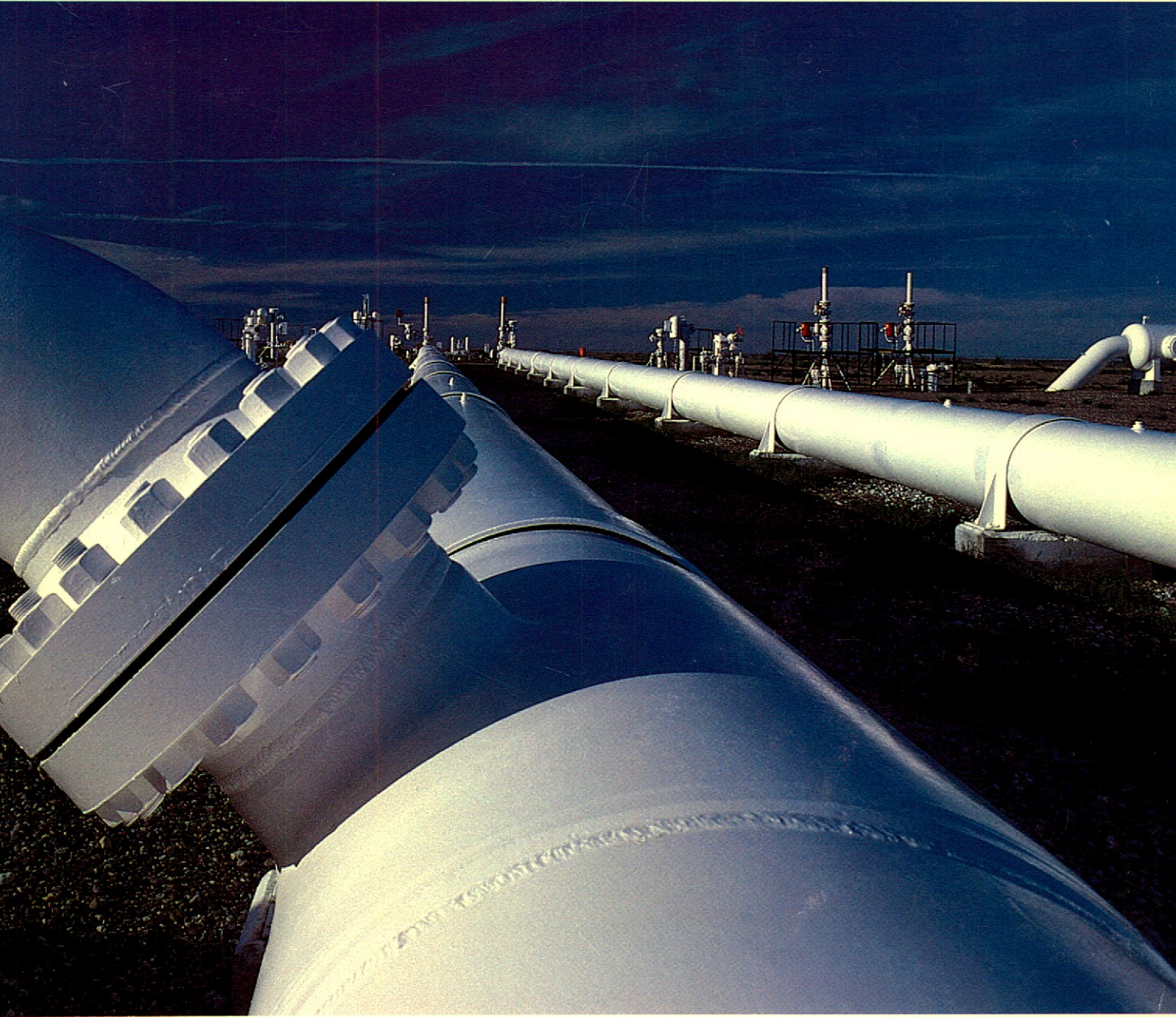


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TransCanada Pipelines



huge distribution 7

pipes at the Bursfall, Saskatchewan 35

compressor station 48

move over 40 per cent of Canada's annual gas production, 76

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Si vous desirez vous procurer un exemplaire de ce rapport en français, veuillez vous adresser au Secrétaire, TransCanada Pipelines, C.P. 54, Commerce Court West, Toronto, Ontario, M5L 1C2.

This report uses the Imperial System of Units for natural resources operations and the International System of Units (metric) for pipeline operations. Approximate conversions can be calculated using the following table:

from	to	multiply by
kilometres	miles	x 0.62
millimetres	inches	x 0.04
kilowatts	horsepower	x 1.34
gigajoules	million British thermal units	x 0.95
cubic metres	cubic feet	x 35.3
kilopascals	pounds per square inch	x 0.15
cubic metres (liquid measure)	barrels	x 6.29

The 1988 Annual and Special Meeting of Shareholders is scheduled for Monday, April 18, 1988 at 10:30 a.m. in the Elizabethan Room of the Regina Inn in Regina, Saskatchewan.

	1987	1986	1985
<b>FINANCIAL</b> ( <i>millions of dollars except per common share data</i> )			
Net income			
Before investment and asset provisions	160.0	166.7	278.1
After provisions	160.0	52.2	162.5
Net income applicable to common shares			
Before investment and asset provisions	121.4	123.9	233.3
After provisions	121.4	9.4	117.7
Funds generated from operations	341.8	431.5	505.5
Per common share data			
Net income applicable to common shares			
Before investment and asset provisions	\$0.96	\$1.13	\$2.40
After provisions	\$0.96	\$0.09	\$1.21
Funds generated from operations	\$2.71	\$3.92	\$5.21
Dividends declared	\$1.12	\$1.12	\$1.12
<b>OPERATING</b> ( <i>millions of dollars except as noted</i> )			
<b>Pipeline operations</b>			
Gas sales and transportation revenues			
Domestic	2,580.2	3,337.4	3,459.4
Export	471.4	569.4	901.3
Gas delivered for sales and transportation ( <i>millions of cubic metres</i> )			
Domestic	27 028	27 340	26 515
Export	5 605	5 745	7 619
<b>Oil and gas operations</b>			
Revenues before royalties			
Canada	195.0	192.6	297.6
United States	33.4	26.9	41.5
Indonesia and other foreign	18.2	18.1	28.2
Oil and natural gas liquids sales ( <i>thousands of barrels</i> )	7,639	7,258	7,404
Natural gas sales ( <i>billions of cubic feet</i> )	36.6	33.7	36.2



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For TransCanada PipeLines, as with many companies within the oil and gas producing sectors of the petroleum industry in North America, 1987 saw a continuation of many of the problems that descended on the industry in 1986. As a consequence the company's financial performance fell far short of meeting our goals.

Although a turnaround in our business environment is not yet evident, we foresee 1988 as being the year when an improvement in business outlook can be expected. The management and staff of TransCanada have applied themselves diligently to addressing each of the problem areas affecting us and to developing solutions. While many issues, such as world oil prices, are beyond the company's control, our objective is to improve corporate performance by aggressively managing factors over which we do have control.

Sincere thanks are due to the employees throughout the TransCanada group for their dedication and tireless application of their skills during difficult times. Without their strong efforts our accomplishments would not be possible. To demonstrate their concern for the difficult economic environment in which the company is operating and for the stakeholders in TransCanada, the company officers agreed to forego a salary increase in 1987.

Total operating revenues for the year were \$3,355.4 million, down 19 per cent from 1986. Operating costs and expenses, excluding depreciation and depletion, were \$2,606.4 million, down 24 per cent, while income from operations was \$537.8 million, up 4 per cent from last year.

Net income for 1987 was \$160.0 million, compared with \$166.7 million before provisions, and \$52.2 million after provisions in 1986. Net income applicable to common shares was \$121.4 million compared with \$123.9 million before provisions in 1986.

The average number of common shares outstanding in 1987 rose by 14.6 per cent to 126.3 million common shares. Earnings per common share for the year were \$0.96 compared with 1986 earnings of \$1.13 before provisions and \$0.09 after provisions. Funds generated from operations decreased from \$431.5 million in 1986 to \$341.8 million in 1987. The major reason for this reduction was an increase in income taxes currently payable.

Earnings reflect continued softness in world oil prices, further deterioration in natural gas prices, unrealized foreign exchange losses, and the National Energy Board decision which resulted in a decrease in the rate of return allowed on the company's main pipeline system.

The petroleum industry and its related service industries are, by their nature, cyclical. Some of the uncertainties facing us today are essentially short term in nature, but an improvement to some of those problem areas is now on the horizon. The industry's major growth potential, and TransCanada's opportunities within that potential, are relatively long term. The company has the experience, flexibility and initiatives underway to meet the challenges and to adapt to changing conditions.

Our overall corporate objectives are clear. Our aim is to be a major, Canadian owned and operated, profitable diversified global energy company through a strategy of building on our existing foundations and selectively investing in related or complementary businesses. Pursuing this strategy is, we believe, the course of action that will reinstate earnings growth and enhance shareholder value in the volatile, unpredictable global economy in which we must now operate.

Despite the current earnings trough, TransCanada has been able to retain its financial flexibility. We have the capability to withstand recession, to refinance and to make investments. What is not readily apparent from the financial statements are two important assets. The first is the 40 per cent of Alberta's proved natural gas reserves that are under contract to TransCanada. The second is the oil and natural gas reserves owned by the company. The value of these assets will become more apparent as supply/demand balance is restored and prices increase.

In the meantime, we have taken three immediate steps designed to enhance our financial integrity.

First, in 1987 we commenced a systematic hedging program to gradually reduce our exposure to foreign exchange losses on the Swiss franc loans that were undertaken in the early to mid-1980s. It is important to note that the company has not actually realized any losses on the Swiss franc loans. Rather, we are amortizing the potential losses over the remaining terms of the loans. The hedging program will reduce the risk associated with this loan position.

Second, in recognition of our current earnings level and the changing asset base of the company following the acquisition of Encor Energy Corporation Inc., we reduced our quarterly common share dividend from 28 cents a share to 17 cents. The dividend reduction was understandably disappointing to many shareholders. However, we believe that TransCanada's overall growth potential in all of its businesses, along with the husbanding of this growth through lower dividends, will make a greater contribution to shareholder value than would have been realized by continuing to follow a high payout dividend policy. The new policy was positively received by the investment community.

Third, we issued \$250 million in common shares. The issue is one of the steps, along with the disposal of certain non-strategic assets, that the company is taking in order to reduce its indebtedness.

In our natural gas marketing and transportation businesses, there are reasons for optimism. During the immediate past fall and winter our systems were operating at or near full capacity. More importantly however, we now perceive a real growth in North American natural gas markets. Capital expenditures on our Canadian systems in 1988 will, for the first time in five years, exceed depreciation, thereby offsetting the decline in the rate base. Beyond 1988 significant expansion is planned to meet growing Canadian needs as well as for additional exports to the U.S. The gas for some of the



G.J. Maier

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export projects, such as the Iroquois pipeline and Ocean State Power, is already under contract and the facilities are in the regulatory approval stage. The company is well-positioned to participate in further export opportunities that are developing.

As the demand for natural gas gradually increases, much of the new supply will originate in Canada. With its existing system and ownership interests in other connecting lines, TransCanada is well-placed to participate in transporting the additional volumes, both in Canada and the U.S.A.

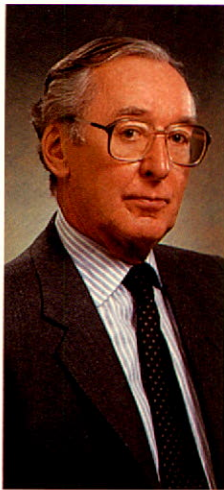
TransCanada is particularly pleased to be able to reduce its transportation tolls in 1988, reflecting lower costs. The amount of the reduction will be determined after hearings before the National Energy Board later this year, but in the meantime that Board has set interim tolls that allow for a 10 per cent reduction from last year. TransCanada expects that the tolls set following the hearing will allow for further reductions. Lower tolls will mean higher returns for TransCanada's contract producers and an improved competitive position for natural gas.

The positive and constructive intent of the partial deregulation of the natural gas industry initiated by the producing industry and provinces, and the federal government in 1985 has, to some degree, been offset by government and regulatory pressure for lower prices within consuming provinces. This pressure is being applied at a time when producers are faced with earning an inadequate return on their natural gas production, and in some cases are not even realizing replacement costs.

Turning to our oil and gas exploration and production businesses, the acquisition of Encor was a key component in our strategy. The prior investment that we held in oil and gas in Canada was primarily passive with most operational and management decisions controlled by another company. A high priority objective is to obtain greater control and improve profitability. The amalgamation of our present resources business with Encor is specifically aimed at enabling TransCanada to achieve those objectives, to obtain additional operating management and to proceed to build a strong Canadian-based international oil and gas company.

In keeping with our global growth plans, we continue to pursue oil and gas opportunities outside of Canada. For example, we have acquired new concession areas in Indonesia, the U.K., Pakistan, Italy and New Zealand. They are all promising geologic areas, and our policy is to secure a position at minimum cost but with maximum tenure. This is consistent with our views regarding the longer term potential of the energy business. Foreign operations hold the opportunity for discovery of large reserves to complement our Canadian operations that are in the lower risk-reward spectrum.

The company's past major investments in oil and gas date back to the early 1980s. The lack of profitability from those holdings can be traced to high acquisition costs funded primarily with debt denominated in foreign currency. Thin margins due to low oil and gas prices, high depletion charges, and



G.P. Osler

unrealized foreign exchange losses are the result, and although they are currently a burden on the company there is no simple remedy for their elimination. Our objective is to work our way towards higher profitability through the actions now being taken.

Some of the other natural gas industry related businesses in which TransCanada has invested include Cancarb, IPEL KOPP, and Ocean State Power. Cancarb's plant in Medicine Hat, Alberta produces the world's highest quality carbon black. To expand markets for its high quality thermal carbon black and to develop an entirely new business enterprise, Cancarb is proceeding with pilot testing of a new ceramic technology process.

IPEL KOPP is one of the world's leaders in pipeline inspection technology; and after consolidation and restructuring in 1987, this subsidiary is expected to be a contributor to profit in the years ahead.

Ocean State Power in Rhode Island will be the first combined cycle power generation facility in which the company will invest. The project has not yet cleared all of the regulatory hurdles, but is expected to do so by the fall of 1988. We view Ocean State as only one of a number of combined cycle and co-generation power projects in which the company will be a participant and, in some cases, operator. These projects present an entirely new spectrum of investment and growth opportunities for the company, where we could be involved not only in gas production and transportation, but also the new business line of producing electric power for sale to utilities.

During 1987 the following changes occurred in the membership of the Board of Directors.

Mr. Harry G. Schaefer, Vice-Chairman of the Board and Chief Financial Officer of TransAlta Utilities Corporation, and Mr. Neil J. Stewart, a former Vice-Chairman of the National Energy Board and former Chairman of the Energy Supplies Allocation Board, were elected to the Board of Directors.

Mr. John P. Gallagher and Mr. Frank A. Schultz retired having reached mandatory retirement age. Mr. Gallagher had been a director since 1978. Mr. Schultz was one of the founding directors of the company in 1951 and will continue as a director of our U.S. subsidiaries.

Mr. George W. Woods, who joined TransCanada PipeLines as an officer in 1959 and became a director in 1968, also stepped down from the Board.

On behalf of the Board of Directors, we thank Mr. Gallagher, Mr. Schultz and Mr. Woods for the major contributions they have made.

In conclusion we invite you to attend the Annual and Special Meeting of Shareholders to be held at The Regina Inn, Regina, Saskatchewan on Monday, April 18 at 10:30 a.m. We hope to see as many shareholders there as possible.



G.J. Maier  
President and  
Chief Executive Officer



G.P. Osler  
Chairman







late fall moon  
hovers over Station  
2 at Burstall,  
Saskatchewan,  
near the boundary  
with Alberta. The  
station's compres-  
sors can pump a  
maximum of 130  
million cubic metres  
of gas a day.

