 2.7 Alberta, although destined to add dramatically to the known store of energy in Canada, did not drill its first gas well until 1890. However, the drilling of the Leduc discovery well in 1947 touched off an intensive, widespread and long-term exploration program which has revealed very large reserves of natural gas and oil throughout western and northern Canada.

43 2.8 These discoveries in the late 1940's and early 1950's came at about the same time as advances in the technology of manufacturing large-diameter pipe and its installation over long distances. This conjunction of circumstances made the development of projects for moving gas to major population centres attractive.

Transmission

44 2.9 To address the problem of moving Alberta gas to the distant markets of Eastern Canada, TCPL was incorporated in 1951 by Special Act of Parliament. In 1954, TCPL received permission to remove natural gas from Alberta. It was also granted a permit from the Federal Board of Transport Commissioners to construct a pipeline from Alberta to Quebec. In June, 1956, further legislation was passed by the federal government providing for a Crown corporation to construct the northern Ontario section of the pipeline.

45 2.10 Construction of the initial pipeline system from the Alberta-Saskatchewan border to Quebec was completed in 1958, and the benefits of natural gas were made available to millions of Canadians not previously served. A petrochemical industry which is critically dependent on natural gas as a feedstock has developed as a result. At the same time, opportunities for new export revenue from the sale of natural gas arose.

46 2.11 In 1963, TCPL purchased the northern Ontario section of the pipeline from the Northern Ontario Pipeline Crown Corporation and thus took possession of the entire gas transportation system from Alberta to Quebec.

47 2.12 Most of the natural gas used in Ontario comes from approximately 650 producers in Alberta. The gas is collected and combined from the various producing areas into transmission lines owned principally by NOVA, AN ALBERTA CORPORATION (NOVA) for delivery to long-distance carriers.

48 2.13 Gas for Ontario and other eastern markets leaves Alberta and the NOVA system at Empress Alberta, where it enters the adjacent pipeline facilities of TCPL at Burstall, Saskatchewan.

49 2.14 As gas flows eastward from Alberta, the gas pressure decreases due to friction with the pipe wall. In order to achieve the required flow rates, the gas must be recompressed at compressor stations located along the transmission line at intervals of 80 to 160 kilometres.

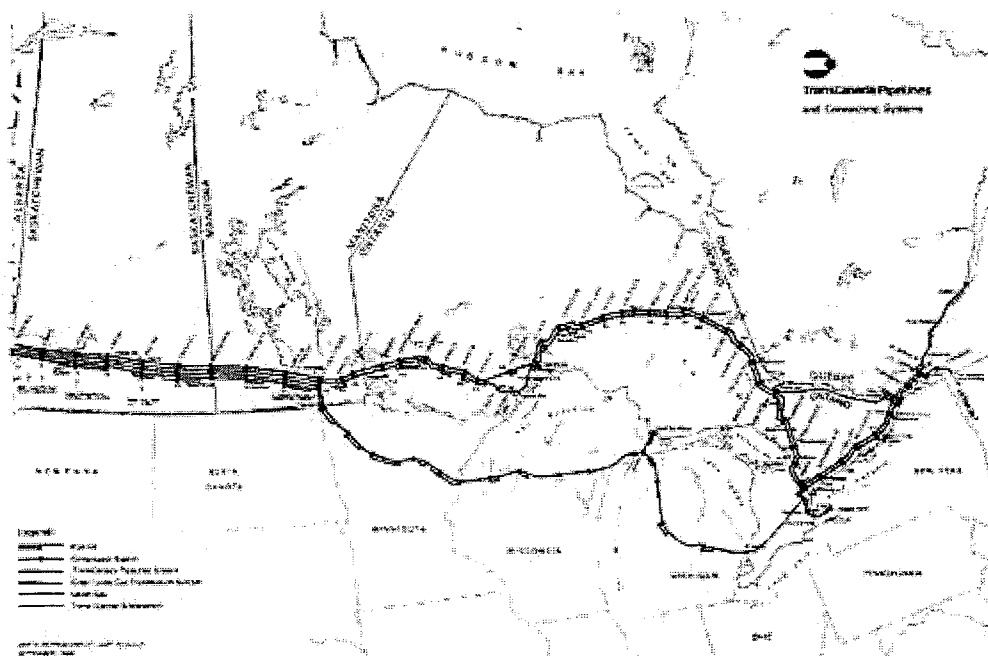
50 2.15 Between Burstall and Winnipeg there are as many as five parallel pipelines and volumes from Alberta are supplemented in Saskatchewan by gas from Saskatchewan Power Corporation, Consolidated Natural Gas Limited and Steelman Gas Limited.

51 2.16 From Winnipeg, two parallel lines move gas into Ontario and Quebec, with portions of a third line also in service in northern Ontario. The northern line branches at North Bay. One branch, the North Bay Shortcut, runs generally east and then south through eastern Ontario, while the other runs south to Toronto. There it branches again, with two lines travelling east along the north shore of Lake Ontario to Montreal while the other skirts west of Toronto and runs south to the Niagara peninsula connecting at the international border with pipelines serving the northeastern United States.

52 2.17 Gas also travels eastward from Winnipeg to markets in southwest Ontario and the mid-western United States through facilities of the Great Lakes Transmission Company (GLTC), which is 50 per cent owned by TCPL.

53 2.18 The GLTC system runs south of Lake Superior and Lake Huron across Minnesota and northern Wisconsin, then south through the state of Michigan with links to Canadian systems at Sault Ste. Marie and Sarnia. Near Sarnia, in Dawn Township, the gas is received by Union and transmitted across southwestern Ontario on its Dawn-Trafalgar transmission pipeline to the Trafalgar Station, near Oakville, where it either rejoins the TCPL pipeline running south to Niagara and east toward Montreal, or connects with the Consumers' distribution system.

54 2.19 The following map shows the TCPL system.



55 2.20 Expansion of the initial pipeline system by TCPL has continued in the form of new pipelines, looplines, additional compressor stations and additional power at existing stations, all to meet the increasing demand for natural gas. The total value of TCPL's assets is now more than \$6 billion.

56 2.21 The present TCPL system extends along a 4,400 kilometre right-of-way consisting of 9,345 kilometres of pipeline and loopline and approximately 795,100 kilowatts of compressor power at 48 compressor stations.

Distribution

57 2.22 There are three major gas distributors in Ontario which together serve approximately 1,500,000 customers: Consumers'; ICG; and Union. Until November 1985 each distributor was permitted to operate as a monopoly both as to the sale of gas and as to the transportation of gas within a given area: Union operates in southwestern Ontario, Consumers' in southern, central, and eastern Ontario, and ICG in northwestern, northern and eastern Ontario.

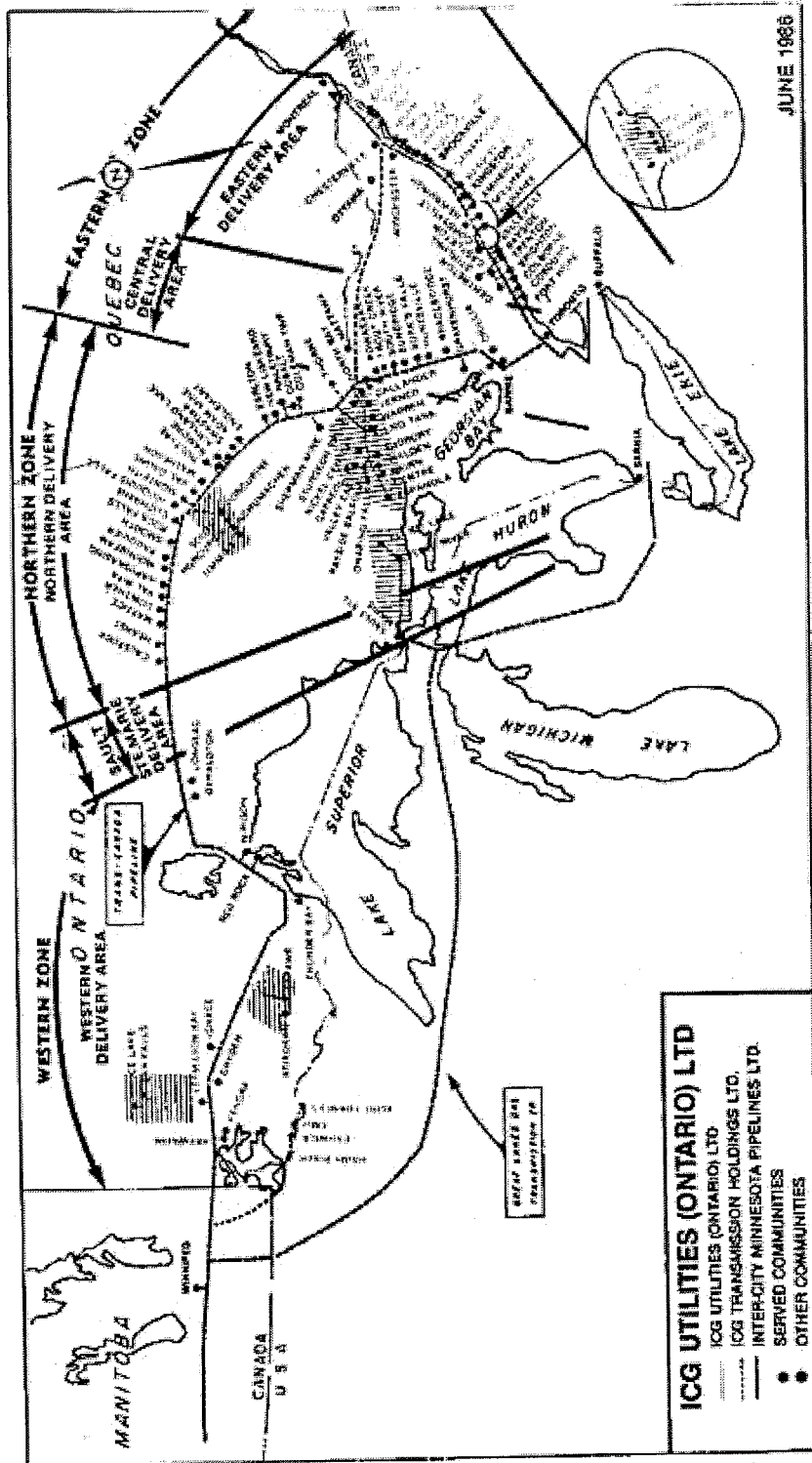
58 2.23 The three major gas distributors in Ontario each have different systems. The unique aspects of each distributor require different approaches to managing variations in demand, particularly during winter peaks.

59 2.24 ICG operates a natural gas distribution system serving 120 communities by way of approximately 5,500 kilometres of pipeline originating at 84 delivery points on the TCPL transmission system. The ICG system essentially consists of a series of laterals off the TCPL pipeline as it crosses Ontario. Much of the system has been in place since the late 1950s and early 1960s. The individual laterals are not interconnected. As noted, ICG serves customers from northwestern to eastern Ontario. ICG's net utility plant is estimated to have an average cost of approximately \$313 million in 1986. ICG projects that in 1986 it will sell approximately 3,100 ¹⁰ m³ of gas and will serve approximately 154,000 customers.

60 2.25 The storage available to ICG is very limited. It contracts with Union for approximately 99.1 ¹⁰ m³ of gas and has its own liquid natural gas storage facility with a capacity of about 14.2 ¹⁰ m³, when converted to gas. This facility and Union's storage are used for winter peaking purposes.

61 2.26 The following map shows ICG's system.