TransCanada owns and operates a 10 000-kilometre pipeline system extending from Empress, Alberta to Montreal, Quebec which connects with export points along the Canada/United States border. Total deliveries of natural gas in 1987 were 32.6 billion cubic metres, a decline of one per cent from 1986. Domestic deliveries reached 27.0 billion cubic metres, one per cent lower than in 1986 when volumes were 27.3 billion cubic metres. Export deliveries were 5.6 billion cubic metres, two per cent lower than in 1986 when volumes were 5.7 billion cubic metres.

Warm weather in 1987 outweighed the positive effects of lower natural gas prices and accounted for the slight decline in domestic market deliveries.

In the United States, regulatory protectionism and reliance on domestic spot gas were the main reasons Canadian imports dropped in 1987, but warm weather was also a factor. Although TransCanada's deliveries to traditional U.S. pipeline customers declined, Western Gas Marketing developed sales to new customers to help minimize the decrease.

#### **Regulatory Environment**

In June, the National Energy Board released its decision on TransCanada's application for new tolls. The board reduced TransCanada's return on common





equity to 13.25 per cent for 1987 and maintained a deemed common equity component of 30 per cent. The new tolls were effective July 1, 1987.

In December, the company, reflecting lower costs, filed two toll applications with the National

**Transportation Services**

With the partial deregulation of the natural gas industry, the number of transportation customers using the pipeline continues to increase. In 1987, TransCanada provided firm and interruptible transportation ser-



Energy Board. The first requested an interim toll reduction of 17 per cent and the second requested new permanent tolls be set based on a test period commencing July 1, 1988.

The board turned down TransCanada's request for interim tolls and rejected the company's application for new tolls based on a test period commencing July 1, 1988. Instead, the board set interim tolls 10 per cent lower than those in effect in 1987 and directed the company to file a new application covering a two-year period commencing January 1, 1988. The board indicated that the hearing of the new application would be conducted in two phases. Phase I will deal with toll design and tariff issues. The cost of service, rate base and rate of return for 1988 and 1989 will be dealt with in Phase II. The company filed an application dealing with Phase I matters in February 1988. The reduced tolls will mean improved returns for Alberta producers and an improved competitive position for natural gas in both Canadian and U.S. markets.

vice for deliveries to points in Canada and to the U.S. border under 293 contracts compared to 45 in 1986. In 1988, the number of contracts is expected to grow beyond 400. The increase in transportation contracts is mainly a result of direct purchase arrangements between Canadian end-users and producers. The number of contracts in this sector has grown from 29 in 1986 to 255 at the end of 1987.

The 3.8 billion cubic metres of gas shipped in 1987 by these new customers displaced volumes previously sold by Western Gas Marketing under sales contracts with distribution customers. The firm deliveries to these new transportation customers reached 16 million cubic metres per day at the end of 1987.

In May 1987, the Manitoba Oil and Gas Corporation (MOGC), a provincial government agency, applied to the National Energy Board for an order requiring TransCanada to transport gas on

**The**  
**10 000 kilometre**  
**gas pipeline**  
**between Alberta**  
**and Quebec owned**  
**and operated by**  
**TransCanada con-**  
**nects with other**  
**major pipeline**  
**systems in Canada**  
**and the U.S. in which**  
**the company has**  
**interests.**

behalf of MOGC. If granted, the MOGC proposal would have resulted in the displacement of virtually the entire volume of gas Manitoba utilities contracted to purchase from the company under existing long-term contracts with gas purchased from new suppliers.

With the support of both gas producers and the Alberta government, TransCanada opposed the application on the grounds that it was inconsistent with the intent of the 1985 Agreement on Natural Gas Markets and Prices. Moreover, similar displacement schemes which would have resulted in the effective abrogation by utilities of existing contracts had previously been rejected by the National Energy Board. In September 1987, the Board turned down the MOGC application. In November, MOGC applied to the Federal Court of Appeal for leave to appeal the decision.

### Construction and Operations

To increase throughput capacity and improve safety, reliability and efficiency on TransCanada's pipeline system, capital expenditures of \$81.9 million were made in 1987.

Among the major capital projects was the construction of 6.7 kilometres of 914-millimetre loop line, relocation of a 5 700-kilowatt compressor on the pipeline in the Niagara region and the continued inspection and testing of the pipeline between Winnipeg and Toronto. In addition, the compressors and yard piping at two northern Ontario stations were modified to improve their operating efficiency.

The company will have extensive construction programs in 1988 and 1989 to meet increased requirements in both the domestic and export markets. The increased requirements include new exports of 10 million cubic metres per day to the



- TransCanada PipeLines
  - Great Lakes Gas Transmission
- Trans Québec & Maritimes
  - Northern Border
  - Northern Border extension (Sask.)
  - Proposed Iroquois Gas Transmission System
  - Montreal Pipe Line

northeastern United States to be delivered at Iroquois, Ontario to the proposed Iroquois Gas Transmission System and 5.1 million cubic metres per day at the Niagara Falls, Ontario export point.

In June 1987, the company filed an application with the National Energy Board for authorization to construct \$334 million of facilities to meet those requirements. The proposed program called for expenditures of \$59 million in 1988 and \$275 million in 1989. Furthermore, (U.S.) \$72 million of additional facilities would be required by Great Lakes Gas Transmission Company.

During the hearing of the application, two large Canadian distribution customers made requests for additional firm service commencing November 1, 1988 and another Canadian customer requested additional firm service commencing November 1, 1989. These requests and the postponement of the commencement of one export sale from November 1, 1988 to November 1, 1989 caused the company to alter its construction program. The changes in 1988 include the relocation of compressor facilities and advancing to 1988 the construction of some of the facilities previously proposed for 1989. As a result, the 1988 construction program for adding system capacity will increase to \$130 million.

In 1989, it will be necessary for the company not only to complete the construction of the remaining

facilities proposed for construction in that year, but to add further capacity to meet the increased service. Studies are currently underway to determine whether that capacity should be constructed by adding facilities in northern Ontario, by adding to the facilities of Great Lakes Gas Transmission Company or a combination of both.

In addition to the construction program to increase capacity, the company will spend \$35 million in 1988 on other capital projects including the replacement of seven kilometres of pipeline in the Toronto area due to population growth and on the modification of compressors and yard piping at two stations to improve operating efficiency.

The 1988 construction program will include relocation of a 10 400-kilowatt compressor to the station at Kapuskasing, Ontario, upgrading of four gas turbines and installation of four aerial coolers at other stations in northern Ontario, building 35.8 kilometres of 914-millimetre loop line and the relocation of a 3 200-kilowatt compressor on the Toronto to Niagara line, construction of 19.1 kilometres of 914-millimetre loop line and the relocation of a 5 700-kilowatt compressor on the Toronto to Montreal section, and the installation of two 1 300-kilowatt compressors and 11.4 kilometres of 508-millimetre loop line on the St. Mathieu extension south of Montreal.

**Great Lakes Gas Transmission Company**

Great Lakes Gas Transmission Company, 50 per cent owned by TransCanada, operates a 2 100-kilometre pipeline from Emerson, Manitoba across Minnesota, Wisconsin and Michigan to Sault Ste. Marie and Sarnia, Ontario. The majority of natural gas transported by Great Lakes is redelivered to TransCanada.

Deliveries through the Great Lakes system in 1987 were 12.4 billion cubic metres, a slight increase over the previous year.

In December 1987, Great Lakes filed a new rate settlement proposal with the United States Federal Energy Regulatory Commission (FERC). Settlement of Great Lakes' rate case has been pending since July 1986.

Great Lakes has received several requests for transportation service and will apply to FERC for authorization to construct new facilities to meet those requirements.

**Northern Border Pipeline Company**

TransCanada holds a 30 per cent interest in the Northern Border Pipeline Company, which owns a 1 323-kilometre pipeline connecting with Foothills Pipe Lines (Sask.) Ltd. at Monchy, Saskatchewan and running to Ventura, Iowa.

In 1987, Northern Border transported a record 6.3 billion cubic metres of natural gas to pipelines and markets in the midwestern United States, an increase of 60 per cent over 1986. The pipeline trans-

portation capacity had not been fully utilized until recently. A two-year marketing and transportation agreement between United Gas Pipe Line Company and Pan-Alberta Gas Ltd., effective July 1987, was partly responsible for the increased volumes.

In October 1987, Northern Border received FERC certificate authority to open its uncommitted pipeline capacity to access by all shippers desiring service. Interruptible open access volumes began to flow December 19, 1987. The company has subsequently received requests for firm and interruptible transportation service which exceed the present capacity of the pipeline.

In November 1987, Northern Border applied to FERC to extend its pipeline 597 kilometres southeast to Tuscola, Illinois, south of Chicago. The proposed expansion and extension of the existing pipeline would cost an estimated (U.S.) \$534 million and carry up to an additional 31.2 million cubic metres of natural gas per day to Tuscola. The project would substantially lower the cost of transportation on Northern Border and provide the opportunity to connect with several other major U.S. pipeline systems.

**Foothills Pipe Lines (Sask.) Ltd.**

TransCanada operates and owns a 44 per cent interest in Foothills Pipe Lines (Sask.), a 257-kilometre pipeline which runs from the Alberta/Saskatchewan border at Empress to Monchy, Saskatchewan where it connects to the Northern Border pipeline.

During 1987, Foothills (Sask.) transported a record 4.9 billion cubic metres of Alberta natural gas to the United States, an increase of 95 per cent over the previous calendar year.

The National Energy Board approved an application to provide interruptible transportation service on Foothills (Sask.), which commenced in December 1987. This authority will enable Foothills (Sask.) to maximize its present transportation capability in response to increased demand for gas on the Northern Border pipeline. If Northern Border expands its pipeline capacity as proposed, Foothills (Sask.) will require a major expansion of its pipeline system.

**Trans Québec & Maritimes Pipeline Inc.**

Trans Québec & Maritimes Pipeline Inc., 50 per cent owned by TransCanada, operates a 342-kilometre pipeline that extends from the TransCanada system near Montreal to Quebec City.

In 1987, the National Energy Board approved Trans Québec & Maritimes Pipeline's tolls for 1987 and 1988. In its decision the National Energy Board allowed Trans Québec & Maritimes Pipeline to maintain its 13.5 per cent rate of return on equity for 1987 and increased it to 13.75 per cent for 1988.

Pipeline deliveries increased by 2.5 per cent to a record 2.6 billion cubic metres. This increase continues a trend of annual growth in deliveries since service began in 1982.

**Montreal Pipe Line Limited**

In 1987, TransCanada acquired 16 per cent of Montreal Pipe Line Limited, the owner of a 300-kilometre natural gas pipeline and a 380-kilometre oil pipeline between Montreal, Quebec and Portland, Maine. The 300-kilometre pipeline has been converted from oil to natural gas service which commenced on an interruptible basis in November 1987. Canadian gas export authority has been granted for up to 1.1 million cubic metres per day to an annual limit of 300 million cubic metres. Firm deliveries of 710 thousand cubic metres per day are scheduled to begin November 1, 1988 under a long-term contract.

**Iroquois Gas Transmission System**

Iroquois Gas Transmission System, a partnership in which TransCanada holds a 50 per cent interest, is progressing through regulatory proceedings in the United States and Canada. The other partners are five New England utilities and a Boston-based energy consulting firm.

The proposed 575-kilometre pipeline will connect with TransCanada's system, near Iroquois, Ontario, and carry 10 million cubic metres of natural gas per day along a route across New York State and Connecticut to Long Island. The gas will serve markets in New York, Connecticut and New Jersey.

In 1987, a removal permit was granted by Alberta's Energy Resources Conservation Board and an export license was granted by the National Energy Board for the gas destined to flow through the pipeline.



In July 1987, FERC announced it would receive proposals to serve the Northeast U.S. market so that relevant decisions on increased pipeline capacity could be made in time for the 1989/90 heating season. The FERC announcement came more

than one year after Iroquois filed its initial application in May 1986. That application was updated in January 1987. Iroquois filed a supplement to its application in January 1988.

WESTERN GAS MARKETING LIMITED

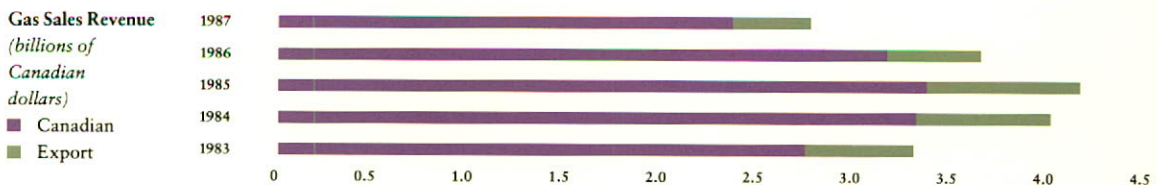
TransCanada's marketing subsidiary, Western Gas Marketing Limited, had its second year of operation in 1987—the first full year under the 1985 Agreement on Natural Gas Markets and Prices.

Under the regulatory changes, new buyers and sellers of gas contracted for space on Canada's natural gas pipelines. In addition, large end-users of gas had the choice of looking beyond distribution companies for their supplies.

There are positive signs that these efforts will result in expanded markets in the near term.

**Domestic Sales**

Western Gas Marketing's total 1987 gas sales in Canada, east of Alberta, were about 20 billion cubic metres, a decline of 3 billion cubic metres from 1986. Direct sales by others to end-users and distributors accounted for 2.4 billion cubic metres of the decline with warmer than normal weather accounting for the balance.



TransCanada had previously served the vast majority of these markets through long term sales contracts with local distribution companies.

In the changed environment, Western Gas Marketing competed vigorously for domestic and export markets.

Sales within Alberta were lower in 1987 than in 1986 primarily due to lower sales to the Empress extraction plants and warmer than normal temperatures. Sales to all Canadian markets have improved in early 1988 with the return to normal winter conditions.





In Manitoba, a new pricing arrangement was established with Manitoba gas distributors. The Manitoba government's removal of its pipeline compressor fuel tax allowed Western Gas Marketing to offer the Manitoba distributors similar pricing terms to those negotiated with Ontario and Quebec distributors. Provincial regulators in Ontario and Manitoba approved the renegotiated pricing arrangements early in 1988. These arrangements will be in effect until October 31, 1988. Western Gas Marketing is currently exploring new sales opportunities with distributors.

#### **Export Sales**

Access to the U.S. market remained limited during 1987. The United States has its own over-supply of natural gas and had not fully implemented deregulation. The producing and transportation sectors in the United States continued to protect their own market for domestic supplies, thus limiting the entry of imported Canadian natural gas. This situation resulted in Western Gas Marketing's traditional customers reducing purchases of Canadian gas in 1987.

Despite this, gas sales to the United States were down only slightly from the previous year. Western Gas Marketing sales to the



**early dawn light  
covers New York  
City, a major market  
for supplies of  
Canadian natural  
gas. Western Gas  
Marketing has been  
building markets  
throughout the  
northeastern U.S.**



U.S. spot market and direct sales to U.S. distribution companies almost offset sales losses to its traditional pipeline customers. At the same time, increased sales opportunities are developing for Western Gas Marketing as U.S. supply and demand come closer into balance and U.S. pipelines open to Canadian gas.

**Gas Supply**

Approximately 40 per cent of Alberta's remaining established gas reserves are contracted to TransCanada PipeLines under long-term contracts administered by Western Gas Marketing. The company holds 2,500 gas purchase contracts with 750 natural gas produc-



To take advantage of these opportunities, Western Gas Marketing took initiatives in 1987 to expand its use of the Northern Border pipeline, a major conduit for access by Canadian gas to the United States. The company has contracted for interruptible transportation on this pipeline and has requested firm transportation rights for currently uncontracted capacity. In addition, it has requested firm transportation capacity on a planned expansion and extension of the Northern Border pipeline.

Western Gas Marketing will be the principal gas supplier to the Iroquois Gas Transmission system. In 1987, a licence was granted to export 7.8 million cubic metres a day over 15 years to local gas distributors in the northeastern United States. In addition, Western Gas Marketing's Boundary phase II sales began early in 1988. About 1.4 million cubic metres a day of natural gas have been contracted under this firm sales agreement.

ers. These contracts encompass 19,000 gas wells which are producing from 675 billion cubic metres of remaining established gas reserves.

In 1987, TransCanada's gas purchase contracts were operated under a netback pricing agreement. Under this two-year arrangement, which began November 1, 1986, transportation tolls and other approved charges are deducted from the prices negotiated in each market to yield a netback price to the producer.