DISTRIBUTION NETWORK



Energy Working For You

BY-PASS UNLIKELY



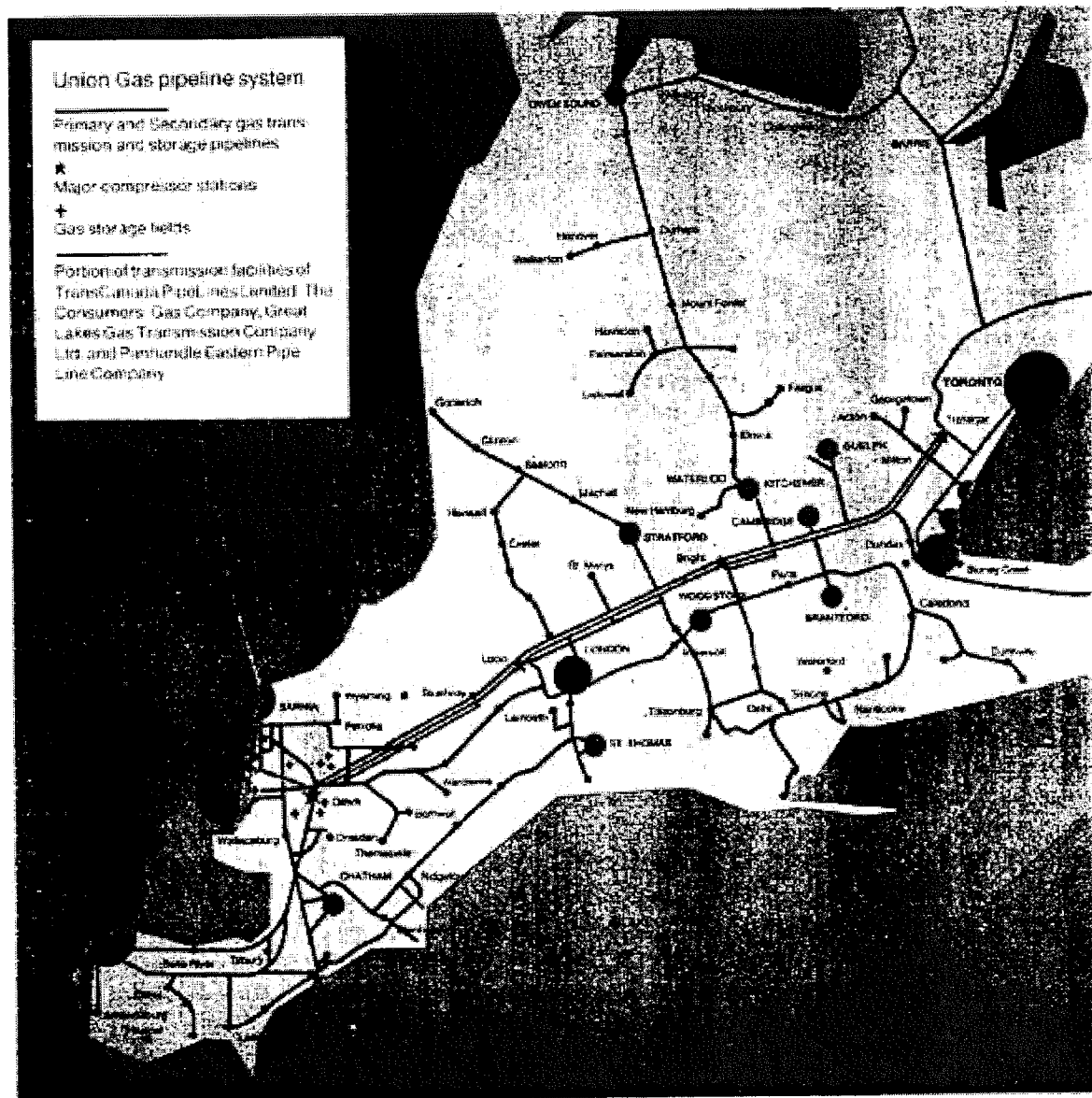
62 2.27 Union operates a fully-integrated gas distribution system employing production, underground storage, transmission and distribution facilities. In its 1987 fiscal year it expects to sell over 7,300 10^6 m^3 of gas to approximately 525,000 customers. Union annual-

ly stores 2,000 10 m of gas for its own use and 63 stores some 650 10⁶ m³ of gas for other utilities. In providing storage and transportation services, Union receives gas from TCPL at both its Dawn and Trafalgar delivery points.

63 2.28 Union's total assets exceeded \$1.3 billion on March 31, 1986 and its net utility plant investment was approximately \$840 million. Union's gathering, storage, transmission and distribution pipelines totalled 18,628 kilometres at March 31, 1986.

64 2.29 The storage made available by Union plays a significant role in enabling TCPL to optimize the use of its delivery system. If Union had not been able to store gas for itself and others, the TCPL delivery system would not be as efficient as it is. Union receives and stores gas in the off-peak period and is then able to use that gas to supplement deliveries in the peak period to its customers which include other utilities such as Consumers', ICG, the City of Kingston and Gaz Metropolitan. The Union system has been in place for over seven decades and has developed to meet Union's needs and those of others, including TCPL. Union is the largest operator of underground storage pools in Ontario.

65 2.30 The following map shows Union's system.



66 2.31 **Consumers'** is Canada's largest natural gas distribution utility serving customers in Ontario, western Quebec and northern New York State. It has existed since the mid-1850s. In 1985, the company had total assets in excess of \$1.6 billion and distributed 9,100⁶ m³ of gas to 821,556 customers through its network of 18,657 kilometres of mains.

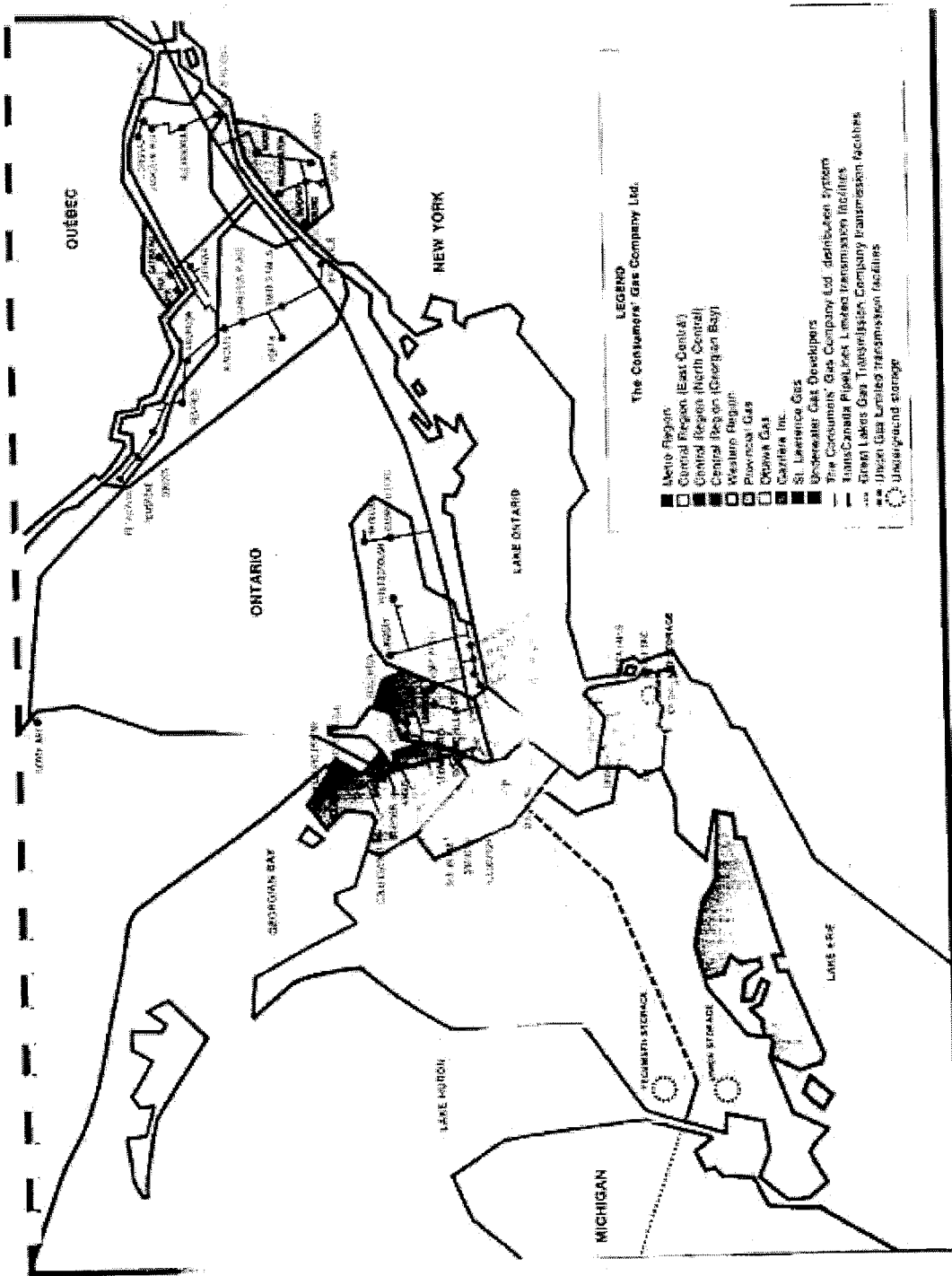
67 2.32 In addition to its regulated gas distribution activities, Consumers' is engaged in:

- * the exploration for and the production of oil and gas, primarily in south-western Ontario;
- * the operation of underground gas storage facilities in Ontario through a subsidiary; and

- * contract well drilling for gas and oil in Ontario and the northeastern United States.

68 2.33 Underground storage located in southwestern Ontario is a key component of Consumers' integrated natural gas transmission and distribution system. Tecumseh Gas Storage Limited (Tecumseh), located in the Sarnia area, provides storage facilities for the Consumers' system. Jointly-owned by Consumers' and Imperial Oil Limited, Tecumseh operates storage reservoirs with a working capacity of 1,670 10^{10} m³. Additional storage capacity of up to 365 10^{10} m³ is secured under long-term agreements with Union. Consumers' also operates two small underground storage reservoirs in the Niagara peninsula, Crowland and Leapfrog, which are used to meet local peak day requirements.

69 2.34 The following map shows Consumers' system.



70 2.35 Consumers', ICG and Union, together with TCPL, essentially provide the complex network of pipelines which serves Ontario with natural gas. In the summer, this network has excess capacity in many of its segments and consequently there are alternative ways in which gas can be routed through the Province, sometimes reversing the normal direction of flow. This flexibility permits each utility to undertake maintenance and construction projects during the off-peak period

of the year while continuing to supply gas. In addition, gas injection into the underground storage pools in south-western Ontario during the summer is facilitated by the ability to transport gas in two directions in the Union line between Dawn and Trafalgar, and certain segments of the TCPL system.

71 2.36 Gas is injected into storage during the summer off-peak period. As winter approaches and demand increases, injection of gas into the storage pools slows and then stops. Once the demand exceeds the limits of the supply agreements between TCPL and the Ontario LDCs gas flows into the distribution system from the underground storage pools. On the peak demand days, the ability of TCPL and the storage pools to meet the demand approaches their limits.

72 2.37 At such times any failure of a pipeline, compressor or valve may threaten significant portions of a LDC's customer base. This is true if the failure occurs anywhere between gas wells in Alberta and the point of use in Ontario. Serious failures have been very rare and when they have occurred, all suppliers who had gas available cooperated to deliver it to those affected.

3. DESCRIPTION OF NATURAL GAS SYSTEMS

Introduction

73 3.1 This Chapter further describes the natural gas pipeline systems, contractual arrangements and jurisdictions involved in the flow of gas from the wellhead in Alberta to the end-user in Ontario. Bypass of the LDC has not yet happened in Ontario although it has in the United States. Only recently has bypass been considered in Ontario. This Chapter distinguishes between the traditional sales service arrangements which currently supply the majority of the Ontario market, contract carriage service which is now available on an interim basis, and bypass which has been proposed but not yet happened. This description is provided to fully describe the custody, control and ownership of gas under each of these three alternatives.

Traditional Sales Service; Physical Flow

74 3.2 Traditional Sales Service involves TCPL purchasing, transporting and supplying gas to the Ontario LDCs for use in Ontario. With a few exceptions this was the case until November 1, 1985. This type of service arrangement still serves most of the Ontario natural gas market.

75 3.3 The physical flow of gas from the producing provinces to markets in Ontario begins at the wellhead. The gas then travels through a series of gathering lines and processing plants to the facilities of NOVA. Generally, the producer or the well operator maintains custody, control and title of the gas through these gathering systems to the interconnection with NOVA.

76 3.4 An Ontario end-user may own the production area and it, or others, may act as shippers on the Alberta gathering systems. In this situation the end-user or the shipper will have title to the gas as it moves through the gathering systems.

77 3.5 At the interconnect of the NOVA system and the field gathering systems, TCPL or its agent takes title to the gas it purchases. Custody and control of the gas transfers to NOVA. NOVA is essentially a much larger gathering system which interconnects with the TCPL system. NOVA's rates are subject to its own Act, NOVA, An Alberta Corporation Act, which provides for regulation by exception by the Alberta Public Utilities Board.

78 3.6 Gas then flows through NOVA's system to the Empress station at the Alberta border, where TCPL's system interconnects with the NOVA system. Custody and control of the gas then

shift to TCPL which continues to hold title to the gas it has purchased. The gas then flows east-ward through TCPL's facilities. Gas reaches Ontario either through TCPL's Northern Line or through the Great Lakes System which is partly owned by TCPL. The TCPL system is regulated by the NEB and the portion of the Great Lakes System within the U.S.A. is regulated by the Federal Energy Regulatory Commission. The gas that flows through TCPL's Northern Line can be delivered to Ontario through a number of interconnection points with the Ontario LDCs. The gas flowing through the Great Lakes System is delivered to Ontario at Union's Dawn Station.