Under the netback pricing structure, Western Gas Marketing's revenues directly track the producers' revenues. Revenue is earned from an operating, administration and marketing charge of 1.5 per cent of a total net revenue pool, derived from all domestic and export sales, less the associated transportation costs.

The majority of TransCanada's gas purchase contracts with its producers are reserve-based contracts. They include take-or-pay provisions

that assure the producers cash flow while dedicating long-term supplies of gas to the company. Under reserve-based contracts, TransCanada and the producers agree on a minimum rate of production over a specified contract life, based on the total contracted marketable reserves.

Reserve-based contracts allow additional reserves, drilled under dedicated lands, to be developed and added to the contract. Significant reserves were developed by the high level of drilling in the late 1970s and early 1980s.

This increase in the total reserves contracted to TransCanada, com-

### Annual Gas Sales and Transportation Volumes

<i>(thousands of cubic metres)</i>	1987	1986	1985	1984	1983
<b>CANADIAN</b>					
<b>SALES</b>					
Saskatchewan	31 999	37 071	40 058	37 163	35 884
Manitoba	1 493 769	1 709 677	1 834 564	1 807 870	1 838 097
Ontario	15 359 336	17 956 700	18 341 308	18 865 124	16 860 659
Quebec	3 107 007	4 051 145	4 183 401	3 748 793	3 227 584
<b>Total Sales</b>	<b>19 992 112</b>	<b>23 754 593</b>	<b>24 399 331</b>	<b>24 458 950</b>	<b>21 962 224</b>
<b>TRANSPORTATION</b>					
Saskatchewan	543 427	627 076	758 114	764 129	731 234
Manitoba	236 855	133 099	99 764	52 538	—
Ontario	3 917 308	1 558 893	334 766	247 261	171 308
Quebec	2 338 569	1 266 523	923 298	659 985	586 225
<b>Total Transportation</b>	<b>7 036 158</b>	<b>3 585 591</b>	<b>2 115 942</b>	<b>1 723 913</b>	<b>1 488 767</b>
<b>Total Canadian</b>	<b>27 028 270</b>	<b>27 340 184</b>	<b>26 515 273</b>	<b>26 182 863</b>	<b>23 450 991</b>
<b>EXPORT</b>					
<b>SALES</b>					
Emerson	2 033 189	2 643 094	4 184 215	3 302 727	2 467 892
Niagara Falls	866 610	378 023	382 248	69 119	—
Philipsburg	146 296	145 515	147 574	141 484	130 590
Cornwall	217 581	210 424	227 625	228 063	180 392
Fort Frances	99 998	110 309	101 826	155 020	159 652
<b>Total Sales</b>	<b>3 363 673</b>	<b>3 487 365</b>	<b>5 043 488</b>	<b>3 896 413</b>	<b>2 938 526</b>
<b>TRANSPORTATION</b>					
Emerson	1 862 748	1 825 269	1 834 399	2 309 125	1 736 423
Niagara Falls	362 248	432 556	740 784	533 541	450 476
Sabrevois	16 809	—	—	—	—
<b>Total Transportation</b>	<b>2 241 806</b>	<b>2 257 825</b>	<b>2 575 183</b>	<b>2 842 666</b>	<b>2 186 899</b>
<b>Total Export</b>	<b>5 605 479</b>	<b>5 745 190</b>	<b>7 618 671</b>	<b>6 739 079</b>	<b>5 125 425</b>
<b>Total Deliveries</b>	<b>32 633 749</b>	<b>33 085 374</b>	<b>34 133 944</b>	<b>32 921 942</b>	<b>28 576 416</b>

*Transportation volumes shown include storage transportation service volumes.*

bined with the static demand resulting from government-mandated price increases, led to a supply surplus.

As the contracted supply exceeded market demand, the take-or-pay provisions in the contracts became effective and payments were made for the gas that was not taken.

In 1982 and 1983, banking syndicates advanced \$2.7 billion to producers to refinance TransCanada's take-or-pay payments under the

Topgas programs. The recovery of these advances began in 1984 and will be completed no later than 1994. As of December 31, 1987, 37 per cent of the advances had been recovered, leaving \$1.7 billion outstanding.

Take-or-pay obligations during the contract years ending October 31, 1987 and 1988 have been suspended under the netback pricing agreements.

## OIL AND GAS

In 1987 TransCanada's oil and gas segment had record sales volumes of oil and natural gas liquids and increased sales volumes of natural gas. The acquisition of Encor in December 1987, has substantially increased TransCanada's oil and gas assets, providing a base to improve profitability and gradually give the company greater control over its activities. TransCanada's results for 1987 do not include those of Encor.

TransCanada continued its strategy of securing land positions in highly prospective areas and concentrating on exploration and development projects that are economic at today's energy prices. In 1987, the company participated in the drilling of 800 gross wells, down from 1,105

wells in 1986, this includes farm-out wells. At year-end, the company held interests in 52.3 million gross (5.1 million net) exploratory acres. Total expenditures on exploration, development and land acquisition were \$94.2 million, a decrease of 16 per cent from 1986.

### Canadian Operations

In 1987, TransCanada invested a total of \$38.3 million in oil and gas exploration, development and land acquisition in western Canada.

TransCanada participated in the drilling of 715 gross (39.70 net) exploratory wells in 1987 which resulted in 493 gross (22.89 net) oil and 99 gross (3.56 net) natural gas discoveries in Western Canada, this includes farm-out wells.

### Petroleum and Natural Gas Rights

<i>as at December 31, 1987 working interest (thousands of acres)</i>	Gross <sup>2</sup>	Net <sup>3</sup>
<b>Canada</b>		
Western Canada <sup>1</sup>		
Alberta	12,703	946
British Columbia	2,259	153
Saskatchewan	1,883	191
Manitoba	1,198	128
Ontario	2	—
	18,045	1,418
Frontier		
Arctic Islands	337	8
Beaufort Sea	820	31
East Coast	64	1
Northwest Territories	551	26
	1,772	66
<b>Total Canada</b>	19,817	1,484
<b>U.S.A.</b>	214	89
<b>International</b>		
Australia	14,804	1,914
Indonesia	20,773	1,164
Italy	1,571	254
New Zealand	750	281
North Sea—United Kingdom	162	45
North Sea—Netherlands	77	7
Spain	152	45
Pakistan	880	264
<b>Total International</b>	39,169	3,974
<b>Grand Total</b>	59,200	5,547

<sup>1</sup>In addition to the above working interests, the company holds a royalty interest in 1.2 million acres in Western Canada and frontier lands.

<sup>2</sup>Gross refers to the total number of acres in which the company holds either a working or overriding royalty interest.

<sup>3</sup>Net is determined by multiplying the gross acres by the percentage of working interest held by the company in gross acres. Overriding royalty interests are excluded in calculating net acres. This table does not include the petroleum and natural gas rights of Encor.

### Joint Exploration Agreement

The majority of the company's oil and gas activities in western Canada have been conducted under a joint exploration agreement with Dome Petroleum Limited. Investment in exploration, development and land acquisition on these lands totalled \$23.1 million. This represented approximately 60 per cent of TransCanada's total expenditures

for Canadian operations, down from 72 per cent in 1986.

Exploration under the joint exploration agreement led to oil discoveries in the Tangent, Seal and Gilwood areas of northern Alberta and in the Tableland area of southeastern Saskatchewan. In addition, natural gas discoveries were made in the Brazeau and Caroline areas of central Alberta.



oil rig operated by TransCanada in the foothills of central Alberta probes the province's energy-rich basin for oil and gas. In 1987 the company participated in the drilling of 715 wells in Western Canada.



The joint exploration agreement with Dome is being reviewed to determine what changes are needed to reflect TransCanada's increasing emphasis on capital investments outside the agreement and the Encor/TransCanada amalgamation.

**Self-managed Operations**

TransCanada continued to increase its Canadian exploration and development activities independent of the joint exploration agreement with Dome Petroleum.

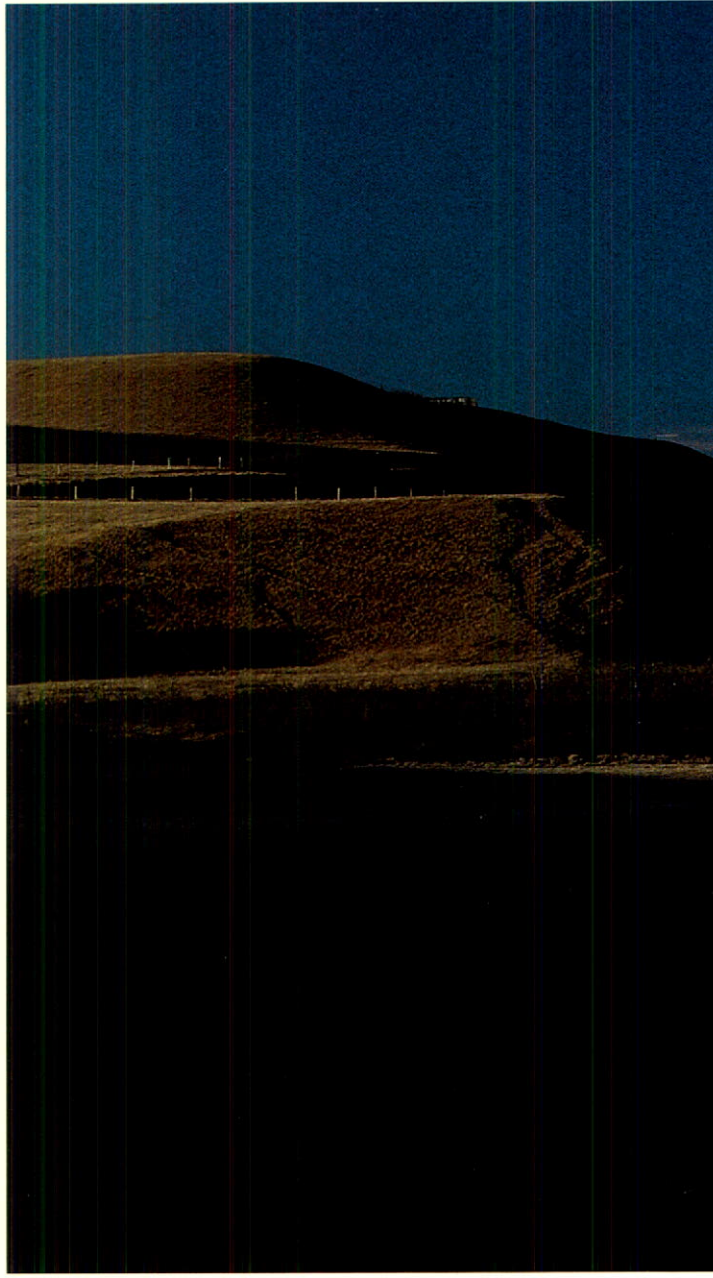
During 1987, the company increased its Canadian land position, independent of the JEA, by acquiring an interest in 58,200 gross (32,700 net) acres for a total self-managed land inventory at year-end of 215,000 gross (81,000 net) acres.

Exploration, development and land acquisition expenditures for self-managed Canadian operations were \$15.2 million, up from \$9.4 million in 1986.

Major exploration successes included oil discoveries in the Rainbow area of northwestern Alberta and the Bashaw and Swalwell areas of central Alberta. A follow-up development program in the Swalwell area resulted in two producing oil wells.

**Canadian Production**

Sales of crude oil and natural gas liquids in Canada, before royalties, averaged 15,678 barrels per day, a







**T**he exploration and development activities of TransCanada in Western Canada are undertaken through a joint agreement with Dome Petroleum Limited and under self-managed programs.

3.5 per cent increase over 1986. Of these volumes, 15,420 barrels of oil per day are managed by Dome under the joint exploration agreement. This includes TransCanada's share of production from the Syncrude plant of 846 barrels per day, which was at record levels as a result of the completion of the "debottlenecking" project and increased plant utilization.

The Syncrude plant capital additions project is expected to be completed by the end of 1988 and should increase the company's production from the plant by about 125 barrels of oil per day.

Independent production levels averaged only 258 barrels of oil per day for the year, but had increased to 500 barrels per day by the end of the year.

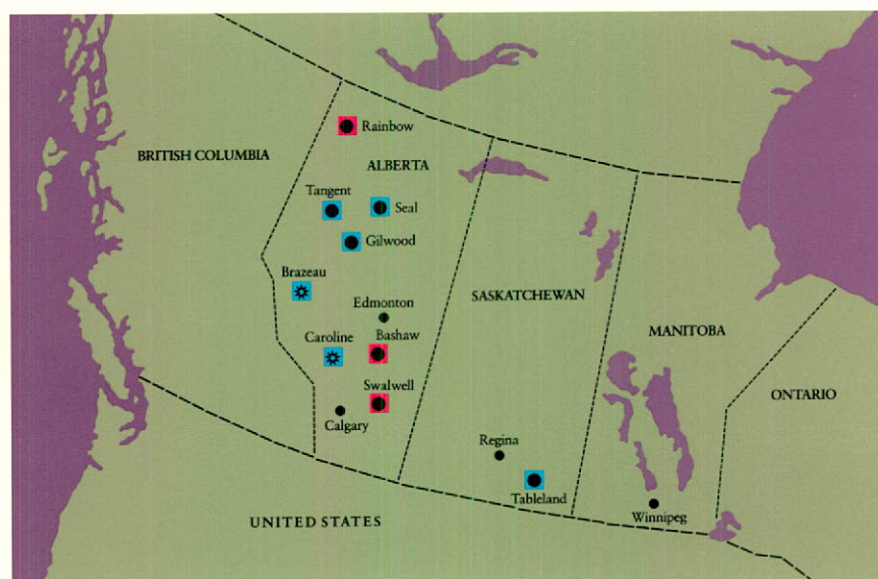
Natural gas sales in 1987 of 84.9 million cubic feet per day, all of

which are managed by Dome under the joint exploration agreement, exceeded the 1986 sales of 80.8 million cubic feet per day. This was due mainly to an increase in export sales to the United States partly offset by lower domestic Canadian sales.

#### United States Operations

In the United States average daily production from oil and gas properties during 1987 was 1,554 barrels of crude oil and natural gas liquids and 15.5 million cubic feet of natural gas. These volumes compare to average daily production of 1,583 barrels of crude oil and natural gas liquids and 11.6 million cubic feet of natural gas for 1986.

The decrease in crude oil production was primarily caused by the sales of marginal oil and gas properties for (U.S.) \$20 million as part of a major rationalization and cost reduction effort. Expenditures for



#### Areas of Significant Activity

- Oil Discovery
- ★ Gas Discovery
- JEA Projects
- Independent Projects



of TransCanada's  
oil and gas activities  
in the United States  
are managed  
through its Dallas,  
Texas office.

exploration, development and land  
acquisition programs in 1987  
totalled (U.S.) \$20.8 million as com-

pared to 1986 levels of (U.S.)  
\$25.6 million.

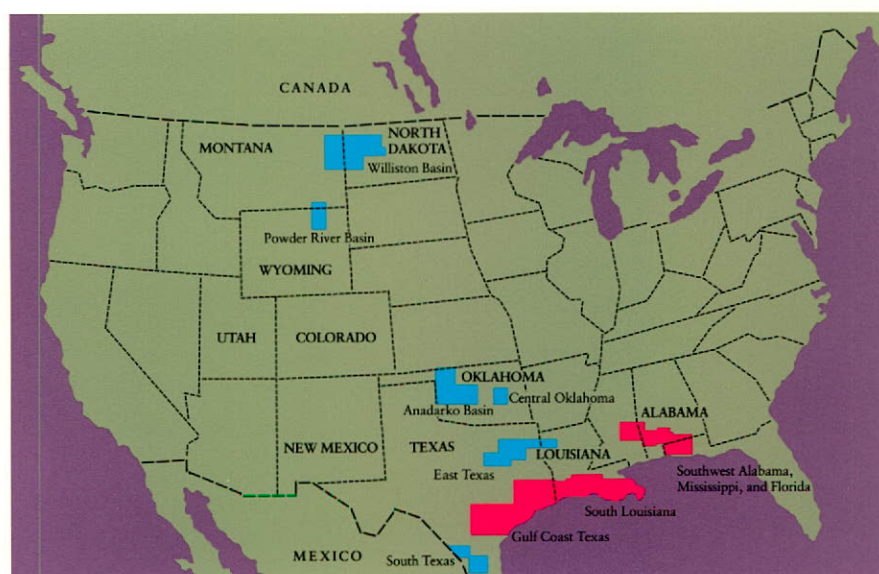
### Estimated Remaining Reserves

December 31	1987	1986
<b>Proved oil and gas reserves<sup>1</sup></b>		
<b>Crude oil and natural gas liquids (thousands of barrels)</b>		
Canada	60,658	62,714
United States	3,485	3,618
Indonesia and other foreign	8,840	7,616
	73,163	73,948
<b>Natural gas (billions of cubic feet)</b>		
Canada	788.1	819.4
United States	57.2	65.3
	845.3	884.7
<b>Synthetic oil<sup>2</sup> (thousands of barrels)</b>		
	7,937	8,880
<b>Sulphur (thousands of tons)</b>		
	851	700

<sup>1</sup>Proved reserves in Canada are determined by the deduction of freehold and overriding royalties but before the deduction of provincial royalties. Proved reserves in the United States are net of all royalties. Proved reserves in Indonesia and other foreign jurisdictions are attributable to the company's gross working interest before host government takes.