79 3.7 Custody, control, and title to the gas typically shifts to the LDC at the delivery point where the TCPL system connects with the LDC system. The LDC may further transfer custody and control to one of the storage or transmission functions at Dawn such as Tecumseh Gas Storage and/or Union Storage and/or the Union transmission system. TCPL retains title to gas that it has contracted with Union to carry through Union's Dawn/Trafalgar transmission system for delivery to LDCs at delivery points in Ontario and Quebec.

80 3.8 The LDC retains title to gas in storage but the custody and control may shift to the storage company and/or transmitter. For example, under Consumers' storage contracts with Union, Consumers' takes title to the gas at Dawn but Union accepts custody and control of the gas for storage and transmission to a delivery point on Consumers' system. The OEB regulates the price paid for the storage and transmission within Ontario.

81 3.9 Gas that is sold to the LDCs' passes through the distribution system and is distributed to the sales customers. Title, custody and control of the gas remain with the distributor until the gas is delivered to the customer's plant gate or meter. Title, custody and control then shift to the customer. The LDC facilities and rates are subject to the jurisdiction of the OEB.

Traditional Sales Service; Contractual Obligations

82 3.10 The gas flows from west to east under a number of contractual arrangements. TCPL pays a charge to its producers which includes the commodity cost of the gas at the wellhead and the cost of transporting the gas through the Province of Alberta to the Empress station.

83 3.11 The Ontario LDCs have gas supply contracts with TCPL. The price paid by the LDCs reflects the price paid by TCPL to its producers and the cost of transportation on TCPL's system. Under the traditional sales service arrangement, TCPL has provided both the transmission and merchant functions.

84 3.12 Traditional sales service end-users purchase gas from the LDC within the terms of established rate schedules, governed by the OEB. The LDC fulfills the merchant function as well as the local transportation function.

85 3.13 The flow of gas is initiated by the LDC when it nominates the amount of gas it wishes to take daily under its demand contracts with TCPL. Typically the nomination stands until notice is given to change it.

Differences Between Traditional Sales Service and Contract Carriage Service in Ontario

86 3.14 Since November 1, 1985 the Ontario end-user has been able to directly purchase natural gas from the West. The resulting arrangements have changed the way in which some gas reaches Ontario end-users.

87 3.15 Under the traditional sales service arrangement, TCPL holds all regulatory approvals related to the movement of its gas in Alberta and on its own system under the jurisdiction of the NEB. The LDC holds all franchise and other orders that are required within the Province of Ontario.

88 3.16 Under contract carriage the customer or its agents must obtain removal permits and exemption orders in Alberta. Pricing orders and a transportation order to require contract carriage on TCPL's system must be obtained from the NEB. The contract carriage arrangement within the Ontario LDC's franchise area is subject to OEB approval.

89 3.17 The physical flow of gas is essentially the same for the traditional sales service and contract carriage from the wellhead to the burner tip. NOVA maintains custody and control in Alberta. The important difference is the ownership of the gas. In the case of contract carriage, title to the gas while in the NOVA system no longer rests with TCPL but is either with the end-user, its agent or the producer.

90 3.18 East of the NOVA/TCPL interconnect point (Empress) the actual physical transportation of gas on the TCPL system on behalf of a direct purchase customer is notional only. In the case of direct purchase the actual gas transported is not owned by the direct purchaser or its agent during the period of transportation in TCPL's system. TCPL owns all of the line-pack gas in its system regardless of direct purchase.

91 3.19 Even though natural gas moves at approximately 30 km/hr which would equate to approximately 4.5 days for gas to move from Alberta to Ontario, through displacement, gas arrives in Ontario instantaneously with its input to the system in Alberta. That is, gas is injected into the TCPL system in Alberta and swapped with an equal amount of gas that is withdrawn from TCPL's line pack gas in Ontario.

92 3.20 The charges paid by the end-user to TCPL for transportation are in accordance with NEB approved rates but are based on notional transportation of the gas. As a result, the contractual relationship between TCPL and the direct purchaser does not match the actual physical operation of the system. The rate charged by TCPL is for transportation of the direct purchaser's gas but physically, only TCPL's gas is transported. However, the customer pays a price to TCPL that is based on the presumption that the gas it owns has actually travelled from the Alberta end on TCPL's system as opposed to having been instantaneously swapped.

93 3.21 Under a contract carriage agreement, when the gas passes beyond the TCPL metering station and into the LDC system travelling to the end-user's plant, ownership of the gas varies according to load balancing arrangements. Load balancing occurs when the LDC provides make-up supply or takes excess deliveries to accommodate fluctuations in the demands of the end-user. If the end-user requires all the gas delivered to the TCPL metering station, then the title to the gas delivered to the end-user will remain with the end-user while carried by the LDC. Custody will be with the LDC as it transports gas to the plant gate at which time custody will be transferred to the end-user. Again, the transportation is notional. The LDC owns its systems line pack gas and provides instantaneous deliveries to end-users. If the end-user requires gas in excess of the amount transported for the end-user by TCPL and the LDC then this supply will be supplemented by gas to which the LDC has title, custody and control up to the end-user's plant gate.

94 3.22 If the end-user delivers to the TCPL metering station more gas than it requires then gas not required by the end-user is purchased by the LDC, title changes and the gas is commingled as part of the LDC's integrated gas supply. Only the amount the end-user requires is transported on the

LDC system to the end-user's plant gate, with the end-user holding title. That gas is in the LDC's custody.

95 3.23 Unlike Union and Consumers' the ICG system presently does not provide load balancing to contract carriage customers. Therefore, title is not an issue. The end-user simply retains title and uses whatever gas is delivered to the TCPL metering station on its behalf. The nomination at Empress must very closely match the consumption at the end-user's plant. The nominations must vary with consumption.

Differences Between Traditional Sales Service and Gas Acquired Through a Bypass Facility

96 3.24 A bypass arrangement is similar to contract carriage as described above in terms of custody, control and regulatory approval, with respect to the movement of gas from the well-head to the delivery interconnection point of the bypasser.

97 3.25 However, all conditions with respect to title under a bypass arrangement may not be the same as under contract carriage, depending upon the relationship of the end-user to the bypasser. The typical bypass envisions an end-user creating a separate company to operate the bypass line between the TCPL transmission line and the end-user's plant. Legally there would be two separate entities but they could be so closely related that there might be no apparent difference between the end-user and the bypasser. If a separate bypasser is established it would typically hold title to the gas in a manner similar to the end-user under contract carriage. At the TCPL delivery point custody would transfer from TCPL to the bypasser rather than to the LDC as under traditional sales service and contract carriage arrangements. The bypasser holding title to the gas and owning the pipe along which the gas flows, delivers the gas to the plant gate. At this point, depending upon the legal relationship between the bypasser and the end-user, custody and title would be transferred to the end-user.

4. THE PUBLIC UTILITY CONCEPT AND THE PUBLIC INTEREST

Introduction

98 4.1 This Chapter considers the concept of public utility regulation and its relationship to the public interest. When considering a question such as bypass, a review of the fundamental principles that underlie regulation is of assistance. The Ontario public interest underlies not only the rationale for regulation but is an integral part of the OEB's current mandate.

The Public Utility Concept

99 4.2 Public utility regulation has been premised on the notion that, because of the substantial capital investment required to build, maintain and operate the natural gas storage, transmission and distribution systems in Ontario, it is a less expensive and more efficient use of society's economic resources to allow only one company to operate within a defined area. Direct competition between two or more natural gas utilities for such services would not produce an efficient allocation of economic resources. The monopolistic nature of the utility has been encouraged through statutory authority. This situation is common throughout North America.

100 4.3 Although traditionally considered to be a single monopoly, natural gas distribution has been essentially two monopolies. These two monopolies are the transportation of gas and the sale of gas. The existence of contract carriage arrangements has reduced in part the monopoly to sell. Bypass, if generally allowed, would reduce the monopoly to transport.

101 4.4 CGA submitted that the concept of bypass is inconsistent with the fundamentals of utility economics and with the position which provincial regulatory bodies traditionally have taken to the regulation of distribution utility service and rates.

102 4.5 TCPL submitted that a duplication of facilities cannot be in the public interest. Union extends this argument further in its pre-filed evidence where it states that there will be no advantage to remaining customers of the LDCs resulting from bypass. Union indicated, in argument, that the primary reason why end-users consider bypass is the economic advantage resulting directly from the end-users' proximity to the TCPL system. Union argued that bypass is a matter of geography, accidental or otherwise, which enables an end-user to reap an economic benefit at the expense of the LDC's other customers. Union argued that bypass would undermine the public utility concept and therefore is not in the public interest.

103 4.6 Special Counsel strongly supported dealing with each bypass application on its own merits and argued that bypass was not inconsistent with the public utility concept and not necessarily inconsistent with the Ontario public interest.

104 4.7 The joint monopoly to transport and sell has benefitted Ontario. The LDCs have avoided unnecessary and inefficient duplication of physical assets. The monopoly to transport, in particular, removes unnecessary duplication of physical assets.

105 4.8 The thrust of Special Counsel's argument is that bypass is a rate-making matter. Although benefits have accrued from maintaining these monopolies, it is not necessarily harmful to dismantle them as long as the rates and charges then approved by the OEB are set in a manner that captures for the remaining customers sufficient revenue to compensate them (through resultant lower rates) for any lost benefits.

106 4.9 Clearly, the setting of natural gas sales and transportation rates is within the jurisdiction of the OEB. As such, if the OEB approves a bypass application it can, if appropriate in the specific circumstance, make adjustments to rate levels (see Chapter 7 for additional discussion). The OEB is the only Board with jurisdiction to consider and protect the financial integrity of the existing distribution systems.

107 4.10 It is generally accepted that because of the inherent ability of a monopoly to impose unreasonably high prices upon consumers, monopolies have been regulated by governments. Regulation is an attempt to achieve the efficiencies that are normally produced by competition. Both Special Counsel and IGUA referred to regulation as an attempt to ensure that customers receive a quality of service and a level of rates that they would receive if competition were present. Special Counsel submitted that for the regulatory scheme to work, and not produce the discriminatory results that regulation was created to avoid, cost and cost causality must be recognized in the rates which the utility is allowed to charge.

108 4.11 Proper regulation does not permit the utility to have rates that unduly discriminate among customers. Undue discrimination is avoided by charging substantially the same price for substantially the same service to different customers with similar costs to serve.

109 4.12 Special Counsel and ICG discussed the concept of a social contract. They argued that regulation, in effect, involves a social contract. The Board accepted this social contract concept in its Report respecting the Union/Unicorp matter (E.B.R.L.G. 28). According to this social contract theory, the regulated firm agrees to charge just and reasonable prices and to forego windfall profits.

The utility further agrees to accept an obligation to serve all customers who want service, providing that it is economically viable and in the public interest to do so. In return, the regulatory authority agrees to set rates that permit the utility the opportunity to earn a fair return. The regulator must balance these competing interests of the customer and the shareholder in the public interest.

110 4.13 In the regulation of natural gas in Ontario there are at least four discrete yet inter-related mechanisms through which the OEB grants monopolistic rights to a LDC and authorizes the rates that the LDC must charge. Special Counsel and ICG submitted that to remove any of those four elements from the exclusive jurisdiction of a single regulatory authority could violate the social contract, but more importantly may impair the ability of the regulator to assess the costs of the lost efficiency occasioned by the breach of the monopoly.

111 4.14 The four discrete yet inter-related mechanisms are as follows:

- a) A utility must have a franchise to serve a geographic area. The franchise is conferred by a municipality and approved by the OEB. Because the division of an area into the most logical units for gas service may not correspond to the existing municipal boundaries, franchises are not always granted on an exclusive basis.
- b) Before a utility may build a transmission line that is within Ontario, leave to construct that line must be granted by the OEB. The impact on the LDC and other public interest concerns are factors in the Board's decision to grant such leave.
- c) A Certificate of Public Convenience and Necessity must be granted before a utility can construct distribution plant required to serve or supply customers. Certificates may be granted for all or only part of a franchise area and to date have been awarded on an exclusive basis. It is, therefore, through the awarding of these certificates that the exclusive and monopolistic nature of the utilities has been maintained.
- d) Having been granted the right to serve a group of customers, the rates which a utility can charge these customers are fixed by the OEB in a rate hearing. It is in this hearing that there is a financial balancing of the interest of the shareholders and the customers.

112 4.15 The Board agrees with Special Counsel and ICG that there is a continuum of regulatory approval from the granting of a franchise through to the setting of rates. It shares their concern that if, as a result of jurisdictional change, more than one regulatory authority can grant leave to construct approval or Certificates of Public Convenience and Necessity for the same operational activities, then the public interest in Ontario may be adversely affected. The Ontario regulator will lose the ability to act to minimize cost and the ability to assess the lost efficiency to those causing and benefitting from the action(s) leading to the lost efficiency. The public interest test is crucial at this point.

113 4.16 As noted, the question of this Board's jurisdiction over bypass has been challenged. The Board believes it has exclusive jurisdiction over bypass and is of the opinion that Ontario, histori-

cally and on a purely practical level, ought to maintain the jurisdiction to regulate all aspects of distribution activity in Ontario so that the impact of bypass on the public interest and the whole regulatory system can be controlled.

The Public Interest

114 4.17 The public utility concept is premised on the protection of the public interest and must be consistent with it.

115 4.18 All parties who argued in this proceeding used the term public interest. Some have used it in a much broader context than others. It is essential to understand what the public interest is and how it is being used in this instance.

116 4.19 The OEB has addressed the question of the public interest directly in six hearings. The hearings were:

- a) An attempt by Consumers' to acquire shares of Union (E.B.O. 36);
- b) An application by Union to construct a 42-inch pipeline (F.B.L.O. 206);
- c) An application by Northern and Central Gas Corporation Ltd. (now ICG) for rate changes (E.B.R.O. 399);
- d) An application by Inter-City Gas Corporation and associated companies to acquire the shares of Northern and Central Gas Corporation (F.B.O. 118/119);
- e) A reference from the Lieutenant Governor Council respecting Unicorp Canada Corporation/Union Enterprises Ltd. (E.B.R.L.G. 28); and
- f) An application by Gulf Canada Corporation respecting the proposed transfer of shares of Consumers' from Hiram Walker Resources Ltd. to HWR Holdings Inc. and 685515 Ontario Inc. (E.B.R.L.G. 30).

117 4.20 In the Inter-City Gas Corporation Report (E.B.O. 118/119) the Board noted that the public interest will consistently take the form of the facts to which it is applied, moulding itself to the specific use to which it is being put.

118 4.21 In the Union/Unicorp report (E.B.R.L.G. 28) the Board said:

In broad terms, the public interest will be satisfied by an undertaking or action that will result over time in an enhancement of the economic or general welfare of the public. The public interest can be satisfied without improving the economic or general welfare of every member or society; indeed, it is possible that the public interest in general can be satisfied even if some members of society are economically damaged. Essentially, one might interpret the public interest as the best possible accommodation of conflicting interests.

119 4.22 Mr. Justice Keith in reviewing the history and origins of the present Ontario Energy Board Act stated:

"In my view the statute makes it crystal clear that all matters relating to or incidental to the production, distribution, transmission or storage of natural gas ... are under the exclusive jurisdiction of the Ontario Energy Board..."

"These are all matters that are to be considered in the light of the general public interest and not local or parochial interests. The words "in the public interest" ... which I have quoted would seem to leave no room for doubt that it is the broad public interest that must be served." (Union Gas Limited v. Township of Dawn, (1977) 76 D.L.R.

120 4.23 In the Union/Unicorp reference the OEB adopted a very broad definition of the public interest. This broad definition of the public interest was challenged by Unicorp Canada Corporation and upheld by the Divisional Court of the Supreme Court of Ontario. In his endorsement on the record dated March 14, 1985 Mr. Justice Henry said:

"A portion of the preamble to the Order in Council which refers the question to the Ontario Energy Board reads as follows: "Whereas a number of major customers of UGL (Union Gas Limited) and a number of municipalities from which UGL holds service franchises, have expressed considerable concern and are seeking assurances that their interest in the public interest in public service and reliability will not be jeopardized by the proposed transaction:" Our interpretation of that recital is that it expresses the concern of the Lieutenant Governor in Council in relation to the general public interest that price, service and reliability will not be jeopardized by the proposed transactions. We regard that principle as fundamental to the whole enquiry."

121 4.24 In the Union/Unicorp matter the Board defined the public interest to include:

"... it may be defined in part to be the benefits and detriments to:

- a) Present and potential shareholders of Enterprises and Union Gas;
- b) The customers, Ontario communities and industries served by Union Gas;
- c) Investors in Enterprises and Union Gas other than the share-holders;
- d) Other persons in the Province of Ontario who would benefit from secure natural gas transmission, storage and distribution at a reasonable cost; and
- e) The public interest generally.

122 4.25 The public potentially impacted by the decision to allow/not allow bypass generally, or individually are as follows:

- a) The specific end-user(s) and its (their) affiliate(s);
- b) The utility and its shareholders both current and potential;
- c) The other customers of the utility, Ontario communities and industries served;
- d) The non-shareholder investors in the utility?

- e) The Ontario public interest generally;
- f) The interprovincial transmission utility (TCPL is the only such utility); and
- g) The supplier(s)/producer(s).

123 4.26 The question of whether to allow/disallow any individual bypass or bypass generally could and would have varying degrees of impact on the various elements of the Ontario public interest. It is therefore necessary that a broad definition of the public interest be used to ensure that all the potentially affected parties are considered and to ensure the outcome which provides the greatest benefits and causes the least cost to all of the competing interests.

124 4.27 If transportation rates are set by the OEB so that it is economically attractive for the end-user to consume the same volume of gas, regard-less of bypass, then the producer(s)/supplier(s) and TCPL would not be materially impacted by the decision to allow/disallow bypass. This is because the same volume of gas would be sold, transported and consumed. The economic circumstances of the producer(s)/supplier (s) and TCPL do not change if a bypass application is allowed or not allowed, given this assumption.

125 4.28 This assumption concerning the impact on TCPL and the supplier(s)/producer(s) requires that the OEB, which approves utility rates, do so on an appropriate economic basis. It is in the interest of the Ontario public to have available significant quantities of gas at reasonable, competitive prices.

126 4.29 The current proceeding on contract carriage arrangements, still in progress, is considering what other rate-making changes will be necessary to allow reasonable transportation service to be widely available in Ontario. Rate changes may be necessary if gas service is to be economically attractive for the end-user, without bypass. The burden falling to others must also be considered.

127 4.30 The major question that underlies the entire discussion on bypass is how well is regulation working in determining utility prices that are appropriate for the changing circumstances in Ontario. Bypass as a circumstance is economically motivated and likely unnecessary if rates are properly determined using sound regulatory principles. The implementation of final transportation rates on the LDC systems is under review by the Board.

Conclusion

128 4.31 Bypass is a question of competing economic benefits. Potential rate-making solutions must be considered as alternatives to ensure that the public interest is fully protected. Historically, only the OEB has exercised this jurisdiction. Loss of its sole mandate over any of the competing distribution alternatives could result in failure to deal appropriately with the broad public interest. The Board, later in this Decision confirms its exclusive jurisdiction to decide the bypass question in Ontario. This Board is in the best position to properly balance the competing elements of the public interest in regard to bypass.

5. DESCRIPTION OF BYPASS

Introduction

129 5.1 This Chapter considers the rationale for by-pass, describes the typical form of bypass and considers the possible economic impact of by-pass if allowed.

Definition of Bypass

130 5.2 Bypass in this Decision refers to the situation where an end-user in Ontario receives gas directly from either the transmission facilities of TCPL or an international pipeline company and thus does not use the facilities of the LDC which currently is the franchised distributor. Bypass, as the term is used herein, involves the total avoidance of the LDC system for the transportation of gas. The acquisition of natural gas through a direct purchase arrangement which requires transportation service from the LDC, is not a bypass in the sense the term is used in this Decision.

Examples of Bypass

131 5.3 There are at least three examples of bypass:

- * direct connection of the end-user to TCPL's transmission line through pipeline facilities constructed or acquired by the end-user or an affiliate;
- * extension by TCPL of its pipeline facilities directly to the end-user; and
- * direct connection to an international transmission pipeline company thereby "bypassing" the LDC and/or TCPL and NOVA.

132 5.4 In most but not all instances of bypass, facilities are duplicated. The LDCs argue that they have a reasonable expectation of serving all incremental customers where gas will be moved in their franchise areas. In the case of an incremental customer there may or may not be duplication.

133 5.5 Most, but not all of the evidence in the hearing, focussed on the type of bypass outlined in the first example. This bypass example exhibited many characteristics that were described by witnesses as typical of bypass. It is also the type of bypass contemplated by Cyanamid in CCPI's application to the NEB and as such is currently the only existing concrete example of how a bypass would likely operate. The specifics of this typical bypass are outlined in more detail later in this Chapter.

134 5.6 In any of the four examples noted, piggybacking could arise. Piggybacking is the grouping of two or more end-users for the purpose of sharing the costs and/or use of a bypass pipeline. This approach, although not yet proposed in Ontario is quite possible and the Board must consider its potential in its deliberations.

History Leading To Bypass

135 5.7 From the 1950s until 1985, TCPL's primary role was to acquire and transport western natural gas to Eastern Canada and wholesale it to LDCs which were the sole retailers or suppliers of natural gas in their respective franchise areas.

136 5.8 On October 31, 1985, the Agreement made available the option to eastern end-users to purchase gas directly from western suppliers. Now, both TCPL and the LDC will transport gas to allow it to move from Western Canada to the end-user's plant in Ontario.

Rationale for Bypass

137 5.9 Once end-users could exercise some control over the cost of the commodity separately from the cost of the transportation of the commodity, the motivation for bypass began. End-users could compare the two costs with the costs of alternative ways of acquiring their energy requirements.

138 5.10 Bypass is an end-user specific consideration. The end-user's desire for lower transportation costs for its natural gas requirements is the main motivating force driving it to consider bypass.

139 5.11 An end-user can now compare the actual cost it would incur to transport its gas requirements via a bypass pipeline to its end-use location against the transportation rate it now pays to the LDC. To the extent that there is a significant difference between these costs, savings can be achieved for the end-user through the use of the cheaper alternative. For example, Cyanamid estimates that its costs if it by-passed Consumers' distribution system would be approximately five to seven cents per mcf as compared to Consumers' current margin over average gas cost of approximately twenty-five cents per mcf. The Consumers' transportation rate is under review and this twenty-five cents per mcf figure relates to rates which are interim only.

140 5.12 One reason for the difference between the cost of these two alternatives is that the LDC's current rates are not strictly cost-based; rather they are cost-related. Rates that are cost-based are designed to recover exactly the cost allocated to the class (in the cost allocations approved by the Board for rate-setting) without any explicit risk or other considerations. Cost-related rates are adjusted for risk and non-cost factors such as stability and value of service which can not be explicitly captured in the cost allocations. The term overcontribution is used to describe the excess of revenue from a customer class over the cost allocated to that customer class. Current rates are cost-related and are based upon a class average cost allocation, whereas the cost resulting from consideration of bypass is customer specific.

141 5.13 Other factors that could lead an end-user to consider bypass are as follows:

- * Current rates do not explicitly take into account the distance to the main TCPL transmission line from the end-user's facility. The costs arising from bypass would directly reflect that distance;
- * An international bypass could avoid any inefficiencies in TCPL or Alberta's gathering systems and would avoid TOPGAS charges (see Glossary of Terms in Chapter 11) related to use of TCPL's pipeline;
- * The avoidance of the LDC's system would remove control of the transportation cost from the LDC and provide the end-user longer-term, strategic control over these costs as well as providing greater planning certainty;
- * Most industries are becoming increasingly competitive which necessitates the searching for any and all ways of reducing costs; and
- * Captive gas users (those which cannot switch to an alternate fuel) are seeking to increase flexibility and reduce the cost of transportation charged by the LDC. LDCs are said to include a component that is not cost-based but rather reflects the fact that the captive customer has no alternative.

Cyanamid/CCPI Example of a Bypass

142 5.14 The application by CCPI, a subsidiary of Cyanamid, to the NEB for approval of the construction of pipeline facilities which would bypass Consumers' distribution system is the only explicit proposal for bypass in Ontario. Most parties to this hearing agreed that the particulars of the

proposed CCPI bypass would assist the Board and others to understand the physical and operational characteristics of a typical bypass.