<sup>2</sup>Synthetic oil reserves result from the company's interest in the Syncrude project.

The table does not include the reserves of Encor.



Areas of Significant Activity  
■ Priority Exploration Areas  
■ Ongoing Producing Areas

# Six

exploratory wells

were drilled in

Indonesia's

Malacca Strait production sharing contract area in 1987.

The successful program

resulted in five

new oil discoveries

for TransCanada's

International

Operations.

## International Operations

### Indonesia

TransCanada has interests in five production sharing contracts (PSCs) in Indonesia, two of which are producing, the Malacca Strait PSC (7.08 per cent interest) and the Southeast Sumatra PSC (1.22 per cent).

Malacca Strait production increased during 1987, more than offsetting a decline from the Southeast Sumatra PSC. A full year of production from the Melibur and Mengkapan oil fields was the reason for the increase.

Average crude oil production was 3,476 barrels per day, an increase of 23 per cent over 1986. Exploration is continuing in the three other contract areas.

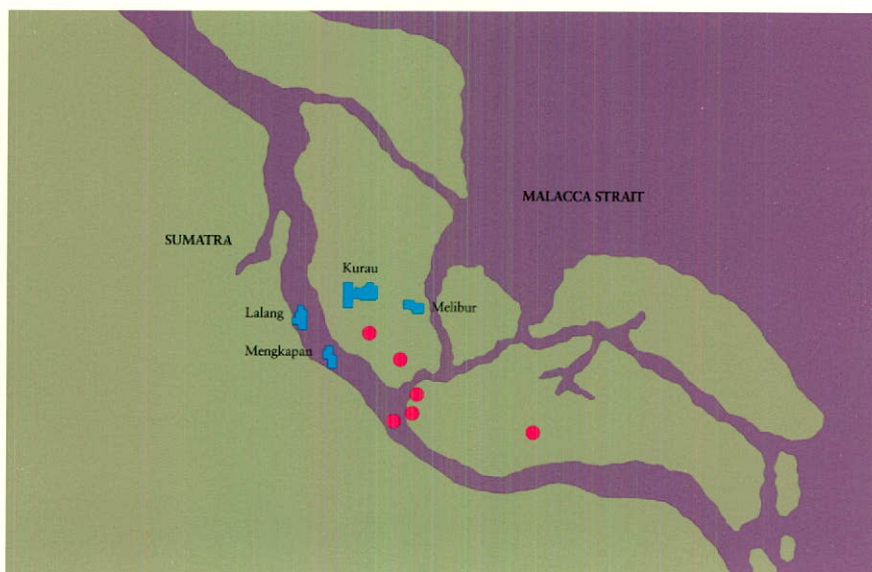
Six exploratory wells were drilled on the Malacca Strait PSC in 1987, resulting in five oil discoveries.

On the Southeast Sumatra PSC in 1987 an important oil discovery was made in the Intan region. Later in 1987, a delineation well was drilling to define the extent of this discovery.

At year-end the company's Indonesian capacity and production were in reasonable balance at about 4,440 barrels of oil per day. Development was underway at the Kurau field which will contribute to production starting by mid-1988.

### New Zealand and Australia

In New Zealand, TransCanada completed a follow-up appraisal well to the Kupe No. 1 South oil and condensate discovery drilled offshore in late 1986. The Kupe South No. 2 appraisal well encountered a 292-



#### Areas of Significant Activity

■ Oilfields

● Undeveloped Oil Discoveries



**TransCanada's**  
**most promising oil**  
**holdings is the Kupe**  
**South exploration**  
**area, located 20**  
**miles offshore of**  
**New Zealand's**  
**North Island.**

### Daily Sales Volume Summary

	1987				1986			
	Canada	U.S.A.	Indonesia & Other Foreign	Total	Canada	U.S.A.	Indonesia & Other Foreign	Total
Oil and Natural Gas Liquids (barrels)								
Conventional	11,644	1,439	3,699	16,782	11,365	1,484	3,148	15,997
Synthetic	846	—	—	846	803	—	—	803
Natural Gas Liquids	3,188	115	—	3,303	2,987	99	—	3,086
Total Oil and Natural Gas Liquids	15,678	1,554	3,699	20,931	15,155	1,583	3,148	19,888
Natural Gas (millions of cubic feet)	84.9	15.5	—	100.4	80.8	11.6	—	92.4
Sulphur (long tons)	180	—	—	180	189	—	—	188

*Note: Sales volumes for Canada are gross and include all volumes attributable to the company's working interests before the deduction of royalties.*

*Sales volumes for the United States are net of royalties. Sales volumes for Indonesia are attributable to the company's gross working interest before government takes.*

*Daily sales volume is calculated by dividing total sales for the respective year by the number of days in that year.*

*TransCanada's results for 1987 do not include those of Encor.*



**Areas of Significant Activity**  
 ● Wells Drilled  
 ■ Oil and Gas Interest Areas





foot gross reservoir column which contained 197 feet of net hydrocarbon pay. A sequence of three drillstem tests through the lower 150-foot section produced oil at rates which varied from 460 to 675 barrels per day. Drillstem tests over the upper zone produced a total of 9.0 million cubic feet per day of gas and 730 barrels per day of condensate.

The Kupe discovery is located 20 miles offshore New Zealand in 120 feet of water. The company holds a 40 per cent working interest and is the operator in this licence. Another well, Kupe South No. 3, was drilling at year-end on the same geologic feature. The company also acquired 40 per cent interests in two other licences in the offshore Taranaki area. Further delineation wells are planned for the Kupe area in 1988.

In Australia, the company participated in the drilling of five exploration wells, resulting in an oil discovery at Kenmore North in Queensland. TransCanada holds interests in three offshore and nine onshore blocks in Australia totalling a net 1.9 million acres.

**O**ne of

**the company's offshore interests is its 40 per cent holding in the Kupe South field, where a drilling rig tests the No. 3 well in the shadow of New Zealand's Mount Egmont.**



# I n Italy

**TransCanada holds interests ranging up to 25 per cent in 17 exploration permits in prospective onshore and offshore areas.**

## Italy

During 1987, the company acquired interests in five new blocks in Italy.

At year-end, TransCanada was participating in three onshore wells drilling in highly prospective oil and gas areas of the northern and southern Apennines.

## North Sea

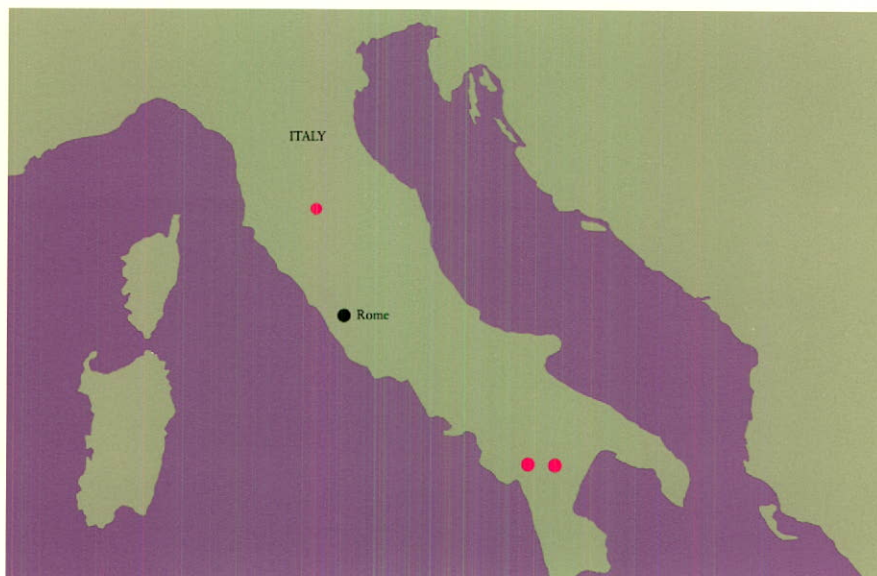
In the United Kingdom offshore sector, TransCanada obtained 30 per cent working interests in each of three blocks at the Tenth Round of competitive bidding in June 1987.

One of the blocks (47/5b) is located in the southern gas basin and the

other two (18/3 and 18/4) are located in the Inner Moray Firth.

During 1988, the company expects to drill one well on the newly acquired southern gas basin block and to carry out seismic surveys over the Moray Firth blocks.

In the Dutch sector, geophysical and geological evaluations of the company's K4b/K5a blocks have resulted in the delineation of several gas prospective exploration targets. The first will be drilled in 1988.



### Areas of Significant Activity

- Currently Drilling



## Drilling Summary

for the year ended December 31, 1987 (includes participation and farm-out wells)

	Oil		Gas		D & A*		Total	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
<b>Exploratory</b>								
Canada	54	6.01	33	1.81	77	9.37	164	17.19
U.S.A.	2	1.00	5	1.40	20	7.82	27	10.22
Foreign	13	1.08	1	0.05	7	0.62	21	1.75
<b>Total</b>	<b>69</b>	<b>8.09</b>	<b>39</b>	<b>3.26</b>	<b>104</b>	<b>17.81</b>	<b>212</b>	<b>29.16</b>
<b>Development</b>								
Canada	439	16.88	66	1.75	46	3.88	551	22.51
U.S.A.	12	3.16	13	2.76	8	2.22	33	8.14
Foreign	4	0.24	—	—	—	—	4	0.24
<b>Total</b>	<b>455</b>	<b>20.28</b>	<b>79</b>	<b>4.51</b>	<b>54</b>	<b>6.10</b>	<b>588</b>	<b>30.89</b>
<b>Exploratory &amp; Development Total</b>	<b>524</b>	<b>28.37</b>	<b>118</b>	<b>7.77</b>	<b>158</b>	<b>23.91</b>	<b>800</b>	<b>60.05</b>

\*Dry and abandoned

TransCanada's results for 1987 do not include those of Encor.

### Encor Energy Corporation Inc.

With the purchase of Encor, TransCanada acquired the assets and operating expertise of a senior independent Canadian oil and natural gas exploration and production company. The assets include 81.9 million barrels of proved oil and natural gas liquids reserves and 695.2 billion cubic feet of natural gas reserves.

In 1987 sales of crude oil and natural gas liquids by Encor, before royalties, averaged 20,150 barrels per day and natural gas sales of 86 million cubic feet per day. Encor conducts oil and gas production operations and is manager/operator, on its own behalf and on behalf

of others, of approximately 14,000 barrels of oil per day. During 1987 Encor participated (including farm-out wells) in the drilling of 441 gross (76.8 net) wells, resulting in an 82 per cent success ratio.

The Encor assets also include interests in 6.2 million gross acres of exploratory land in western Canada and an interest in Syncrude. International assets include exploration lands in the U.S. Gulf Coast, Turkey, Tunisia, Thailand and other areas.

With the acquisition of Encor, TransCanada has become the 14th largest producer of oil and gas liquids and the 12th largest producer of natural gas in Canada.

**International PipeLine Engineering Limited/KOPP**

In 1987, Kopp International Pipeline Services merged with IPEL Engineering, another TransCanada subsidiary in the pipeline inspection business, to form IPEL KOPP International Inc. The newly-formed TransCanada subsidiary provides an extensive range of pipeline inspection services to clients around the world. TransCanada acquired KOPP of Lingen, West Germany in 1986.

Operating offices have been established in Toronto, Lingen, Houston, Haugesund (Norway) and Aberdeen (Scotland). Sales offices and agents are now being set up in key pipeline centres. In 1987 IPEL KOPP successfully completed pipeline surveys in nine countries.

To maintain a long-term technological advantage, IPEL KOPP is committed to major research and development programs in Canada and Germany. The company is continuing to develop its ultrasonic and magnetic flux pipeline inspection tools and various other special pipeline inspection devices.

**Ocean State Power Project**

TransCanada holds a 40 per cent share in a proposed two-unit electric generating plant in Rhode Island. The plant would be fueled by 1.4 million cubic metres of gas a day from western Canada. Final permits for the first 250-megawatt plant are expected to be available by the fall with construction starting later in the year. The plant is scheduled for commissioning in 1989.

**Les Mines Selbaie**

TransCanada owns a ten per cent interest in Les Mines Selbaie, a polymetallic combined underground and open pit producer located 70 kilometres northwest of Joutel, Quebec. In 1987, the company's share of production amounted to 2.1 million kilograms of copper, 3.7 million kilograms of zinc, 7.9 million grams of silver and 62 400 grams of gold. A-1 zone production reached its design rate of 5 000 tonnes per day while the B-1 output was maintained at 1 650 tonnes per day. Mine life will be extended to eleven years with a recent decision to develop the A-2 zone deposit.

**Cancarb Limited**

Cancarb Limited, a wholly owned subsidiary since October 1981, produces and markets thermal carbon black under the name Thermax. Its Medicine Hat, Alberta plant is the largest, high quality thermal carbon black facility in the world.

In 1987, Cancarb achieved an increase in sales and market share. Sales volume and market share are projected to continue to grow in 1988 barring any severe recessionary trends.

During the year, Cancarb acquired a new process for produc-

ing high quality beta-phase silicon carbide from Thermax carbon black and silica sand. Silicon carbide is used in making advanced ceramics materials that withstand wear, corrosion and high temperatures in numerous industrial applications.

Laboratory studies demonstrated the new process could become the most economic source of silicon carbide in the world. A pilot plant will further assess the technical and economic merits of the project.

## FINANCE

In May 1987, TransCanada redeemed an \$80 million issue of Series F preferred shares and issued an equivalent amount of Series J preferred shares. The action allowed the company to take advantage of lower financing costs.

In July, the company issued \$100 million of Series L debentures, a 15-year issue at an interest rate of 10.80 per cent. These funds were used to finance TransCanada's utility operations. In late 1987 and early 1988, the company issued by private placement two series of New Zealand dollar notes, in the total principal

amount of (New Zealand) \$300 million, due 1993. The Canadian dollar equivalent of these transactions was about \$250 million.

TransCanada's currency exposure on these issues was completely hedged into Canadian dollars through a series of forward foreign exchange contracts. This provided the company with financing at rates lower than available by issuing securities in the domestic market. The funds will be used to finance capital projects in TransCanada's utility and non-utility businesses.

TransCanada also arranged in late 1987 a \$600 million five-year loan from a syndicate of Canadian banks to help finance the acquisition of Encor Energy Corporation Inc.

In addition, the company replaced its seven per cent 100 million Swiss franc issue due February 1994 with an issue due the same date bearing a coupon of  $4\frac{7}{8}$  per cent. In mid-1987, TransCanada embarked on a four-year program to hedge its entire Swiss franc position into Canadian dollars.

The company reduced its quarterly common share dividend to 17 cents from 28 cents. The dividend was reduced to reflect the change in the company's business mix and to make a greater contribution in the longer term to shareholder value than would have been realized by following a high payout policy.

TransCanada's short-term borrowing requirements were met primarily through issuing notes under the company's commercial paper program. In 1987 the program was expanded from \$400 million to \$600 million. The average cost of short-term borrowings was 8.12 per cent on average daily Canadian dollar notes outstanding of \$560 million and 6.28 per cent on average daily United States notes outstanding of (U.S.) \$39.8 million.