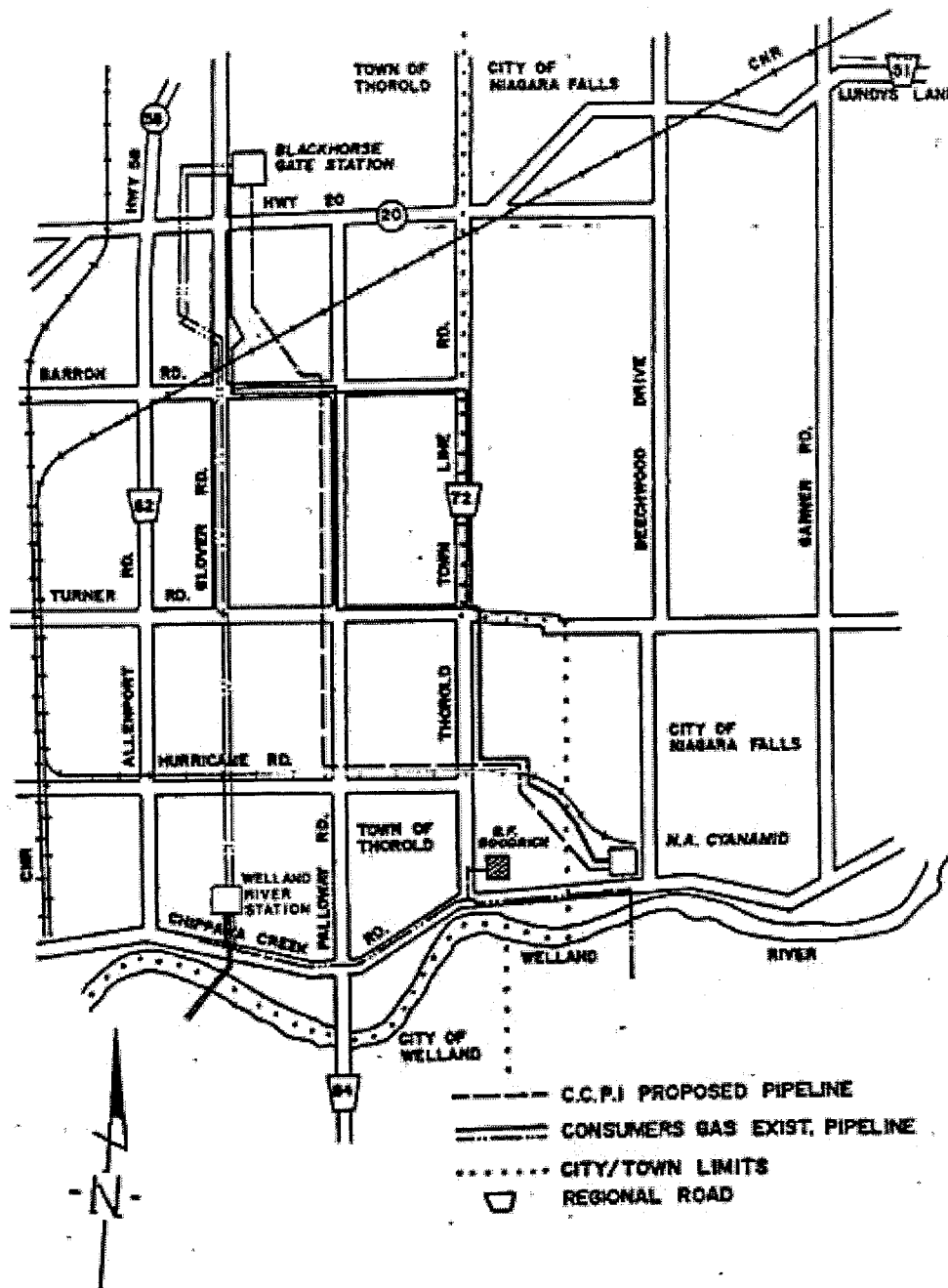
143 5.15 Although the OEB believes that it has the sole jurisdiction to consider and decide bypass applications within Ontario, the Board has no application before it and will not comment on the specific merits of the specific CCPI proposal.

144 5.16 The Board believes that, the CCPI bypass proposal, described below, assisted in a better understanding of the characteristics of a typical bypass. Any individual bypass might exhibit unique characteristics such as the length of pipe or the cost of pipe but in general these would not alter the operation of the bypass and are not relevant to an assessment of the general merits of bypass or the consideration of jurisdiction.

145 5.17 Cyanamid, currently has an interim transportation rate with Consumers'. It is a direct purchase customer and uses Consumers' distribution system to transport its gas (see Chapter 3 for a general description of contract carriage).

Physical Aspects

146 5.18 CCPI, the bypasser, proposes to construct an 8- inch diameter, 6.2 kilometre long pipeline from Cyanamid's plant near Welland, Ontario to tap into the TCPL line at TCPL's Black Horse Station. Gas will be transported through this pipeline from the TCPL Black Horse station to Cyanamid's plant. The proposed route for the pipeline is indicated in the map following.



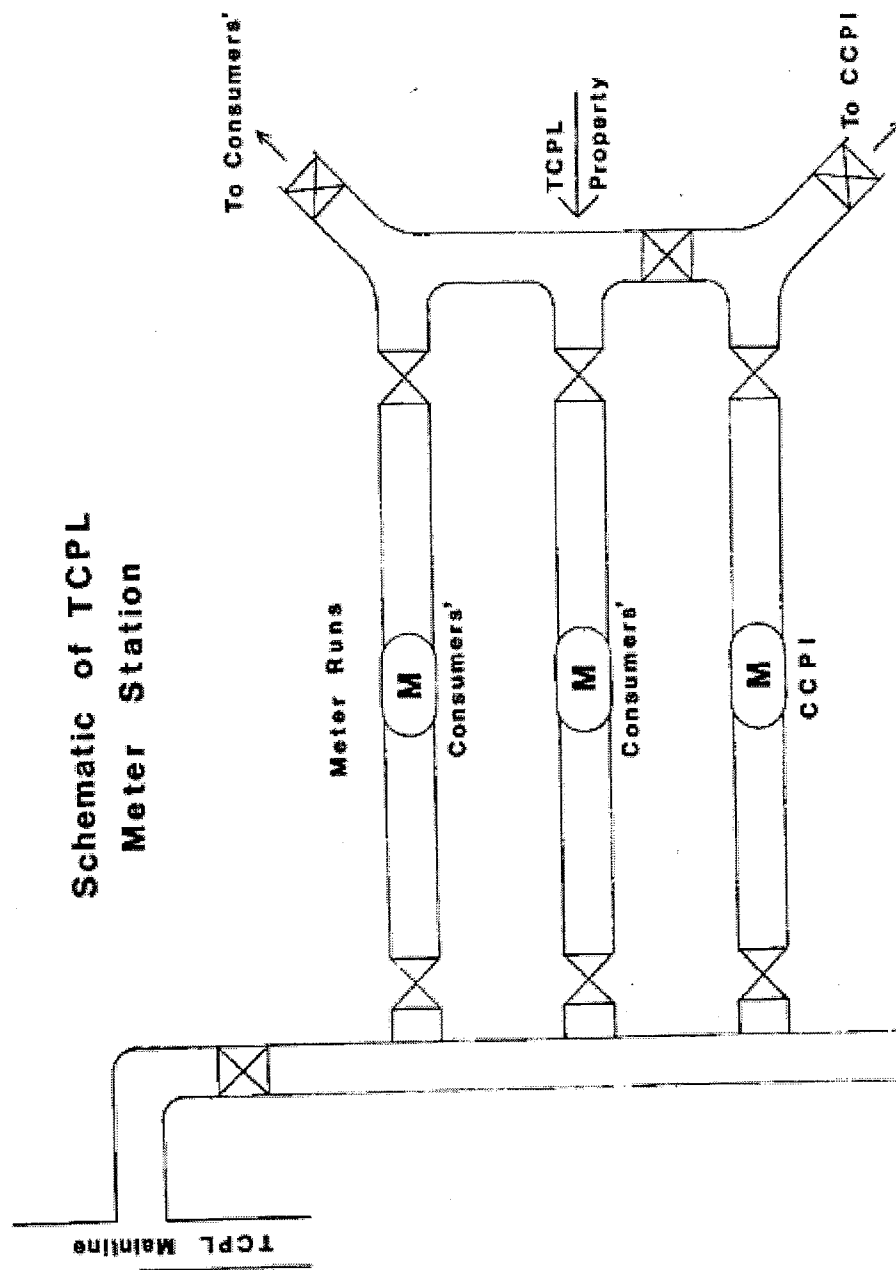
147 5.19 CCPI's proposed line would run south across Highway 20 and then easterly to Barron Road, south paralleling Palloway Road on its west side, crossing Barron and Turner Roads, east along the north side of Hurricane Road across Palloway Road and Thorold Townline Road and finally southeast to Cyanamid. The entire route would involve five road crossings and one railway crossing.

148 5.20 Cyanamid has taken many of the preliminary steps required to obtain approvals for the five road crossings. Correspondence with the necessary authorities was filed in the hearing.

149 5.21 CCPI will be the sole owner and operator of the pipeline. All new facilities will be required to meet the standards imposed on all pipelines to reflect safety and environmental considerations.

150 5.22 CCPI requires a connection to be made to TCPL's facilities at the junction of the pipes inside the Black Horse station. To complete this connection, TCPL must replace the existing 12-inch meter with an 8-inch meter and construct a small "stub" of a pipeline to complete the connection to the proposed CCPI pipeline. It would be short in length (between 10 and 50 feet) and wholly within the property owned by TCPL in and around Black Horse station. The new CCPI pipe would also need to be connected to the existing piping at Cyanamid's plant gate.

151 5.23 At or near the connection of the TCPL system and CCPI's pipe both companies require a metering station to measure gas flows. This would be supplied by TCPL. Of the three existing meter runs in the Black Horse meter station one would be dedicated exclusively to CCPI. Certain valves are required for safety and isolation purposes. The following plan indicates the proposed metering station configuration.



152 5.24 The connection of the new pipe to the existing pipes at Cyanamid's plant gate under its proposal would be undertaken by TCPL. There is, however, no particular reason why this connection would need to be made by TCPL. It could be made by any qualified contractor or by an Ontario LDC.

153 5.25 In summary, the physical components of a typical bypass are: pipe of the required length, diameter and pressure resistance; appropriate connections at the TCPL delivery point and at the end-user's plant, including at the TCPL facility a meter, valves, and a small stub line going to the end of TCPL's property; adequate compression; shut-off valves; and the required land, easements or rights-of-way for the entire bypass pipeline route.

Operational Aspects

154 5.26 CCPI will be the sole owner and operator of the bypass pipeline, the fundamental purpose of which is to transport gas from the TCPL Black Horse station to the Cyanamid plant at Welland Ontario.

155 5.27 The nomination procedures for the gas used by Cyanamid and transported by CCPI would essentially be the same as that used by existing direct purchase customers and by the LDC for traditional sales service customers. Essentially, nominations are submitted only for changed volumes and do not necessarily take place daily.

156 5.28 CCPI will physically control the flow of gas through its branch line by means of valves. TCPL will be precluded from controlling the flow except by shutting off the flow through its valves. This latter action could not be taken as part of normal operations.

157 5.29 CCPI controls its own flow of gas. Because of its independence from Consumers' it must make its own load balancing and storage arrangements. It could purchase these from either Consumers' or Union (if permitted by the OEB). According to CCPI, storage and load balancing would enhance the attractiveness of the bypass option. If not available, CCPI's proposed bypass would still be sought by CCPI, albeit at a higher cost to CCPI than would otherwise be the case. Solutions to overcome the storage and load balancing problems, as described by CCPI, would include obtaining discretionary natural gas purchases from suppliers, using fuel oil where possible, or operating the plant at a lower production level.

158 5.30 CCPI will rely on the pressure of gas leaving the TCPL system at the Black Horse station in order to transport the gas from the Black Horse station to Cyanamid's plant. This does not require any special operational action(s) on the part of either TCPL or CCPI. This method of operation is expected for typical bypass facilities where the length of pipeline from the TCPL system to the plant is short. Longer bypass facilities may require compression facilities, which if necessary, could be provided by the bypasser.

159 5.31 The proposed CCPI bypass would not function without TCPL delivering gas to it. Clearly, TCPL would continue to operate in the same manner as it now does, regardless of the existence of the bypass.

160 5.32 In summary, the operational aspects of a typical bypass customer are: the nomination of volumes to be shipped on TCPL's system and then transported along the bypass pipeline; the controlling of the volume of gas taken at the TCPL interconnect and at the end-user's plant gate; the obtaining of load balancing or storage to the extent necessary and available; the maintaining of the appropriate pressure in the bypass pipeline; and the obtaining of the appropriate regulatory approvals.

Economic Impact of Bypass if Allowed

161 5.33 Bypass in Ontario will have economic impact on the public interest. The public interest is considered in Chapter 4.

162 5.34 This section of the Decision addresses the extent to which bypass might occur, if allowed, and the impact generally that such bypass might cause. The Board will reserve judgment on the impacts of any particular bypass proposal until such time as an end-user files an application. At that time, the Board will hear the proposal and reach a decision taking into account among other factors, the criteria outlined later in this Decision.

163 5.35 Northridge testified that eight of approximately seventy end-users with which it had discussions were judged to be potential bypass candidates. Table 1 indicates the approximate total annual volume of each of the three major utilities and the Northridge estimate of volumes susceptible to bypass.

Table 1

Volumes Susceptible to Bypass
(billion cubic feet)

	<u>Consumers'</u>	<u>Union</u>	<u>ICG</u>	<u>Total</u>
Northridge Estimate	11.3	49.2	14.3	74.8
Total Annual Volume (Approximate)	300	260	100	660
Percent of Total	<u>3.8</u>	<u>18.9</u>	<u>14.3</u>	<u>11.3</u>

164 5.36 Table 2 summarizes the initial financial impact of customer loss to bypass based on the evidence of the three LDCs, as amended by Special Counsel, and without allowance for reference to the alleged death spiral. Death spiral refers to the impact on rates of a customer bypassing the system causing the remaining customers to cover the fixed costs that are not absorbed by the customer which left the system to bypass. Rates are increased causing others to leave the system.

Table 2

Estimated Initial Impacts of Losing
to Bypass the Most Likely Candidates

	<u>Volume</u>	<u>Revenue</u>	<u>Gross</u> <u>Margin(c)</u>	<u>Increase to</u> <u>all remaining</u> <u>Customers</u>
	<u>Ref</u>	<u>(\$ millions)</u>	<u>(\$ millions)</u>	
Consumers'	14.6 (4.5%)(a)	62.8 (3.8%)	4.0 (1.1%)	1.3¢/mcf
Union	38.8 (15.0%)	169 (13.0%)	13.0 (4.7%)	5.5¢/mcf
ICG	23.3 (22.7%)	94.1 (19.0%)	5.1 (N/A)(b)	6.0¢/mcf
Total in Ontario	<u>2,175.2</u>	<u>325.9</u>	<u>22.1</u>	

[Editor's Note: Notes (a), (b), (c), (d) are included in the image above]

165 5.37 Special Counsel removed some of the costs that the LDCs argued should be included. For example, Special Counsel argued that the unabsorbed demand charge problem would be essentially resolved through implementation of the operating demand volume concept contemplated by the NEB in its Decision in PH-5-85. The unabsorbed demand charge could arise because the utility, having contracted for long term gas supply with TCPL, would not be relieved of its fixed charges

under these contracts when the bypass customer left the system. The customer, having bypassed, would no longer be available to pay these demand charges. Hence, they would be unabsorbed.

166 5.38 Clearly, bypass could have significant impact on the Ontario public interest. The extent of the impact is speculative at this time.

167 5.39 The OEB has the jurisdiction which requires it to look at all aspects of each potential bypass circumstance. Each application for bypass must be considered on its own merits. Since the bypass decision is influenced by rate-making, there may be more than one solution to the problem and it may not be as simple as accepting or rejecting bypass. General or customer-specific rate changes should be considered. For example, the public interest may be best served through a special rate reduction to an individual customer as an alternative to bypass.

168 5.40 Bypass candidates are typically large volume, high load factor users, which are located close to the TCPL or an international pipeline. These customers are excellent load for the LDCs. The existence of these loads assists the LDCs to minimize gas purchase and system operating costs. If such loads leave the LDC, the LDCs could face much lower load factors, seasonal loads, increased costs and decreased system efficiency. In other words, the conditions necessary for a death spiral may result.

6. CRITERIA FOR BYPASS APPLICATION EVALUATION

Introduction

169 6.1 The Board requested all parties to comment on the criteria for consideration of bypass, assuming an individual bypass application would be considered. This Chapter briefly outlines the criteria submitted.

Positions of the Parties

170 6.2 Parties made submissions on bypass criteria which can be summarized under the following broad categories:

1. Cost/economic factors with respect to the utility and the applicant.
2. Alternative rate-making or competitive alternatives.
3. Safety/environmental factors.
4. Public policy.
5. Bypass duration and standby/exit fees.
6. Social contract.
7. Type of bypass, (single bypass or piggyback).

171 6.3 Criteria (1) to (3) were recommended either directly or indirectly by most parties.

172 6.4 Consumers', Union and ICG clearly stated their opposition to bypass. Consumers' and ICG, in the event a bypass application was ever considered by the Board, argued that the importance of the impact on the utility as well as safety and environmental impacts should be considered in evaluating the application.

173 6.5 Consumers' argued that a bypasser must obtain a Certificate of Public Convenience and Necessity under section 8 of the Municipal Franchises Act, as well as an order granting leave to construct under section 46 of the Ontario Energy Board Act. When considering the granting of these

orders, Consumers' contended that the Board should consider the direct and indirect effects on the distributor holding the franchise as the major concern.

174 6.6 Union urged the Board to oppose bypass in principle on the basis that bypass is simply not in the public interest and for that reason it argued that it is inappropriate to contemplate criteria that might apply to future applications.

175 6.7 ICG recognized that a bypass might be considered where new facilities must be constructed to serve a potential customer and where it is not economically feasible for the utility to provide such service but argued that this policy should be implemented by legislation.

176 6.8 ICG suggested that the Board establish guidelines and state a general policy which would oppose bypass And discourage bypass applications.

Conclusion

177 6.9 The Board is of the opinion that a general policy opposing bypass is not in the public interest. The Board will consider each application for bypass on the basis of its individual merits. The Board does not consider it appropriate to limit its consideration of any specific application at this time. In reaching this conclusion, the Board relies on a very broad definition of the public interest. The Board when deciding bypass applications will consider the following:

1. Cost/economic factors related to the LDC, the applicant and the LDCs other customers;
2. Rate-making alternatives to bypass and other rate-making options;
3. Safety and environmental factors;
4. Public policy;
5. The type of bypass (is it a single customer or multiple customers; is it incremental load);
6. The duration of the bypass (will the end-user return to the LDC); and
7. Other factors relevant to the specific application.

7. RATE-MAKING CONSIDERATIONS

Introduction

178 7.1 Bypass is essentially a financial and economic issue. It may prove to be a rate-making issue, where appropriately developed rates might eliminate the incentive for bypass. This Chapter briefly summarizes some of these other considerations.

A Rate-making Alternative

179 7.2 The question of whether to determine rates at a level that would compete with a customer's specific bypass alternative was raised by most participants in the hearing. The argument for cost-based rates as opposed to cost-related rates was central to this question. Cost-based rates are stringently based on cost allocations used by the Board for rate-making. Cost-related rates, implicitly address risk and other factors such as stability and value of service which are not normally factors which can be explicitly captured in the cost allocations. Typically, cost-based rates are rates that are designed solely to recover the costs allocated to a customer class. That is, there is no over or under-contribution. Cost-related rates result in some over and under-contribution from customer classes. The term over-contribution describes the excess of revenue from a customer class over the costs allocated to that customer class. Some participants argued that in implementing cost-based

rates the OEB ought to look beyond the costs allocated to a specific customer class and in fact look at the customer specific cost within a customer class. It was argued that this cost would more closely approximate the cost of the bypass alternative.

Standby/Exit/Re-entry Charge

180 7.3 The questions of standby, exit and re-entry charges were also raised. To the extent that an existing customer bypasses the LDC then some of the LDC's fixed costs incurred on behalf of that customer will no longer be recovered from that customer's rates. These costs remain as a burden to the other customers still on the system. An exit charge is one way to recover some of these costs and offset the financial impact on the LDC's remaining customers. A standby or re-entry charge was proposed as a means to ensure that, should the bypasser at some future point return to the LDC's system, there would be compensation to the LDC and its other customers.

Fairness

181 7.4 The LDCs argued that it is unfair that the bypasser can now take advantage of TCPL facilities that would not exist if it were not for the development of the Ontario base load by those LDCs through their monopolies. They argued that it is unfair to allow the bypasser to now take advantage of TCPL's tolls while avoiding the embedded costs of the LDCs' that made those tolls possible. It is the LDCs' view that the benefits and costs of the distributors' systems should be shared equitably and that the possibility of bypass threatens to destroy the benefits of fully integrated distribution systems.

182 7.5 CIL and Nitrochem argued that competition brought benefits flowing from the Agreement to all natural gas users in Ontario. They submitted that the direct purchasers have provided the incentive to TCPL and its producers to offer competitive prices to system sales customers.

183 7.6 Industrial customers also generally contend that their debt to the system, if it ever existed, has been paid many times over through years of overcontribution.

Accident of Geography

184 7.7 The rate to an individual customer includes to some extent the average costs of its customer class as opposed to only customer specific costs. As such, the accident of geography situation where one customer is closer to TCPL's line than another, historically has not excused the former from paying his share of the direct and indirect costs incurred by all customers in the same customer class.

185 7.8 Direct evidence was presented to the NEB by Mr. Bruce MacOdrum, Assistant Deputy Minister on behalf of the Minister of Energy for Ontario. This evidence was filed as part of this OEB proceeding. Mr. MacOdrum testified that Ontario has endeavoured over the years to encourage industry to locate widely across the Province through the development of uniform rates for similar customer classes across each distributor's system. To now put a large proportion of industry at an economic disadvantage because of its distance from the TCPL system would be unfair, in his view.

Conclusion

186 7.9 The Board is currently completing the Main Hearing with respect to the implementation of final contract carriage rates within the Province. The question of how transportation rates will be determined cannot be answered until that hearing is complete. The Board accepts that there are

many factors that are relevant to the consideration of a specific bypass application. However, since some of these matters are still being discussed before the Board and since the Board has no specific bypass application before it at this time, the Board will not make specific findings on these issues now. The Board has indicated in Chapter 6 the criteria that will be considered when a specific bypass application is made to the Board.

8. JURISDICTION

Introduction

187 8.1 As a delegate of authority from the Legislature of the Province of Ontario, the jurisdiction of the Board is limited to matters falling within the legislative jurisdiction of the Province of Ontario.

188 8.2 Before assuming the power to regulate and control a matter, this Board must determine whether the matter falls within the scope of the jurisdiction conferred upon it by its empowering statutes, and whether the matter falls within the jurisdiction of the Legislature of Ontario.

189 8.3 The constitutional questions raised in this hearing mirror those raised in the recent review of Consumers' request to construct a LNG facility and those raised before the NEB as a result of the application of CCPI to the NEB for approval of CCPI's plans to construct a bypass pipeline, situated wholly within Ontario, from the TCPL pipeline to the premises of its parent company, Cyanamid Canada Inc. While the CCPI application is not expressly contemplated by the Board in this Decision, it should be recognized as a useful point of reference to the extent that it may amplify the general description of bypass established in the hearing.

Local Works and Undertakings

190 8.4 All participants in the hearing agreed that the determination of whether legislative jurisdiction over the construction and operation of a bypass pipeline lies with the provincial or the federal government requires an analysis of subsection 91(29) and clause 92(10)(a) the Constitution Act, 1867. Subsection 91(29) assigns to Parliament exclusive legislative jurisdiction over:

29. Such Classes of Subjects as are expressly excepted in the Enumeration of the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces. (emphasis added)

191 8.5 Such an exception is expressly created in clause 92(10)(a) which confers exclusive legislative jurisdiction on the legislature to make laws in relation to:

10. Local Works and Undertakings other than such as are of the following Classes:

- (a) Lines of Steam or other Ships, Railways, Canals, Telegraphs, and other Works and Undertakings connecting the Province with any other or others of the Provinces, or extending beyond the Limits of the Province. (emphasis added)

192 8.6 In the Board's view, subsection 91(29) and clause 92(10)(a) of the Constitution Act, 1867 should be interpreted in a manner consistent with the principle that where a statute enunciates a general proposition and then sets forth an exception to it, the onus lies upon the party claiming the benefit of the exception to satisfy the court or tribunal that it clearly applies. As stated by Beetz J.:

Because provincial competence is the rule and federal competence is the exception, the onus is on the party who invokes the exception to establish the constitutional facts necessary for the exception to come into play. Failing such a demonstration, exclusive provincial competence must govern.

(Northern Telecom Canada Limited and Canadian Union of Communication Workers v. Communication Workers of Canada, [1983] 1 S.C.R. 733 at 779).