TransCanada earned 8.16 per cent on average daily Canadian short-term investments of \$43.3 million and 6.54 per cent on average daily United States short-term investments of (U.S.) \$493.2 million.

More than 3,300 common and preferred shareholders participated in TransCanada's Dividend Reinvestment and Share Purchase Plan in 1987, the plan's fifth year. During the year, the plan raised over \$96 million in common equity at an average price of \$16.92 per share. Through the plan, \$95 million was raised through reinvested dividends and \$1 million was raised through optional share purchases.

In March 1988, the company sold by public offering \$126.8 million of common equity. Concurrent with this public issue, BCE Inc., the company's largest shareholder, purchased \$123.2 million of common equity by private placement. The net proceeds of \$245.2 million were used to pay down debt incurred to finance the acquisition of Encor Energy Corporation Inc.



TransCanada  
PipeLines  
Limited

The accompanying consolidated financial statements included in the Annual Report are the responsibility of management and have been approved by the Board of Directors of the Company. The consolidated financial statements of the Company have been prepared by management in accordance with accounting principles generally accepted in Canada applied on a consistent basis, except for the prospective application in 1986 of the method adopted by the Canadian Institute of Chartered Accountants for computing the limitation of capitalized costs in accounting for oil and gas operations as explained in Note 1(ii). These principles also conform in all material respects with International Accounting Standards on an historical cost basis. Financial information contained elsewhere in this Annual Report is consistent with the consolidated financial statements.

The Board of Directors has appointed an Audit Committee consisting solely of directors who are not officers of the Company to review with

management and the independent auditors the annual consolidated financial statements of the Company prior to submission to the Board of Directors for final approval. The Audit Committee also meets periodically during the year with management and the internal and external auditors either individually or as a group. Internal and external auditors have free access to the Audit Committee without obtaining prior management approval.

The independent auditors, Peat Marwick, have been appointed by the shareholders to express an opinion as to whether the consolidated financial statements present fairly the Company's financial position, operating results and changes in financial position in conformity with generally accepted accounting principles.

The report of the independent auditors on page 47 outlines the scope of their examination and their opinion on the consolidated financial statements.

TransCanada  
PipeLines  
Limited

The following discussion has been prepared by management and is a review of the financial results of the Company. Its focus is primarily a comparison of the Company's financial performance between 1987 and 1986 and it should be read in conjunction with the consolidated financial statements and accompanying notes. In addition, material changes between 1986 and 1985 are highlighted.

The significant changes that energy related companies faced in 1986 continued to impact 1987 results. While world crude oil prices recovered somewhat from their precipitous drop in 1986, prices at year end 1987 were far from stable. The effects of deregulation of natural gas prices in Canada not only pushed natural gas prices

lower for the Company's Oil and Gas segment but also caused a reduction in gross revenues received by the Pipeline segment. All of TransCanada's gas purchase contracts with Alberta producers and all natural gas sales contracts with domestic and export customers are administered by Western Gas Marketing Limited, a wholly-owned subsidiary. A number of traditional sales markets for the Company were lost to competitors but the Company continues to transport the gas which is sold to those markets. It should be noted that variations in Pipeline segment gas sales and transportation volumes, by themselves, do not have an impact on net income because the Pipeline segment is regulated on a rate base, rate of return model.

**Results Of Operations**

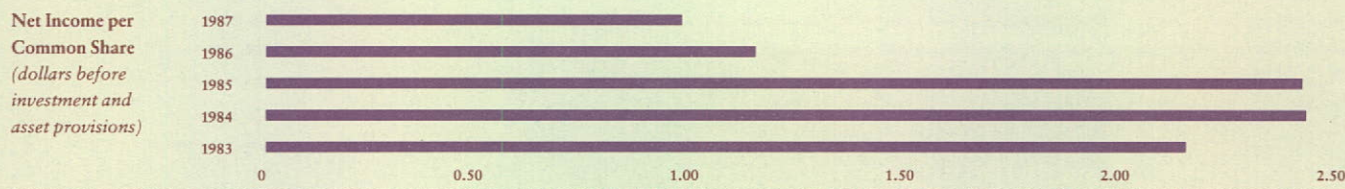
Net income applicable to common shares for 1987 was \$121.4 million, compared to \$123.9 million, before provisions, in 1986. On a per share basis 1987 earnings were 96 cents compared to \$1.13 in 1986.

Investment and asset provisions of \$114.5 million in 1986 reduced earnings for that year to nine cents per share. There were no such provisions in 1987.

Earnings for 1986 have been reduced by \$8.4 million to reflect the decision of the National Energy Board ("NEB") on a tolls application filed in July of 1986. In the application the Company had sought to recover increased costs incurred from August 1, 1986 in new tolls to be effective January 1, 1987. The Company had included in reported earnings from August 1 to

December 31, 1986 a return of 14.5% on a deemed common equity of 30% pending receipt of the decision. In June 1987 the NEB released its decision on the application and established an allowed return on deemed common equity of 13.10% for the period August 1 to December 31, 1986 and 13.25% for 1987. In both cases the NEB has deemed the common equity to be 30% of total capitalization.

Earnings per share in 1987 reflect an increase in the weighted average number of shares outstanding principally as a result of the Company's issue of common shares in July 1986, the proceeds of which were used to repay non-recourse loans. Funds generated from operations were \$341.8 million compared to \$431.5 million in 1986, the decline due principally to an increase in income taxes currently payable.



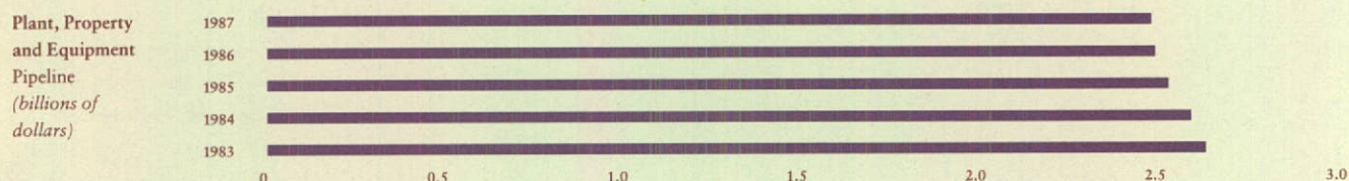
Pipeline segment results for 1987 approximated 1986 levels. Operating income from oil and gas operations was \$26.5 million, an increase of \$16.1 million compared to last year. The positive effects of reduced operating expenses, higher volumes and higher average oil prices were partially offset by lower natural gas prices in 1987.

The amalgamation of TransCanada's oil and gas interests with those of Encor Energy Corporation Inc. ("Encor"), as a result of the acquisition late in 1987 of approximately 97 per cent of Encor, is proceeding as planned and is expected to be completed in the first half of 1988. Because the acquisition was made at the end of 1987, consolidated income for 1987 does not include any portion of Encor's results. The acquisition significantly increases the Company's oil and gas reserves and puts the Company in a good position to substantially increase production in the years ahead.

The Company's Pipeline segment, together with investments in other pipelines, continues to provide the most significant contribution to consolidated net income. These operations are

subject to the jurisdiction of various regulatory bodies with respect to matters such as tolls, construction, operation and accounting.

The Pipeline segment tolls are set by the NEB to permit the Company the opportunity to recover projected costs of transporting natural gas and to provide a fair and reasonable return on its investment. Toll rates are based on a number of factors including estimates of the level of the Pipeline segment's rate base, operating costs and financing costs. Rate base is essentially the net book value of the Pipeline segment's plant, property and equipment plus an allowance for working capital. The plant, property and equipment component of rate base has decreased over the past three years as depreciation expense has exceeded capital expenditures. If variations occur between the actual amount of certain operating costs and the estimated amount used when tolls are established, the Company may earn more or less than the approved return on its rate base. Changes in authorized rate base also impact the contribution to net income by this segment.





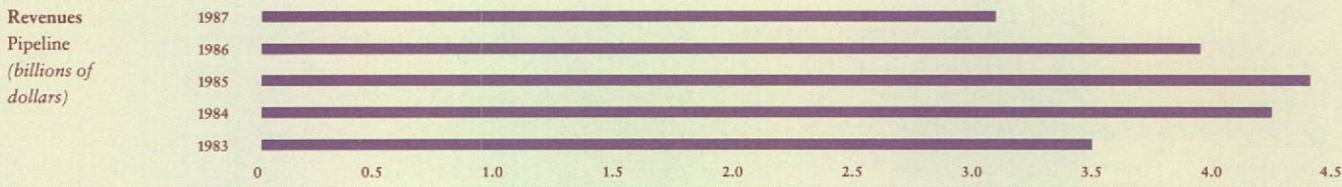
In December 1987 the Company filed an application with the NEB requesting interim tolls from January 1, 1988 and new tolls to be effective July 1, 1988. These tolls were approximately 17% lower than 1987 tolls. This substantial decrease resulted from a combination of factors including a change in the treatment of revenue from interruptible transportation services, increased throughput and a slight decline in rate base. In January 1988 the NEB established interim tolls at a level 10% lower than 1987 tolls and directed that the Company file a revised application covering the two-year period commencing January 1, 1988. The Company is in the process of preparing the revised application. Any over recovery of costs under interim toll conditions from those costs ultimately approved by the NEB will be refunded to customers.

The impact of inflation on the Company is, to a large extent, minimized by the regulatory process. The Company believes that to present financial statements in any form other than historical cost would be misleading in that such statements would not depict the economics of its regulated operations.

Increased competition resulting from deregulation of natural gas prices has caused the loss of sales in the Company's traditional market areas. As a result there has been a significant shift in

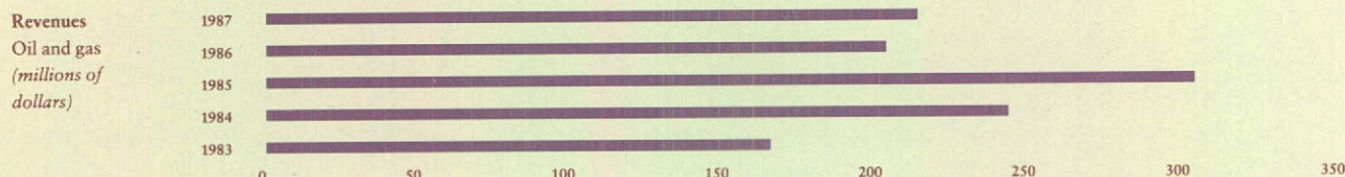
volumes from gas sales to gas transportation. This shift, however, while affecting revenues in isolation does not impact net income from pipeline operations due to the method of regulation. Total Pipeline deliveries in 1987 were 32 633 million cubic metres, compared to the 1986 total of 33 085 million cubic metres. Domestic deliveries were 27 028 million cubic metres, one per cent lower than 1986 volumes. Unseasonably warm weather in Canada offset the stimulative effect of lower natural gas prices resulting from deregulation. In addition, there has been a decline in exports to the United States. Deliveries to the United States in 1987 totalled 5 605 million cubic metres, compared to 5 745 million cubic metres in 1986. This was caused mainly by the reliance of U.S. purchasers on domestic spot gas and regulatory protection in the U.S.

Total deliveries in 1986 were 3% lower than 1985's level of 34 134 million cubic metres. While 1986 domestic deliveries were 3% higher than in 1985 due in part to improved economic conditions in central Canada, export deliveries were down by almost 25% from 1985 deliveries of 7 619 million cubic metres. This decline resulted from the natural gas surplus in the U.S. which reduced the export of Canadian natural gas to those markets.



Oil and gas revenues represent revenues, net of royalties, received from the production and sale of crude oil, natural gas and natural gas liquids as well as revenues received for the extraction of natural gas products. While total revenues, excluding extraction plant revenues, recovered by 7.5% from 1986 levels they are still well

below those received in 1985. As a result of the significant decline in world oil prices during 1986 revenues for that year were 36% lower than the \$281.9 million received in 1985. In 1987, crude oil and natural gas liquids sales volumes were 5% higher than in 1986 while natural gas volumes increased by 9%.



The most significant component of Costs and Expenses is the Pipeline segment's operating costs. Included therein are cost of gas sold, transmission, operating and general expenses. The decrease in the Pipeline segment's operating costs between 1987 and 1986 of \$862.8 million and of \$440.8 million between 1986 and 1985 is principally the result of decreases in cost of gas sold, reflecting the decline in sales volumes mentioned above and reduced natural gas prices paid to producers.

Oil and gas operating costs for 1987 decreased by \$18.1 million when compared to 1986 levels and by \$11.6 million in 1986 compared to 1985 due principally to the cancellation, effective October 1, 1986, of the Canadian government's Petroleum and Gas Revenue Tax.

Income from Investments—Pipelines decreased by \$5.3 million in 1987 compared to 1986. The Company's investments in Northern Border Pipeline Company ("Northern Border") and TransQuébec and Maritimes Pipeline Inc. are held through partnerships and include the Company's proportionate share of income on a pre-tax basis. The Company's investments in Great Lakes Gas Transmission Company ("Great Lakes") and Foothills Pipe Lines (Sask.) Ltd. are held directly and are therefore accounted for on an after-tax basis. Earnings from the Company's investment in Great Lakes increased by \$5.7

million in 1987, due principally to a settlement agreement reached with its customers. United States tax reform became effective July 1, 1987 and reduced the effective statutory federal tax rate for 1987 from 46% to 40%. Northern Border's tolls include a component for recovery of income taxes, and as a result of tax reform, pre-tax income for that company was reduced to reflect the reduction in the tax requirement in their tolls.

Income from interest-bearing deposits increased by \$10.0 million in 1987 compared to 1986. During 1986 and prior years certain deposits were pledged as security for a loan. In the accounts of the Company the interest income on these deposits was netted against the interest costs of the loan. At the end of 1986 this security arrangement was terminated and as a result interest income increased by \$13.1 million in 1987. The reduction in income from interest-bearing deposits between 1986 and 1985 reflected lower cash balances on deposit and lower short-term interest rates.

Financial charges in 1987 of \$379.4 million were comparable to 1986. The favourable effects of reduced interest costs resulting from the repayment of long-term loans was offset by an increase in the level of short-term borrowings during the year and an increase in amortization charges related to unrealized foreign exchange losses.

The Company has a significant amount of debt denominated in Swiss francs which was borrowed at an average exchange rate of approximately 59 cents per Swiss franc. The Swiss franc has strengthened considerably against the Canadian dollar over the last three years moving from approximately 68 cents at the end of 1985 and approximately 86 cents at the end of 1986 to approximately \$1.02 at December 31, 1987. In accordance with Canadian generally accepted accounting principles, the Company amortizes unrealized exchange losses over the remaining life of the individual debt issues. During 1987 the Company began a program of systematically

hedging this debt over four years with the goal of having all of the Swiss franc debt and interest payments thereon totally hedged by 1991. The effect of this program will be to eliminate the Company's exposure to future Swiss franc foreign exchange fluctuations.

Income taxes increased in 1987 compared to 1986 due principally to additional income taxes in the Pipeline segment which are recoverable through the rate making process. Income taxes decreased in 1986 when compared to 1985 due primarily to lower pre-tax earnings.

#### Liquidity and Capital Resources

In 1987, cash generated internally amounted to \$401.1 million and financing activities provided additional funds of \$791.3 million. These funds, totalling approximately \$1.2 billion, together with a reduction of cash on hand, were sufficient to fund the acquisition of Encor as well as to meet the capital expenditure requirements of the Pipeline and Oil and Gas segments, retire long-term debt and pay dividends on preferred and common shares.

Cash generated internally in 1987 was approximately \$41 million lower than in 1986. While there are many components to cash generated internally the primary reason for the decrease in 1987 was an additional \$85.7 million reduction

in income taxes previously deferred partially offset by an additional decrease in operating working capital of approximately \$49 million.

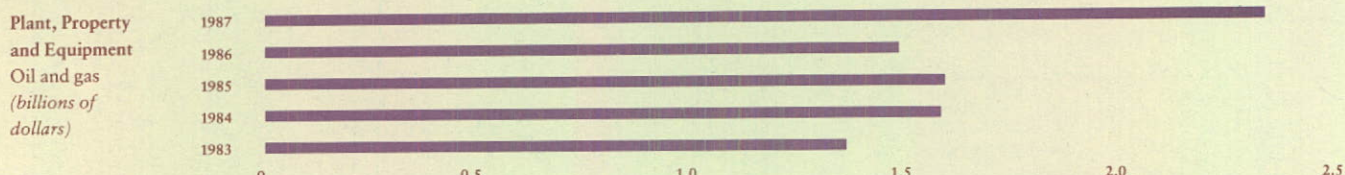
Cash generated internally in 1986 was in turn \$69 million lower than in 1985 due in part to the reduction in income before provisions of approximately \$111 million and a reversal in the impact of deferred taxes of approximately \$114 million. These reductions were partially offset by dividends received by the Company in excess of earnings of certain pipeline investments and the amortization of previously deferred costs, the majority of which were recovered in Pipeline segment revenues.

Cash Generated Internally (millions of dollars)



The most significant investment activity during the year 1987 was the acquisition of Encor. Capital expenditures in the Pipeline and the Oil and Gas segments followed the same trend as in prior years with expenditures for the Pipeline increasing from \$71.4 million in 1986 to \$81.9 million in 1987 and the Oil and Gas expendi-

tures declining from \$112.8 million to \$94.2 million. The major reason for the decline in the Oil and Gas segment capital expenditures was reduced expenditures with respect to the Company's properties covered under the Joint Exploration Agreement with Dome Petroleum Limited.



Financing activities during 1987 were approximately \$120 million higher than in 1986 and included approximately \$589 million of new long-term debt incurred in the initial financing of the Encor acquisition. In March of 1988 the Company issued \$250 million of common shares the proceeds of which were used to repay a portion of the debt incurred to finance the Encor acquisition. Financing activities in 1986 were \$460.1 million higher than in 1985 principally because of a new common share issue, the proceeds of which were used to retire a significant portion of non-recourse loans.

In January 1988, TransCanada announced that it is reducing its quarterly common share dividend from 28 cents to 17 cents per quarter, partly to reflect the change in business mix resulting from the Encor acquisition. The new dividend level takes into account the distinct nature of the two businesses that make up the major portion of TransCanada's assets. The expanded oil and gas business will require substantial funding for exploration and development of discoveries. The nature of the pipeline business allows for a relatively high proportion of its earnings to be made available to shareholders notwithstanding capital requirements for new growth and expansion opportunities that are foreseen.

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Capital expenditures in 1988 for the Company's two main segments are estimated to be \$318.9 million including \$175.0 million for the Pipeline segment and \$143.9 million for the Oil and Gas segment excluding any capital expenditures related to Encor properties for which estimated capital expenditures have not been finalized. In addition, scheduled retirement of long-term debt will require additional funds of \$91.3 million. Such cash requirements are expected to be met by way of internally generated funds and external financing.

The current oversupply of natural gas in Canada and the United States, together with the deregulation of natural gas prices in Canada and the significant decline in world oil prices since the beginning of 1986, has resulted in intense competition for markets and lower natural gas prices. The Company, through Western Gas Marketing Limited, is competing effectively for market share in this environment and is particularly conscious of the level of its costs in each of its business segments. Although natural gas prices have been deregulated, the Pipeline segment will continue to be regulated by the NEB and, as a regulated enterprise, will continue to have the opportunity to earn a fair and reasonable return on its rate base.

TransCanada  
PipeLines  
Limited

	1987	1986 (Restated- Note 16)	1985
<i>Year Ended December 31 (stated in millions of dollars except per share amounts)</i>			
Revenues (Note 2(b))	3,355.4	4,145.3	4,701.5
Costs and Expenses			
Operating	2,606.4	3,430.8	3,873.5
Depreciation and depletion	211.2	196.3	183.7
	2,817.6	3,627.1	4,057.2
Income from Operations	537.8	518.2	644.3
Income from Investments			
Pipelines (Note 5)	82.3	87.6	80.2
Interest-bearing deposits	40.6	30.6	34.1
	122.9	118.2	114.3
Other Income	15.2	16.0	18.6
Income before the Undernoted Items	675.9	652.4	777.2
Financial Charges (Note 17)	379.4	381.2	344.1
Income before Income Taxes	296.5	271.2	433.1
Income Taxes (Note 8)	136.5	104.5	155.0
Income before Provisions	160.0	166.7	278.1
Investment and Asset Provisions (Note 20)	—	114.5	115.6
Net Income for the Year	160.0	52.2	162.5
Net Income per Common Share (Note 10)			
Before provisions	\$0.96	\$1.13	\$2.40
After provisions	\$0.96	\$0.09	\$1.21

The accompanying notes to the consolidated financial statements are an integral part of these statements.

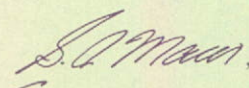
TransCanada PipeLines Limited	1987	1986 <i>(Restated- Note 16)</i>	1985
<i>Year Ended December 31 (stated in millions of dollars)</i>			
<b>Cash Generated Internally</b>			
Income before provisions	160.0	166.7	278.1
Depreciation and depletion	211.2	196.3	183.7
Deferred income taxes	(117.5)	(31.8)	83.1
Equity income from investments net of dividends received	10.0	19.0	(13.9)
Amortization of deferred charges and other assets	78.1	81.3	(25.5)
Funds generated from operations	341.8	431.5	505.5
Decrease in operating working capital <i>(Note 18)</i>	59.3	10.5	5.5
	401.1	442.0	511.0
<b>Investment Activities</b>			
Capital expenditures	190.4	185.0	217.7
Investment in Encor Energy Corporation Inc., net of cash of \$131.7 <i>(Note 3)</i>	911.0	—	—
Pipeline investments	—	—	(68.4)
Deferred charges and other	(88.2)	21.4	67.7
	1,013.2	206.4	217.0
<b>Reduction of Long-Term Debt and Non-Recourse Loans</b>	152.6	802.3	383.2
<b>Dividends Paid</b>	180.0	160.7	153.1
<b>Financing Activities</b>			
Long-term debt—new financing	877.0	214.0	194.7
Common shares and common share warrants issued	100.8	400.3	85.4
Preferred shares issued	78.8	—	157.1
Preferred shares redeemed	(83.4)	—	(157.0)
(Decrease)/increase in notes payable	(181.9)	57.3	(68.7)
	791.3	671.6	211.5
<b>Decrease in Cash and Short-Term Investments</b>	(153.4)	(55.8)	(30.8)
<b>Cash and Short-Term Investments— at beginning of year</b>	616.3	672.1	702.9
<b>Cash and Short-Term Investments— at end of year</b>	462.9	616.3	672.1

*The accompanying notes to the consolidated financial statements are an integral part of these statements.*

TransCanada PipeLines Limited	1987	1986 <i>(Restated- Note 16)</i>
<i>December 31 (stated in millions of dollars)</i>		
<b>Assets</b>		
<b>Current Assets</b>		
Cash and short-term investments	462.9	616.3
Accounts receivable	495.0	414.3
Inventories—Line pack gas and gas stored underground	48.8	73.9
—Materials and supplies	38.7	41.3
Total current assets	1,045.4	1,145.8
Payments on Future Gas Supply <i>(Note 11)</i>	40.7	44.4
Investments in Pipelines <i>(Note 5)</i>	344.5	376.3
Plant, Property and Equipment <i>(Notes 3, 4, 6 and 20)</i>	4,839.0	3,986.8
Deferred Charges and Other Assets <i>(Notes 12 and 20)</i>	399.7	398.0
	6,669.3	5,951.3
<b>Liabilities and Shareholders' Equity</b>		
<b>Current Liabilities</b>		
Notes payable <i>(Note 7)</i>	416.1	598.0
Accounts payable	344.4	300.4
Income taxes payable	96.9	29.5
Interest accrued	125.2	119.4
Dividends payable	46.0	45.9
Long-term debt due within one year <i>(Note 6)</i>	91.3	143.9
Total current liabilities	1,119.9	1,237.1
Deferred Revenues	65.1	53.4
Long-Term Debt <i>(Note 6)</i>	3,063.5	2,173.8
Deferred Income Taxes <i>(Note 8)</i>	298.5	393.1
<b>Commitments and Contingencies <i>(Note 21)</i></b>		
<b>Shareholders' Equity</b>		
Preferred shares <i>(Note 9)</i>	444.0	444.4
Common shares <i>(Note 10)</i>	763.7	662.8
Contributed surplus	282.0	285.1
Retained earnings	596.0	616.1
Foreign exchange adjustment <i>(Note 19)</i>	36.6	85.5
	2,122.3	2,093.9
	6,669.3	5,951.3

The accompanying notes to the consolidated financial statements are an integral part of these statements.

On behalf of the Board:


 , Director

 , Director



TransCanada PipeLines Limited	1987	1986 <i>(Restated- Note 16)</i>	1985
<i>Year Ended December 31 (stated in millions of dollars)</i>			
<b>Contributed Surplus</b>			
Balance at beginning of year	285.1	273.3	276.3
Redemption of preferred and cancellation of common shares (net)	(3.1)	0.2	(3.0)
Common share warrants issued (Note 10)	—	11.6	—
Balance at end of year	282.0	285.1	273.3
<b>Retained Earnings</b>			
Balance at beginning of year as restated	616.1	731.7	739.3
Other (Note 16)	—	—	(16.5)
Net income for the year	160.0	52.2	162.5
	776.1	783.9	885.3
<b>Dividends declared</b>			
Preferred	38.2	42.8	44.6
Common	141.9	125.0	109.0
	180.1	167.8	153.6
Balance at end of year	596.0	616.1	731.7
<i>The accompanying notes to the consolidated financial statements are an integral part of these statements.</i>			

A U D I T O R S ' R E P O R T

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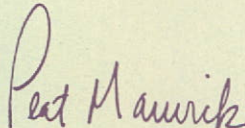
To the  
Shareholders  
of TransCanada  
PipeLines  
Limited

We have examined the statement of consolidated financial position of TransCanada PipeLines Limited as at December 31, 1987 and December 31, 1986 and the statements of consolidated income, retained earnings, contributed surplus and changes in financial position for each of the years in the three-year period ended December 31, 1987. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements which appear on pages 44, 45, 46 and 47 present fairly the financial position of the Company as at December 31, 1987 and December 31, 1986 and the results of its opera-

tions and the changes in its financial position for each of the years in the three-year period ended December 31, 1987 in accordance with generally accepted accounting principles which, except for the prospective application in 1986, with which we concur, of the method adopted by the Canadian Institute of Chartered Accountants for computing the limitation of capitalized costs in accounting for oil and gas operations as explained in Note 1(ii), were applied on a consistent basis.

Toronto, Canada  
January 26, 1988



Chartered Accountants

Note 1.  
Accounting  
Policies

The consolidated financial statements of the Company have been prepared by management in accordance with accounting principles generally accepted in Canada. These principles also conform in all material respects with International Accounting Standards on an historical cost basis. The significant accounting policies of the Company are summarized below:

<p><b>Principles of consolidation</b>—The consolidated financial statements include the accounts of the Company and its subsidiaries and the propor-</p>	<p>tionate share of the assets, liabilities, revenues and expenses of its oil and gas joint ventures.</p>
<p><b>Regulation</b>—The Company is subject to the authority of certain regulatory bodies with respect to the determination of tolls and related accounting for the natural gas transmission system (the “Pipeline segment”) as further described in Notes 2 and 16. In order to achieve a proper</p>	<p>matching of revenues and expenses, the timing of recognition of certain expenses may therefore differ from that otherwise expected under generally accepted accounting principles applicable to non-regulated companies.</p>
<p><b>Investments</b>—The Company uses the equity method of accounting for its pipeline investments. Under this accounting method these</p>	<p>investments are carried at cost plus the related equity in earnings reduced by dividends received.</p>
<p><b>Plant, property and equipment— Pipeline</b> Plant, property and equipment of the Pipeline segment is carried at cost.  Depreciation is calculated on a straight-line basis using rates approved by the National Energy</p>	<p>Board (“NEB”). The NEB has approved the following depreciation rates—2.5% for pipelines, 3.5% for compressor stations and other transmission plant and various rates for general plant and equipment.</p>
<p><b>Oil and gas</b> <i>(i) Capitalized costs</i> The Company uses the full cost method of accounting for its oil and gas operations. During 1986 the Company adopted, on a prospective basis, the guideline entitled Full Cost Accounting in the Oil and Gas Industry (“CICA Guideline”) issued by the Canadian Institute of Chartered Accountants. All costs of exploring for and developing oil and gas and related reserves are capitalized in cost centres established on a country-by-country basis. Capitalized costs include all acquisition, exploration and development costs, including interest and other carrying charges of non-producing properties and costs of drilling both productive and non-productive wells.</p>	<p>Interest is capitalized on the costs of acquiring and evaluating unusually significant acquisitions of unproven oil and gas properties and major development projects until such time as development activities have proceeded to the point where proved reserves are capable of being produced or it is determined that there are no economically proved reserves associated with the properties.  Proceeds from sales of oil and gas properties are accounted for as adjustments of capitalized costs with no gains or losses recognized in Consolidated Income unless such dispositions would significantly alter the rate of depletion.</p>

*(ii) Ceiling test*

Since 1986, the Company has followed the methodology prescribed in the CICA Guideline in computing the limitation of capitalized costs ("ceiling test"). Such costs are generally limited to the value of future net revenues from estimated production of proved reserves at current prices and costs and the costs of unproven properties. Future net revenues are not discounted, but are calculated after deducting general and administrative expenses, financing costs and income taxes on a global basis. The Company has, in accordance with the CICA Guideline, excluded the acquisition of Encor Energy Corporation Inc. ("Encor") from its ceiling test computations at December 31, 1987.

Prior to 1986, the Company applied a discounting factor when calculating future net revenues for each individual cost centre in the ceiling test computation.

The ceiling test is not intended to provide an estimate of the fair market value of oil and gas properties but is a cost recovery test at a point in time.

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**Translation of foreign currency**—Transactions and accounts in a currency other than a domestic currency are translated into the domestic currency using the temporal method. Certain debt payable in foreign currencies is exchanged through swap agreements into other currencies. Such debt is accounted for using exchange rates applicable to the currencies into which they have been swapped. Foreign exchange gains and losses on Pipeline segment related debt are included in income as they are dealt with in the tollmaking process. Other foreign exchange gains and losses are included in income in the

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**Income taxes**—The Company follows the taxes payable method of accounting for income taxes related to the regulated operations of the Pipeline segment. This method is prescribed by the NEB for tollmaking purposes. Since there is reasonable expectation that all such taxes will be

*(iii) Depletion and depreciation*

The Company uses the unit-of-production method to calculate depletion. For the purpose of calculating depletion, natural gas production and reserves are converted to equivalent units of crude oil based on the relative energy content of each commodity. Such calculation is made on a before royalties basis for all cost centres with the exception of the United States cost centre which is computed after deducting royalties.

Production equipment used in oil and gas operations is depreciated using the unit-of-production method. Other assets are depreciated on a straight-line basis over their estimated service lives.

Costs of unusually significant acquisitions of non-producing properties are initially not depleted but are brought into the applicable cost centre for depletion purposes on a straight-line basis over the anticipated period that exploration of these properties will be undertaken.

The Company employs the unit-of-production method of depletion for its developed oil sands properties.

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current period except for unrealized gains and losses related to non-hedged monetary assets and liabilities with a fixed or ascertainable life extending beyond one year. These unrealized gains and losses are deferred and amortized to income over the remaining life of such assets or liabilities.

The accounts of self-sustaining foreign operations are translated into Canadian dollars using the current rate method. The resulting translation adjustments are reflected in a separate component of shareholders' equity.

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included in future costs of service and recovered in revenues at such time, this method is being followed for accounting purposes. For all other operations the Company follows the deferral method of tax allocation accounting.

**Inventories**—Inventories include line pack gas and gas stored underground which are valued and charged to operations in accordance with

the regulatory process. Materials and supplies are valued at actual cost and charged to operations at average cost.

**Pension accounting**—Effective January 1, 1987, the Company adopted the new pension accounting standard of the Canadian Institute of Chartered Accountants. Under this standard, the Company was required to change, among other things, its actuarial cost method for determining pension expense from the attained age normal method to the projected unit credit method pro-rated on services and to amortize certain pension

related amounts on a straight-line basis over the expected average remaining service life of the employee group. This change has been applied prospectively. Previously, the annual contributions to the pension fund were charged to income as pension expense. The impact of this change is not material to 1987 results of operations.