193 8.7 In the opinion of the Board, the bypass pipeline is a local work or undertaking prima facie within the exclusive legislative jurisdiction of the Province of Ontario. Upon an application for approval of the construction of a bypass pipeline, the onus is not upon a party seeking to uphold the jurisdiction of the OEB to demonstrate that the bypass pipeline will not be part of an interprovincial work or undertaking, but rather upon a party seeking to cast the bypass pipeline within the legislative authority of the federal government to demonstrate that it clearly falls within the exception set forth in clause 92(10)(a).

194 8.8 As stated in City of Montreal v. Montreal Street Railway "...works are physical things, not services". In contrast, as stated in the Radio Reference, an "'undertaking' is not a physical thing, but is an arrangement under which of course physical things are used". (City of Montreal v. Montreal Street Railway. [1912] A.C. 333 at 342; and Re Regulation and Control of Radio Communications in Canada (Radio Reference) [1932] A.C. 304 at 315).

195 8.9 In this instance, the "work" is the facility itself, which includes an interconnection with the TCPL pipeline, a bypass pipeline extending from the TCPL interconnection to the end users' premises, with meters at the TCPL interconnection and at the point of delivery (collectively referred to as the "bypass pipeline"). The sole "undertaking" involved in the instance of bypass is the transportation of natural gas from the TCPL pipeline to the facility of the end user through the bypass pipeline. (The work and undertaking are hereinafter referred to as the "bypass").

196 8.10 while several modes of transportation are delineated in the Constitution Act, 1867, there is no mention therein of transportation per se. The resolution of constitutional jurisdiction over matters involving transportation has, in all cases, required an analysis of clause 92(10)(a). Moreover, it has been held that clause 92(10)(a) is confined to transportation or communication activities. (Canadian Pacific Railway v. A.G.B.C. [1950] A.C. 122).

197 8.11 In determining constitutional jurisdiction of a matter involving transportation, the constitutional authorities require that the ownership, physical connection and operational integration of the related works and undertakings be addressed. (Reference Re Validity of the Industrial Relations and Disputes Investigation Act (CAN.), (Stevedore Reference) (1955), 3 D.L.R. 721; Northern Telecom Limited v. Communication workers of Canada et al., [1980] 1 S.C.R. 115; Northern Telecom Canada Limited and Canadian Union of Communication Workers v. Communication Workers of Canada, supra; and Luscar Collieries, Limited v. McDonald and Others, [1927] A.C. 925.)

198 8.12 In the case of bypass, the bypass pipeline will be entirely owned, controlled and maintained by the corporation seeking approval for bypass construction (the bypass corporation). The bypass pipeline will be within the exclusive control of the bypass corporation, and will be operated using only the property, equipment and employees of the bypass corporation, and not those of any interprovincial undertaking. While ownership or the proprietary relationship of the works or undertakings are factors to be considered, the mere fact that an intraprovincial work may complement or

have an economic impact upon an interprovincial business or undertaking does not prevent the two from being regarded as separate and distinct. As Laskin, C.J.C. stated in Canadian National Railway Company v. Nor-Min Supplies Limited, [1977] 1 S.C.R. 322 at 333:

The mere economic tie-up between the C.N.R.'s quarry and the use of the crushed rock for railway line ballast does not make the quarry a part of the transportation enterprise in the same sense as railway sheds or switching stations are part of that enterprise. The exclusive devotion of the output of the quarry to railway uses feeds the convenience of the C.N.R., as would any other economic relationship for supply of fuel or materials or rolling stock, but this does not make the fuel refineries or depots or the factories which produce the materials or the rolling stock parts of the transportation system.

199 8.13 As mentioned, a further factor to be considered is the degree of physical connection between the local work and the interprovincial work. The TCPL pipeline is clearly an interprovincial work connecting Ontario with other provinces and extending beyond the limits of Ontario within the terms of clause 92(10)(a) of the Constitution Act, 1867. The undertaking of TCPL carried on through use of the TCPL pipeline is the transportation of natural gas between provinces and the sale of natural gas. As an interprovincial work and an interprovincial undertaking, the TCPL pipeline is subject to the legislative jurisdiction of Parliament and the administrative and regulatory jurisdiction of the NEB. The mere fact of physical connection between the bypass pipeline and the TCPL pipeline does not result in the bypass pipeline becoming part of the interprovincial work or undertaking. In cases involving interconnecting federal and provincial railways, both the Supreme Court of Canada and the Privy Council have held that the mere fact of physical connection is insufficient to bring a provincial railway under federal jurisdiction. (British Columbia Electric Railway Company et al. v. The Canadian National Railway Company et al., [1932] S.C.R. 161; City of Montreal v. Montreal Street Railway et al., *supra*; and Northern Telecom Canada Limited and Canadian Union of Communication Workers v. Communication Workers of Canada, *supra*.) As stated by Lord Atkinson in City of Montreal v. Montreal Street Railway, at page 345 :

The right contended for in this case is in truth the absolute right of the Dominion Parliament wherever a federal line and a local provincial line connect to establish, irrespective of all consequences, this dual control over the latter line whenever there is through traffic between them, at least of such a kind as would lead to unjust discrimination between any classes of the customers of the former line. In their Lordships' view this right and power is not necessarily incidental to the exercise by the Parliament of Canada of its undoubted jurisdiction and control over federal lines, and is therefore, they think, an unauthorized invasion of the rights of the Legislature of the Province of Quebec.

200 8.14 In the case of a natural gas pipeline, the fact of physical connection is one of even less significance than in the case of a railway, since there must of necessity be a degree of physical connection between interprovincial pipelines and the works of intraprovincial natural gas distributors or others to whom natural gas is to be delivered. Where the physical interconnection is essential in order for the local work to operate, the factor should not, in the Board's view, be assigned significant weight in determining constitutional jurisdiction.

201 8.15 In determining the degree of operational integration necessary to convert a prima facie local work or undertaking to a work or undertaking as within the "Classes" identified in clause 92(10)(a), the courts have generally required that the integration be vital or essential to the operations of the interprovincial undertaking.

202 8.16 The extent to which the local work or undertaking is, by its nature, essential to the operation of the interprovincial work or undertaking, has been assigned particular weight by the courts. In this regard, the relevant question is not whether the TCPL pipeline is essential to the operation of the bypass pipeline, but whether the bypass pipeline is essential to the operation of the TCPL pipeline. As Taschereau J. stated in the Stevedore Reference at pages 735 and 737:

Regulation of employment of stevedores is, I believe, an essential part of navigation and shipping and is essentially connected with the carrying on of the transportation by ship.

The transportation of goods by water by means of ships, is an operation entirely dependent on the services of the stevedores of the company and both are so closely connected that they must be considered as forming part of the same business. (emphasis added)

203 8.17 In a decision released November 10, 1986, the Divisional Court of Ontario held that the existence of provincial control and the history of legislative assertion of jurisdiction confirmed the OEB's authority over intraprovincial pipelines in Ontario (Re: OEB and Minister of the Environment et al; not yet reported). This decision resulted from a stated case put to the Court by the OEB in which the Court was required to determine whether or not the OEB had jurisdiction over the proposed construction of an LNG facility by Consumers', a provincial natural gas distributor. This facility, like the bypass pipeline, required an interconnection with the TCPL pipeline. In that case, it was argued that the NEB had jurisdiction because the physical connection and operational integration between the two enterprises created an interprovincial work or undertaking as within clause 92(10)(a) of the Constitution Act, 1867. The Divisional Court ruled that although connected to the TCPL system, the Consumers' proposal was a local work because it would not become an integral part of the TCPL system.

204 8.18 The Board is of the view that in this case neither the bypass pipeline, nor the undertaking for which it is used, are in any way essential or vital to the operation of TCPL. Further, in assessing the operational integration of the bypass pipeline and the TCPL pipeline, it is significant that the bypass pipeline will have no direct effect on the operational ability of the TCPL pipeline, or the quantity of product that can be transported by that pipeline. (Northern Telecom Canada Limited and Canadian Union of Communication Workers v. Communication Workers of Canada, supra; and Reference re Validity of Industrial Relations and Disputes Investigation Act (CAN.), supra.)

205 8.19 The relationship between the bypass corporation and TCPL, insofar as the operation of a proposed bypass pipeline is concerned, will be governed by the terms of contracts negotiated at arm's length. The degree of cooperation and the nature of the relationship will not differ from that which has historically existed and of necessity exists at the present time between TCPL and all LDCs in Ontario. It is at present necessary for TCPL and the LDCs to cooperate with respect to quantity, quality, price and delivery dates of natural gas transmitted into the intraprovincial distribu-

tion network, by executing and being governed by contracts which specify the manner in which those matters are to be treated.

206 8.20 In the Board's opinion, these facts distinguish bypass from other situations where the courts have found a local work or undertaking to constitute part of an interprovincial work or undertaking. (The Queen v. Board of Transport Commissioners, supra; and Luscar Collieries Limited v. McDonald and others, supra; Alberta Government v. C.R.T.C., (1984) 17 Admin. L.R. 149; and Re Westpur Pipeline Co. Gathering System, (1958) C.R.T.C. 158.)

Regulation of Trade and Commerce

207 8.21 It was submitted by certain intervenors that regulation of bypass pipelines is exclusively within the jurisdiction of Parliament pursuant to its power to regulate trade and commerce under subsection 91(2) of the Constitution Act, 1867. It has been judicially determined that subsection 91(2) confers upon Parliament, exclusive jurisdiction over interprovincial trade and commerce. It was submitted that Parliament has authorized the NEB to regulate aspects of the interprovincial trade in natural gas under a comprehensive regulatory scheme. Part 3 of the National Energy Board Act, it was argued, provides a comprehensive code for the regulation and construction of pipelines; "pipeline" is defined in section 2 of the National Energy Board Act as follows:

"pipeline" means a line for the transmission of gas or oil connecting a province with any other or others of the provinces, or extending beyond the limits of a province or the off-shore area as defined in section 87, and includes all branches, extensions, tanks, reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegraph or radio, and real and personal property and works connected therewith, (emphasis added)

208 8.22 It was submitted that because the bypass pipeline interconnects with the TCPL pipeline, it thereby becomes a pipeline that connects and/or extends beyond provincial borders as within section 2, the construction of which thereby becomes subject to the provisions of Part 3 of the National Energy Board Act. The argument continued that the OEB's jurisdiction over the construction and regulation of pipelines and other works to supply gas in Ontario which flows primarily from Part III of the Ontario Energy Board Act, section 8 of the Municipal Franchises Act and other related provisions therein, must give way in accordance with the doctrine of paramountcy. (Attorney-General of British Columbia v. Attorney-General of Canada, [1937] A.C. 377).

209 8.23 Since the case of The Citizens Insurance Co. of Canada v. Parsons, it has been clear that intraprovincial trade and commerce is a matter relating to "property and civil rights" within the exclusive jurisdiction of the provinces pursuant to subsection 92(13) of the Constitutional Act, 1867. Legislation directed towards the regulation of the intraprovincial distribution of natural gas is clearly within the legislative jurisdiction of the Province of Ontario pursuant to its power over property and civil rights. In the Board's view, the power to regulate and control bypass is necessarily incidental to the regulation of the transmission and distribution of natural gas within Ontario, and as such, remains validly within the jurisdiction of the OEB. Moreover, it is fundamental to the power conferred on the Board to set just and reasonable rates for natural gas in Ontario, pursuant to section 19 of the Ontario Energy Board Act, that the Board also have the authority to assess applications for bypass as it is, a rate-related concept. (The Citizens Insurance Co. of Canada v. Parsons (1881), 7 A.C. 96 (P.C.); (McAffee et al. v. Irving Refining Ltd. et al. (1970), 17 D.L.R. (3d) 729; Shannon v.

Lower Midland Dairy Products Board and Attorney General for British Columbia, [1938] A.C. 708 (P.C.); Home Oil Distributors Limited et al. v. Attorney General of British Columbia, [1940] S.C.R. 444; Caloil Inc. v. The Attorney General of Canada, [1971] S.C.R. 545; and Robert Fulton et al. v. Energy Resources Conservation Board and Calgary Power Ltd. [1981] S.C.P. 153.)

210 8.24 Furthermore, the Ontario Energy Board Act, the Municipal Franchises Act, and the powers conferred by this legislation on the OEB are, in pith and substance, validly within provincial jurisdiction. In Churchill Falls (Labrador) Corp. Ltd. et al. v. Attorney General of Newfoundland et al., (1984) 1 S.C.R. 297 at page 331 Mr. Justice MacIntyre quoted with approval the following statement from Professor Hogg's Constitutional Law of Canada:

But where the cases go wrong, as it seems to me, is in refusing to recognize that a statute whose pith and substance is a matter inside the province may incidentally destroy or modify rights outside the province.