**Comparative figures**—In addition to the restatement referred to in Note 16, certain comparative

figures have been reclassified to conform with the current year's financial statement presentation.

Note 2.  
Segmented  
and Other  
Information

The Company operates principally in three segments of the energy industry:

by the NEB on a net plant rate base, rate of return and cost of service basis.

(i) **Pipeline segment**

The Company owns and operates a natural gas transmission system which extends from Alberta into Quebec. The Pipeline segment purchases, transports and sells natural gas to regional gas distribution and transmission companies in Canada and the United States. Western Gas Marketing Limited, a subsidiary of the Company, acts as the agent for the Pipeline segment in these purchases and sales. In addition, the Pipeline segment transports gas for other users who purchase natural gas directly from producers.

(ii) **Oil and gas segment**

The Company is engaged in exploration, development and production of oil, natural gas and natural gas liquids in western Canada, offshore areas of Canada and in the United States, Indonesia, Australia, New Zealand, Italy, and the United Kingdom. In addition the Company is involved in the extraction of natural gas liquids and ethane from natural gas and the sale of sulphur.

Matters such as tolls, construction, operations and accounting in connection with the Pipeline segment are subject to the jurisdiction of certain regulatory bodies. Pipeline tolls are determined

(iii) **Other segment**

Included in this segment are the Company's financial results with respect to Western Gas Marketing Limited, the production and sale of thermal carbon black, the marketing of engineering consulting services as well as general corporate overheads.

The Company's financial data by business segment is as follows:

(a) Business segments

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
<b>Revenues</b>			
Pipeline	3,057.1	3,912.5	4,367.0
Oil and gas	211.5	201.2	301.5
Other	86.8	31.6	33.0
	3,355.4	4,145.3	4,701.5
<b>Operating costs</b>			
Pipeline	2,443.3	3,306.1	3,746.9
Oil and gas	74.5	92.6	104.2
Other	88.6	32.1	22.4
	2,606.4	3,430.8	3,873.5
<b>Depreciation and depletion</b>			
Pipeline	94.0	94.8	88.2
Oil and gas	110.5	98.2	92.8
Other	6.7	3.3	2.7
	211.2	196.3	183.7
<b>Income / (loss) from operations</b>			
Pipeline	519.8	511.6	531.9
Oil and gas	26.5	10.4	104.5
Other	(8.5)	(3.8)	7.9
	537.8	518.2	644.3
<b>Capital expenditures</b>			
Pipeline	81.9	71.4	44.2
Oil and gas	94.2	112.8	173.3
Other	14.3	0.8	0.2
	190.4	185.0	217.7
<i>December 31 (millions of dollars)</i>	1987	1986	1985
<b>Business segment assets</b>			
Pipeline	2,836.6	3,001.9	3,234.3
Oil and gas	2,744.9	1,688.9	1,739.0
Other	195.0	213.1	240.3
	5,776.5	4,903.9	5,213.6
Investments	344.5	376.3	401.7
Corporate assets	548.3	671.1	706.9
	6,669.3	5,951.3	6,322.2

As at December 31, 1987, over 90% of the Company's assets identifiable with its business segments were located in Canada.

**(b) Revenues**

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
<b>Pipeline segment</b>			
Gas sales—domestic	2,339.0	3,225.8	3,421.2
Gas sales—export	407.7	501.1	826.9
Gas transportation and other	310.4	185.6	118.9
	3,057.1	3,912.5	4,367.0
<b>Oil and gas segment</b>			
Oil and natural gas liquids	148.1	126.6	232.8
Natural gas	68.0	78.5	102.2
Other products	13.3	12.0	12.7
Less: Royalties	(35.1)	(36.4)	(65.8)
	194.3	180.7	281.9
Extraction plant	17.2	20.5	19.6
	211.5	201.2	301.5
<b>Other segment</b>			
Sales and service revenues	86.8	31.6	33.0
<b>Total revenues</b>	<b>3,355.4</b>	<b>4,145.3</b>	<b>4,701.5</b>

As a result of the regulatory process applicable to the Pipeline segment, variations in gas sales and gas transportation revenues and volumes by themselves do not have an impact on net income.

**(c) Principal customers**

The following table sets forth the Company's revenues generated by the Pipeline segment from natural gas sales under long-term contracts and transportation services to its five principal customers:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
The Consumers' Gas Company Ltd.	943.0	1,195.0	1,206.2
Union Gas Limited	598.9	885.7	958.8
Gaz Metropolitan, inc.	373.8	482.1	506.7
ICG (Ontario) Ltd.	302.3	391.3	438.9
Great Lakes Gas Transmission Company	168.0	214.1	245.2

**Note 3.**  
**Acquisition**  
**of Encor Energy**  
**Corporation Inc.**

During the period from February 1987 to November 26, 1987, the Company purchased approximately 13% of the common shares of Encor for cash. On November 16, 1987 the Company, through a wholly owned subsidiary, TCPL Energy Limited ("TCPL Energy"), commenced an offer to purchase for cash all of the remaining Common Shares, Junior Preferred Shares, Series M and 6.75% Convertible Subordinated Debentures of Encor. On December 8, 1987 this offer was amended so as to, among other things, extend the expiry date to December 21, 1987 and increase the prices offered for the securities of Encor.

As a result of the offer and the Company's earlier market purchases, the Company as at December 31, 1987, owned approximately 97% of each of the Common Shares, the Junior Preferred Shares, Series M and the 6.75% Convertible Subordinated Debentures of Encor. The total cost of the acquisition was approximately \$1.1 billion which is being financed initially by a non-revolving term credit facility of \$600 million entered into between TCPL Energy and a syndicate of Canadian banks and with the balance provided by the Company from its general funds and short-term credit sources.

The acquisition has been accounted for as a purchase transaction. Accordingly, the Company is

required to allocate the purchase price to the assets and liabilities of Encor based on their estimated fair values. The fair values of such assets and liabilities have been based on a preliminary evaluation by the Company and its outside financial advisors. A further detailed appraisal will be performed in 1988 and certain accounts may require further adjustment.

Details of the acquisition are as follows:

(millions of dollars)

Cash	131.7
Operating working capital	(4.9)
Oil and gas properties	902.4
Deferred charges and other assets (net of minority interest of \$20.5 million)	87.6
Long-term debt	(48.5)
Deferred revenue	(25.6)
Purchase price	1,042.7

The financial statements of the Company assume that the effective date of acquisition of Encor was December 31, 1987. Accordingly, the Consolidated Financial Position at that date includes the fair value of the assets and liabilities of Encor, but Consolidated Income for the year then ended does not include any portion of Encor's operating results.

**Note 4.**  
**Plant,**  
**Property and**  
**Equipment**

December 31 (millions of dollars)	1987			1986		
	Cost	Accumulated Depreciation and Depletion	Net	Cost	Accumulated Depreciation and Depletion	Net
<b>Pipeline segment</b>						
Gas transmission plant	3,492.4	1,033.0	2,459.4	3,425.0	950.1	2,474.9
<b>Oil and gas segment</b>						
Conventional properties	2,851.1	635.5	2,215.6	1,922.2	545.0	1,377.2
Extraction plant	75.4	13.7	61.7	75.3	9.9	65.4
Oil sands and other assets	50.5	7.4	43.1	37.1	5.8	31.3
	2,977.0	656.6	2,320.4	2,034.6	560.7	1,473.9
<b>Other segment</b>	90.6	31.4	59.2	57.8	19.8	38.0
	6,560.0	1,721.0	4,839.0	5,517.4	1,530.6	3,986.8

Oil and gas properties include capitalized administrative costs of \$6.7 million in 1987 (\$8.2 million—1986 and \$7.6 million—1985). The Company also capitalized certain interest costs as disclosed in Note 17.

Costs of oil and gas properties which are currently excluded from the depletion calculation amounted to \$924.7 million at December 31, 1987, which includes approximately \$725 mil-

lion of Encor properties to be included in the depletion calculation January 1, 1988. At December 31, 1986, the excluded amount was \$42.5 million.

The following table sets forth the aging of such costs as at December 31, 1987:

<i>Year of Expenditure (millions of dollars)</i>	Total	1987	1986	1985	Prior to 1985
Acquisition costs	899.7	885.5	12.1	0.9	1.2
Exploration costs	15.3	15.3	—	—	—
Capitalized interest	9.7	9.7	—	—	—
	924.7	910.5	12.1	0.9	1.2

These oil and gas properties are currently under various stages of exploration and development and it is anticipated that approximately 79% of these costs will be included in the depletion calculation in 1988. The remainder of these costs will be either included in the depletion calculation or amortized not later than 1994.

The following sets forth the depletion rates per barrel of production:

	1987	1986	1985
<b>Conventional oil and gas properties</b>			
Canada	\$ 5.76	\$ 5.67	\$ 5.10
United States (U.S. \$)	\$12.85	\$11.76	\$10.18
Indonesia (U.S. \$)	\$ 3.23	\$ 3.93	\$ 8.03
<b>Oil sands</b>	\$ 2.84	\$ 2.84	\$ 3.33

The Company's pipeline investments at December 31, 1987, 1986 and 1985 and its share of the earnings from those investments for the years then ended are:

<i>(millions of dollars)</i>	1987		1986		1985	
	Investment	Equity Earnings	Investment	Equity Earnings	Investment	Equity Earnings
Great Lakes Gas Transmission Company	67.0	25.7	84.3	20.0	111.9	16.4
Northern Border Pipeline Company	205.8	45.4	216.0	56.2	209.5	50.5
Foothills Pipe Lines (Sask.) Ltd.	25.5	4.6	27.0	5.1	29.9	5.8
Trans Québec & Maritimes Pipeline	46.2	6.6	49.0	6.3	50.4	7.5
	344.5	82.3	376.3	87.6	401.7	80.2

Investments in Northern Border Pipeline Company and Trans Québec & Maritimes Pipeline Inc. are held through partnerships and include the Company's proportionate share of income on a pre-tax basis. Dividends and distributions received from pipeline investments amounted to \$94.2 million in 1987, \$106.0 million in 1986 and \$66.4 million in 1985. Consolidated retained earnings at December 31, 1987, includes \$84.7 million which represents undistributed earnings of investments accounted for by the equity method.

Note 5.  
Investments—  
Pipelines



**Great Lakes Gas Transmission Company**

The Company owns 50% of Great Lakes Gas Transmission Company ("Great Lakes") which operates a pipeline system extending from the Canada/United States border near Emerson,

Manitoba through the United States to the vicinity of Sarnia, Ontario. Great Lakes purchases gas from the Company for resale to United States customers and transports gas for the Company to eastern Canada.

The following sets out summarized financial information for Great Lakes:

<i>December 31 (millions of U.S. dollars)</i>	1987	1986	
Natural gas transmission plant	275.7	290.2	
Current assets	63.7	73.5	
Current liabilities	(70.8)	(65.1)	
Deferred credits	(86.1)	(85.1)	
Long-term debt	(76.9)	(88.6)	
Shareholders' equity	105.6	124.9	

<i>Year Ended December 31 (millions of U.S. dollars)</i>	1987	1986	1985
Operating revenues	261.1	282.0	286.6
Operating expenses	(180.3)	(214.6)	(232.1)
Interest	(6.6)	(8.8)	(9.2)
Income taxes	(31.4)	(28.3)	(20.1)
Net income	42.8	30.3	25.2

**Northern Border Pipeline Company**

The Company owns a 30% interest in the Northern Border Pipeline Company, a partnership

which owns a natural gas pipeline extending from the Canada/United States border near Monchy, Saskatchewan to a point near Ventura, Iowa.

The following sets out summarized financial information for Northern Border Pipeline Company:

<i>December 31 (millions of U.S. dollars)</i>	1987	1986	
Natural gas transmission plant	1,038.2	1,080.2	
Current assets	42.3	55.5	
Current liabilities	(51.5)	(65.1)	
Deferred credits	(233.9)	(199.3)	
Long-term debt	(503.5)	(552.4)	
Partners' equity	291.6	318.9	

<i>Year Ended December 31 (millions of U.S. dollars)</i>	1987	1986	1985
Operating revenues	231.5	247.7	243.7
Operating expenses	(78.1)	(68.1)	(60.1)
Interest	(43.5)	(52.5)	(68.0)
Income before income taxes	109.9	127.1	115.6

**Foothills Pipe Lines (Sask.) Ltd.**

The Company owns 44% of Foothills Pipe Lines (Sask.) Ltd. ("Foothills (Sask.)") which owns a pipeline extending from the Alberta/

Saskatchewan border near Empress, Alberta to the Canada/ United States border near Monchy, Saskatchewan which connects with the Northern Border pipeline.

The following sets out summarized financial information for Foothills (Sask.):

<i>December 31 (millions of dollars)</i>	1987	1986
Natural gas transmission plant	288.5	302.7
Current assets	10.2	12.4
Current liabilities	(12.0)	(7.2)
Deferred credits	(60.5)	(59.7)
Long-term debt	(159.5)	(178.4)
Shareholders' equity	66.7	69.8

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Operating revenues	63.5	71.2	76.7
Operating expenses	(23.8)	(24.2)	(23.9)
Interest	(16.2)	(20.7)	(24.1)
Income taxes	(13.0)	(14.8)	(15.5)
Net income	10.5	11.5	13.2

**Trans Québec & Maritimes Pipeline**

The Company owns 50% of the issued shares of Trans Québec & Maritimes Pipeline Inc. ("TQM"). TQM is the agent of a partnership, in

which the Company is an equal partner, formed to own and operate a natural gas transmission system extending from the vicinity of Montreal to Quebec City, Quebec.

The following sets out summarized financial information for TQM:

<i>December 31 (millions of dollars)</i>	1987	1986
Natural gas transmission plant	412.2	427.7
Current assets	9.6	13.6
Deferred charges	2.3	4.0
Current liabilities	(19.8)	(10.2)
Bank loans	(14.0)	(38.3)
First Mortgage Bonds	(285.0)	(285.0)
Partners' equity	105.3	111.8

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Operating revenues	132.3	148.1	135.9
Operating expenses	(80.8)	(95.1)	(82.5)
Interest	(39.1)	(41.2)	(38.7)
Income before income taxes	12.4	11.8	14.7

Note 6.

Long-Term  
Debt

Classification (2)	Repayment Dates	1987		1986	
		Outstanding December 31 (2)	Average Interest Rate (3)	Outstanding December 31 (2)	Average Interest Rate (3)
<b>UTILITY (1)</b>					
<b>First Mortgage Pipe Line Bonds</b>					
Denominated in Canadian dollars	1992 and 1993	62.1	9.1%	70.9	9.1%
Denominated in United States dollars (1987 U.S. \$429.1; 1986 U.S. \$467.6)	1996 and 1997	557.7	16.2%	645.5	16.0%
Denominated in Pounds Sterling (1987 £25.0; 1986 £25.0)	2007	61.3	16.5%	51.2	16.5%
<b>Debentures (Series A to H, J, K and L)</b>					
Denominated in Canadian dollars	1990 to 2005	547.8	11.3%	469.7	11.5%
<b>Notes</b>					
Denominated in United States dollars (1987 U.S. \$97.8; 1986 U.S. \$97.8)	1992	127.1	16.0%	135.0	16.0%
Denominated in New Zealand dollars (1987 N.Z. \$125.0; 1986-nil) (7)	1993	104.1	17.0%	—	—
<b>Subordinated Debentures</b>					
Denominated in Canadian dollars	—	—	—	21.3	5.9%
Denominated in United States dollars (1987-nil; 1986 U.S. \$8.2)	—	—	—	11.3	5.6%
		1,460.1		1,404.9	
Less: Exchange differential recoverable through the tollmaking process		65.1		80.4	
		1,395.0		1,324.5	
<b>NON-UTILITY</b>					
<b>Debentures (Series I)</b>					
Denominated in Canadian dollars	1993	100.0	11.7%	100.0	11.7%
<b>Notes</b>					
Denominated in Canadian dollars	1989 and 1994	117.0	12.6%	96.9	12.6%
Denominated in Swiss francs (1987 SFr. 802.2; 1986 SFr. 804.0) (4) (6)	1991 to 1995	764.6	6.3%	668.1	6.3%
Denominated in Australian dollars (1987 A. \$40.0; 1986 A. \$40.0) (5) (6)	1990	36.0	8.8%	38.3	5.8%
Denominated in New Zealand dollars (1987 N.Z. \$75.0; 1986-nil) (7)	1993	50.8	17.0%	—	—
<b>Term Loans</b>					
Denominated in Canadian dollars	1993, 1996 and 1999	640.2	8.8%	55.4	8.3%
<b>Other Debt</b>					
Term Promissory Notes	—	51.2	—	—	—
Denominated in United States dollars (1987-nil; 1986 U.S. \$25.0)	—	—	—	34.5	17.4%
		1,759.8		993.2	
		3,154.8		2,317.7	
Less: Due Within One Year		91.3		143.9	
		3,063.5		2,173.8	

(1) Utility long-term debt of the Company finances the Pipeline segment.