Where the pith and substance of the provincial enactment is in relation to matters which fall within the field of provincial legislative competence, incidental or consequential effects on extra-provincial rights will not render the enactment ultra vires, (emphasis added)

211 8.25 It is the view of the Board that Parliament has not purported to regulate local pipelines such as bypass pipelines and has not attempted to bring such pipelines within the regulatory scheme established by the National Energy Board Act. Further, as previously stated, no legitimate distinction can be made between a bypass pipeline and the pipelines forming the entire distribution networks of the Ontario utilities. To hold that a bypass pipeline both falls within federal legislative jurisdiction and constitutes a "pipeline" within the definition in section 2 of the National Energy Board Act, endangers the constitutional integrity of the entire regulatory scheme established by the Province of Ontario to control transmission and distribution of natural gas within Ontario. Moreover, in Re: OEB and Minister of the Environment, et al., supra, the Divisional Court stated that the Ontario Energy Board Act and the Municipal Franchises Act are designed not to regulate interprovincial trade and commerce but rather to regulate matters having to do with energy and local works or undertakings in relation to energy in Ontario. Section 2 of the National Energy Board Act, the Court ruled, relates only to the interprovincial or international transmission of natural gas and is, therefore, not applicable.

212 8.26 In any event, any similarity between Part 3 of the National Energy Board Act and the provincial legislation is irrelevant as the Supreme Court of Canada has held that where otherwise valid provincial legislation merely duplicates federal law without actual conflict or contradiction, paramountcy will not render the provincial legislation inoperative. (Multiple Access Ltd. et al. v. McCutcheon et al., [1982] 2 S.C.R. 161).

Conclusion

213 8.27 For the foregoing reasons, the Board is of the view that the Province of Ontario, and this Board as its delegate, has jurisdiction over bypass within Ontario. The Board is of the view that this jurisdiction is imperative in order for the Board to carry out its statutory duties and responsibilities to regulate the transmission and distribution of natural gas and to approve and fix just and reasonable rates in connection therewith in Ontario.

9. STATED CASE

214 9.1 ICG, Union, The City of Kitchener and Special Counsel urged the Board to state a case to the Divisional Court of the Supreme Court of Ontario to confirm the Board's jurisdiction with respect to bypass. Other parties were either opposed to the stating of a case or were of the opinion that it is not necessary at this time.

215 9.2 The Board is entitled to state a case to the Divisional Court pursuant to Section 31 of the Ontario Energy Board Act. The Board is also entitled to state a case on the basis of a hypothetical set of facts. (Reference re Certain Titles to Land in Ontario [1973] 35 D.L.R. (3d) 10)

Board Findings

216 9.3 The Board is of the view that the jurisdictional question that has been raised requires an immediate response. The potential impact of bypass is significant. It is in the public interest that this matter be resolved and that any question as to jurisdiction be clearly answered.

217 9.4 The Board is aware of an application to the NEB by CCPI for approval of a bypass application. To date no decision has been rendered in this regard. It is imperative that the OEB confirm its jurisdiction as quickly as possible in light of this challenge to its historically applied authority.

218 9.5 The Board accepts the submission of the parties in this proceeding that bypass is primarily a financial and economic problem with rate-making implications. It is the OEB that has the mandate to make orders approving or fixing just and reasonable rates and other charges for the sale of gas by transmitters, distributors and storage companies, and for the transmission, distribution and storage of gas within the Province of Ontario. The OEB also approves the franchises and certificates that allow the distribution and transmission activities to take place. Any doubt surrounding the question of jurisdiction with regard to bypass is not in the public interest.

219 9.6 Accordingly, the Board will state a case to the Divisional Court of the Supreme Court of Ontario.

220 9.7 The Board will retain counsel to state this case to the Divisional Court of the Supreme Court of Ontario on its behalf. Counsel will ultimately pose the questions stated. However, the Board is of the opinion that the following questions must be addressed.

- A. Does the Legislative Assembly for the Province of Ontario have the right under the Constitution Act, 1867, to pass laws with respect to the approval and regulation of the construction and operation of bypass facilities situated in the Province of Ontario?
- B. Is the right to pass laws concerning the approval and regulation of bypass facilities in the Province of Ontario within the exclusive legislative competence of the Legislative Assembly of the Province of Ontario?
- C. If the answer to B is no, does the Federal Parliament have the paramount right to pass laws concerning the approval and regulation of bypass within the Province of Ontario?

10. BOARD DECISION

221 10.1 The Board is of the opinion that the Province of Ontario and this Board as its delegate has exclusive jurisdiction over bypass within Ontario. The Board is of the view that this jurisdiction is imperative in order for the Board to carry out its statutory duties and responsibilities to regulate the transmission and distribution of natural gas and to approve and fix just and reasonable rates in connection therewith in Ontario.

222 10.2 The OEB is in the best position to properly balance the competing interests in regard to bypass. Bypass is primarily a financial and economic problem with rate-making implications and rate-making solutions must be considered as potential alternatives to ensure that the public interest is fully protected.

223 10.3 The Board is of the opinion that a general policy opposing bypass is not in the public interest. The Board will consider each application for bypass on the basis of its individual merits. The Board does not consider that it is appropriate to limit its consideration of any specific application at this time. In reaching this conclusion, the Board has relied on a very broad definition of the public interest. The Board when deciding bypass applications will consider the following:

1. Cost/economic factors related to the LDC, the applicant and the LDC's other customers.
2. Rate-making alternatives to bypass and other rate-making options.
3. Safety and environmental factors.
4. Public policy.
5. The type of bypass (is it a single customer or multiple customers; is it incremental load).
6. The duration of the bypass (will the end-user return to the LDC).
7. Other factors relevant to the specific application.

224 10.4 No argument touched on whether or not the Board should set the rate to be charged by the by-passer to the end-user. Under Section 19 of the Ontario Energy Board Act, the Board has the mandate to make orders approving or fixing just and reasonable rates and other charges for the sale of gas by transmitters, distributors and storage companies, and for the transmission, distribution and storage of gas. Also under this section the Board is required when fixing rates to determine a rate base for the transmitter, distributor or storage company and shall determine whether the return on the rate base produced or to be produced by such rates and other charges is reasonable. If a by-passer were to operate within the Province of Ontario it would be transmitting gas. Subject to change in the legislation governing the operations of the OEB, the Board has the mandate to determine the rate to be charged by the by-passer in accordance with the legislation.

225 10.5 The Board has the jurisdiction to approve franchises and to grant Certificates of Public Convenience and Necessity for the construction of distribution facilities and to supply gas. The Board must exercise the authority conferred upon it by that legislation.

226 10.6 The Board is of the opinion that it is important to remove any uncertainty with respect to its jurisdiction and will therefore, state a case to the Divisional Court of the Supreme Court of Ontario.

11. GLOSSARY OF TERMS

227 **BUNDLED RATE** A single charge that covers a number of services provided by the distributor. Examples of such services are transportation, storage and load balancing.

228 BUY-SELL In this arrangement, the end-user purchases its own supply of gas and arranges for transportation to the distributor's receipt point from TCPL. The distributor purchases the gas and comingles it with the balance of its supplies, and then sells to the end-user under the appropriate rate schedule.

229 BYPASS Bypass describes the means by which an end-user of natural gas in Ontario avoids using the local distribution company to deliver gas to its consumption point.

230 COMPETITIVE MARKETING PROGRAMS (CMP) A mechanism by which "system producers"(i.e. those who sell gas to TCPL) provide specific discounts to individual end-users of gas. The distributor sells to the end-user under the appropriate sales rate schedule; the distributor then provides to TCPL details of these sales; TCPL rebates to the distributor the agreed upon discount for the preceding month's volumes; and the distributor flows the reduction in the cost of gas through to the end-user.

231 CONTRACT CARRIAGE A service provided under contract for the transportation of gas not owned by the pipeline company or the distributor.

232 COST ALLOCATION The allocation of a utility's capital costs and operating costs among customer classes. It is used as a guide in designing rates to recover those costs in an equitable manner.

233 COST-BASED RATES Rates stringently based on cost allocations approved by the Board for ratemaking.

234 COST-RELATED RATES Rates that implicitly address risk and other factors such as stability and value of service which are not normally factors which can be explicitly captured in the cost allocations approved by the Board for rate-making.

235 CUSTOMER CLASSES The grouping of the customers of a utility for rate-setting purposes, usually on the basis of similar gas use characteristics.

236 CUSTOMER LOAD The total volume of gas used by a customer in a fixed period of time.

237 DIRECT PURCHASE Natural gas supply purchase arrangements transacted directly between producers, brokers, or agents and end-users at negotiated prices.

238 DOUBLE DEMAND CHARGE Occurs when there is a displacement of a distributor sale by a direct purchase so that the space reserved by that distributor in the TCPL system is paid for by both the utility and the direct purchaser.

239 DUAL FUEL CAPABILITY A customer's capability to use an alternate fuel as well as natural gas.

240 GIGAJOULE A measure of the energy content of a fuel. One gigajoule equals 948,213.3 BTU.

241 INTERRUPTIBLE CUSTOMER A customer whose gas service is subject to interruption at the discretion of the utility. This type of customer is typically required to have a dual fuel capability in the event of interruption.

242 LOAD BALANCING The efforts of a utility to balance gas supply to demands, which may involve sales using storage and other peak supply sources, curtailment of interruptible sales, and diversions from one delivery point to another.

- 243 PEAK DEMAND** A phrase used to describe the maximum amount of gas required over a given unit of time.
- 244 PROCE DISCRIMINATION** Price discrimination takes place when customers that impose similar costs on the system pay different prices for similar service.
- 245 RATE BASE** The amount the utility has invested in assets that are used or useful such as mains, meters, compressors and regulator stations, etc., minus accumulated depreciation, plus an allowance for working capital and other amounts that may be allowed by the Board.
- 246 RATE OF RETURN ON RATE BASE** The amount, including interest, which the Board allows a utility to earn net of all taxes and other expenses, expressed as a percentage of rate base.
- 247 RATE OF RETURN ON COMMON EQUITY** The net income of the utility expressed as a percentage of the amount of common equity in the company.
- 248 RANGE RATES** A rate structure which allows the utility to negotiate prices with the customer within a range of rate levels prescribed by the Board. The final negotiated price takes into consideration various characteristics of the customer including size, load factor, seasonality, supply pressure, minimum annual volume, and other factors.
- 249 REVENUE DEFICIENCY** Revenue deficiency is the expected difference between the revenues required to achieve the allowed annual level of earnings established by the Board and the revenue that will be produced with current rates.
- 250 TAKE-OR-PAY** Gas supply contracts often contain a provision so that gas contracted for, but not taken, will be paid for.
- 251 TCPL DEMAND CHARGE** A component of TCPL's CD rate, traditionally designed to recover its fixed costs of meeting its peak gas demand, particularly the fixed costs of transmission. Demand charges are payable by the utility whether or not it takes any gas.
- 252 TOPGAS & TOPGAS II** Two banking consortiums formed in 1982 and 1983 respectively which have made an aggregate of approximately \$2.65 billion of take-or-pay payments to TCPL and Alberta gas producers for gas contracted for but not taken by TCPL. The payments were made on a project financing basis and are referred to as the TOPGAS and TOPGAS II loans. The interest on these loans is paid for by TCPL gas producers.
- 253 T-SERVICE** The gas transportation service offered by a pipeline company or distributor to transport gas owned by others. See also CONTRACT CARRIAGE.
- 254 UNBUNDLED RATES** A series of rates for individual, seperate services offered by a distributor and priced separately.
- 255 UNABSORBED DEMAND CHARGE** Occurs when a distributor purchases its gas or receives its gas at less than its forecast load factor. The retail rates for the distributor are designed to recover gas costs calculated on the assumption that gas is purchased at the forecast load factor. An unabsorbed demand charge can also occur when the distributor must pay for capacity contracted for but not used by it on the TCPL system.
- 256 VALUE OF SERVICE RATES** Rates not set on the basis of cost but rather the value of service to the customer, usually in relation to alternative service or forms of energy.

12. COMPLETION OF BYPASS PORTION OF THE HEARING

257 12.1 The Board will address the question of costs with respect to the bypass portion at the completion of the Main Hearing.

Dated at Toronto this 10TH of December, 1986.

R.W. Macaulay, Q.C.
Chairman and Presiding Member

J.C. Butler
Vice Chairman

D.A. Dean
Member

M. Jackson
Member

C.A. wolf, Jr.
Member

qp/e/qlspi/qljxh

(a) Bracketed figures indicate percent of total.

(b) Figure not available.

(c) Gross margin is defined as the excess of revenue over the cost of gas.

(d) Utility numbers have been converted to Imperial units at the standard of $1 \text{ Bcf} = 28.328$
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