(2) Amounts outstanding are stated in millions of Canadian dollars; amounts denominated in other than Canadian dollars are stated in millions.

(3) Current weighted average interest rates are stated as at the respective outstanding dates and include, where applicable, effective interest rates arising from swaps.

(4) In 1987, an amount of 87.5 million Swiss francs was exchanged through a swap agreement into Cdn. \$75.1 million. In 1986 an amount of 104 million Swiss francs was exchanged through a swap agreement into U.S. \$50 million.

(5) The amount denominated in Australian dollars was exchanged through a swap agreement into U.S. \$27.7 million. Interest is payable at floating rates approximating the six month London Interbank Offered Rate.

(6) Non-utility long-term debt swapped into U.S. dollars is regarded as a partial hedge of the Company's net investments in the United States.

(7) The amounts denominated in New Zealand dollars were exchanged for Canadian funds through a series of forward foreign exchange contracts.

**First Mortgage Pipe Line Bonds**

The Deed of Trust and Mortgage securing the Company's first mortgage pipe line bonds provides for a first charge on all real and immovable property and rights of the Company and on substantially all of the Company's Pipeline segment's gas transportation, gas purchase, gas sales and gas product sales contracts and also

provides for a first floating charge on all remaining assets. All series of bonds, with the exception of the series denominated in pounds sterling, are subject to mandatory sinking fund provisions which require the Company to retire prescribed amounts of each series annually prior to maturity.

**Debentures**

In 1987, the Company issued \$100 million of Series L debentures. The proceeds of the issue were used to repay short-term debt incurred to finance the Company's Pipeline segment.

The Series A to H debentures are subject to mandatory sinking fund provisions. The terms of the Series A to G sinking fund debentures also

provide for purchase funds which require the Company to purchase debentures in the market, if available at prices, including costs of purchase, that do not exceed the principal amount plus accrued interest to the date of purchase. The Series I to L debentures rank equally with the sinking fund debentures but are not subject to sinking or purchase funds.

**Notes and Term Loans**

The notes and the term loans rank equally with the debentures.

The notes denominated in Canadian dollars were issued with warrants exercisable into \$75 million of additional notes. The warrants entitle the warrant holder to subscribe on or before December 6, 1989 for additional notes bearing interest at 12<sup>5</sup>/<sub>8</sub>% and maturing in 1994. As at December 31, 1987, 42,001 warrants have been exercised, resulting in the issuance of \$42.0 million principal amount of notes due 1994 in exchange for cash.

In December 1987 the Company issued notes denominated in New Zealand dollars. The net proceeds and all future interest payments were exchanged for Canadian funds with a Canadian bank. The non-utility portion of the issue was

swapped, with a Canadian bank, to a floating rate basis. The net proceeds of this issue were used to finance the Pipeline segment and to retire short-term non-utility debt. The effective interest cost over the term of the agreement is at a rate approximating bankers' acceptances on the non-utility portion and a rate of 10.72% on the portion financing the Pipeline segment.

Included in Term Loans denominated in Canadian dollars is a non-revolving term credit facility entered into to provide initial financing with respect to the Encor acquisition. As at December 31, 1987, \$589 million had been drawn on this facility. On all of the term loans interest is currently payable at rates approximating bankers' acceptances with options to convert to London Interbank Offered Rate or Canadian bank prime.

**Mandatory Retirements**

In addition to purchase fund requirements which are applicable in certain circumstances, mandatory retirements of all long-term debt of the Company, as a result of maturities and sinking

fund obligations, approximate:  
1988—\$91.3 million; 1989—\$181.5 million;  
1990—\$132.1 million; 1991—\$327.0 million;  
and 1992—\$180.9 million.

Note 7.  
Notes  
Payable

<i>December 31 (millions of dollars)</i>	1987	1986
Bank loans	416.1	267.8
Commercial paper	—	330.2
	416.1	598.0

The weighted average cost of bank loans and commercial paper was: 1987—8.2% and 7.8% respectively; and 1986—7.8% and 8.5% respectively. The 8.2% and 7.8% rates for 1987 and 1986 respectively are an average of United States dollar and Canadian dollar bank borrowing rates.

Note 8.  
Income  
Taxes

(a) The geographic components of income before income taxes are summarized below:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Canada	244.5	181.2	263.4
Foreign	52.0	90.0	169.7
	296.5	271.2	433.1

(b) The provision for income taxes is summarized as follows:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
<b>Current</b>			
Canada	250.3	127.6	62.6
Foreign	3.7	8.7	9.3
	254.0	136.3	71.9
<b>Deferred</b>			
Canada	(119.1)	(44.8)	67.1
Foreign	1.6	13.0	16.0
	(117.5)	(31.8)	83.1
<b>Total</b>	136.5	104.5	155.0

(c) Deferred income taxes result from timing differences in the recognition of revenue and expense for tax and financial statement purposes. The sources of these differences and their effect on income taxes are as follows:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Capital cost allowance deducted in excess of depreciation	2.5	5.8	22.9
Exploration and development expenditures deducted in excess of depreciation and depletion	(4.1)	0.5	18.5
Payment of tax liability previously deferred	(61.3)	—	—
Capitalized interest	5.1	1.1	5.8
Utilization/(benefit) of losses	1.5	1.1	(13.1)
Amortization of deferred amounts	(56.8)	(39.6)	37.4
Other	(4.4)	(0.7)	11.6
	(117.5)	(31.8)	83.1

(d) Total income tax expense differs from the amount computed by applying the basic Canadian federal income tax rate to income before income taxes. The reasons for these differences are as follows:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Income before income taxes	296.5	271.2	433.1
Less:			
Canadian pipeline income not subject to tax currently	(30.2)	(35.7)	(44.5)
Equity in after tax net income of non-partnership investments	(43.3)	(31.4)	(29.7)
	223.0	204.1	358.9
Federal statutory tax rate	46.6%	47.8%	46.9%
Expected income tax expense	103.9	97.6	168.3
Effect of United States tax reform	—	13.4	—
Non-deductible royalties and payments to governments net of allowances	(0.8)	5.2	13.5
Non-deductible depreciation and depletion	7.7	7.9	10.2
Non-deductible capital losses	13.6	1.8	—
Net difference between the federal statutory tax rate and rates of provincial, state and foreign authorities	6.5	(15.3)	(39.2)
Other	5.6	(6.1)	2.2
Actual income tax expense	136.5	104.5	155.0

(e) In October 1986, the United States adopted certain tax reform measures, the most significant being the reduction of the basic Federal corporate tax rate from 46% to 34%. This rate reduction was effective July 1, 1987 and reduced recorded deferred tax benefits arising from United States operations by \$13.4 million in 1986.

(f) The Company follows the taxes payable method of accounting for those income taxes related to the regulated operations of the Pipeline segment. Had the deferral method of tax allocation accounting been prescribed by the NEB for this segment from the date of commencement of operations, additional deferred income taxes in the amount of \$381 million would have been recorded and recovered in tolls to date through the tollmaking process.

The authorized number of preferred shares issuable in series is unlimited. Details of the Company's cumulative redeemable first preferred shares, all of which are without par value, are:

<i>Authorized and Outstanding as at December 31</i>	1987		1986		1985	
	Shares	Amount(1)	Shares	Amount(1)	Shares	Amount(1)
<b>First Preferred Shares</b>						
<b>Cumulative redeemable</b>						
\$2.80 (2)	580,681	29.0	587,671	29.4	600,377	30.0
<b>Cumulative redeemable retractable</b>						
Series E	1,500,000	75.0	1,500,000	75.0	1,500,000	75.0
Series F	—	—	1,600,000	80.0	1,600,000	80.0
Series H	1,000,000	50.0	1,000,000	50.0	1,000,000	50.0
Series I	2,200,000	110.0	2,200,000	110.0	2,200,000	110.0
Series J	1,600,000	80.0	—	—	—	—
<b>Cumulative redeemable convertible</b>						
Series G	1,000,000	100.0	1,000,000	100.0	1,000,000	100.0
		444.0		444.4		445.0

(1) Stated in millions of dollars.

(2) During 1987, 1986 and 1985, 6,990; 12,706; and 17,874 shares respectively were purchased by the Company for cancellation.

Additional information pertaining to the Company's preferred shares outstanding as at December 31, 1987 is as follows:

Preferred Share Issue	Stated Value Per Share	Dividend Rate Per Share	Redemption Premium Per Share	Retraction Date (1)	Annual Purchase Fund Requirement (2)
\$2.80 First Preferred Shares	\$ 50.00	\$2.80	\$0.50	Not applicable	2% of aggregate stated value of shares outstanding on previous December 31
Series E	\$ 50.00	\$5.16	reducing from \$3.10 to nil over periods to 1989	November 1, 1989	3% of aggregate stated capital amount outstanding on December 31, 1989
Series G (3)	\$100.00	\$9.00	not redeemable prior to June 1, 1989; nil thereafter	Not applicable	None
Series H	\$ 50.00	\$4.35	not redeemable prior to August 1, 1990; nil thereafter	August 1, 1990	3% of aggregate stated capital amount outstanding on August 2, 1990
Series I	\$ 50.00	\$3.90	not redeemable prior to November 1, 1990; nil thereafter	November 1, 1990	3% of aggregate stated capital amount outstanding on November 2, 1990
Series J	\$ 50.00	\$3.80	not redeemable prior to August 1, 1992; nil thereafter	August 1, 1992 and August 1, 1997	3% of aggregate stated capital amount outstanding on August 2, 1997

- (1) The retractable first preferred shares have a retraction feature which requires the Company, subject to certain conditions, to invite tenders for the purchase of all such shares on the specified dates at the stated value plus accrued and unpaid dividends. The Company may increase the dividend rate on such shares effective on each retraction date.
- (2) The Company will be required to set aside on its books in purchase fund accounts up to a maximum of \$0.6 million, \$0.6 million, \$7.6 million, \$7.4 million and \$7.2 million in each of the years 1988 to 1992 respectively.
- (3) Dividends are payable at a fixed rate of \$9.00 per share per annum until May 31, 1989 and thereafter the rate fluctuates based on a formula measured against the prime rate of a Canadian chartered bank. These preferred shares may at any time after May 31, 1989, subject to certain provisions, be redeemed in whole or in part by the Company on payment of \$100 per share. Holders have the right at any time after May 31, 1990, subject to certain limitations, to convert any or all of the Series G shares into common shares on the basis of four common shares for each preferred share, which conversion basis will be adjusted in specified circumstances.

In May 1987, the Company redeemed all outstanding Cumulative Redeemable Retractable First Preferred Shares, Series F, at a price of \$52 per share and in June 1987, issued \$80 million of Cumulative Redeemable Retractable First Preferred Shares, Series J to repay short-term debt incurred to finance the redemption of such shares.

Note 10.  
Common  
Shares

The Company is authorized to issue an unlimited number of common shares of no par value. Details of the Company's common shares are:

	Number of Shares	Amount  (millions of dollars)
<b>Outstanding—January 1, 1985</b>	95,232,329	191.3
Issued for cash or cash equivalent		
Under the dividend reinvestment and share purchase plan	3,424,790	75.9
Under the stock dividend and share purchase plan	81,061	1.8
Under employee stock purchase plans	385,000	7.7
Cancellation of common shares	(220,083)	(2.6)
<b>Outstanding—December 31, 1985</b>	98,903,097	274.1
Issued for cash or cash equivalent		
Under the dividend reinvestment and share purchase plan	5,127,717	84.0
Under the stock dividend and share purchase plan	72,131	1.2
Under employee stock purchase plans	511,200	7.6
Under public offering and concurrent sale to BCE	18,604,650	296.6
Cancellation of common shares	(46,261)	(0.7)
<b>Outstanding—December 31, 1986</b>	123,172,534	662.8
Issued for cash or cash equivalent		
Under the dividend reinvestment and share purchase plan	5,651,737	95.5
Under the stock dividend and share purchase plan	32,179	0.6
Under employee stock purchase plans	385,900	4.9
Under warrant subscription	387	—
Cancellation of common shares	(8,798)	(0.1)
<b>Outstanding—December 31, 1987</b>	129,233,939	763.7

**Equity Issue**

On July 15, 1986, the Company completed a Canadian public offering of 9,632,372 units, each of which consisted of one common share and one-half of a common share purchase warrant, at a price of \$16.75 per unit. The Company concurrently sold 8,972,278 units to BCE Inc. ("BCE") at the same price, enabling BCE to retain its pro rata ownership in the Company. Gross proceeds from the public offering and sale to BCE were \$311.6 million. After tax expenses

related to the issue aggregated \$3.4 million. Net proceeds were used to repay a portion of non-recourse loans. The proceeds from the sale of the warrants of \$11.6 million were credited to Contributed Surplus.

As at December 31, 1987, 9,301,938 whole common share purchase warrants were outstanding. Each whole warrant entitles the holder to buy one common share at \$19.25 on or before July 13, 1989.

**Net Income per Common Share**

Net income per common share is calculated using the weighted average number of common shares outstanding during the respective periods and after provision for dividends on preferred shares, which amounted to \$38.6 million in 1987, \$42.8 million in 1986 and \$44.8 million in 1985. The calculation of net income per

common share on a fully diluted basis assumes conversion of all securities and exercise of all common share purchase warrants if such action would result in dilution of earnings per share. In 1987, 1986 and 1985, the effect of potential dilution was immaterial.



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**Employee Stock Purchase Plan**

The Company has a Key Employee Stock Incentive Plan ("KESIP") under which the Company provides interest-free loans through a trustee to certain key employees, some of whom are also directors, to purchase common shares of the Company. These loans are repayable within ten years. The outstanding balance of these loans

totalled \$41.4 million and \$39.5 million at December 31, 1987 and 1986 respectively. During 1987 and 1986, 8,570 and 46,020 shares issued under the KESIP were purchased by the Company for cancellation. The excess of the purchase price over the original issue price has been charged to Contributed Surplus.

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**Common Shares Reserved**

At December 31, 1987, 131,450 common shares were reserved for issuance under the KESIP, 4,000,000 common shares were reserved for issuance upon conversion of the Cumulative

Redeemable Convertible First Preferred Shares Series G and 9,301,938 common shares were reserved for the exercise of common share purchase warrants.

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**Note 11.  
Payments  
on Future  
Gas Supply**

The majority of the Company's gas purchase contracts include provisions which require payments by the Company when it is unable to nominate for delivery specified minimum annual quantities of gas. As the contracted supply has exceeded the demand in recent years, the Company has outstanding direct payments ("take-or-pay payments") to producers totalling \$40.7 million as at December 31, 1987 (\$44.4 million as at December 31, 1986). Costs associated with

financing such payments up to October 31, 1986 were included in the Company's Alberta Cost of Service. Costs subsequent to October 31, 1986 are being recovered by the Company through producers' agreements or pursuant to regulations made under the Alberta Take-or-Pay Costs Sharing Act. Reference should be made to Note 21(a) for other take-or-pay financing arrangements.

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**Note 12.  
Deferred  
Charges and  
Other Assets**

<i>December 31 (millions of dollars)</i>	1987	1986
<b>Deferred Amounts</b>		
Subject to regulation	19.8	160.0
Not subject to regulation		
Unamortized foreign exchange losses	252.5	190.3
Other deferred amounts	13.2	0.5
	285.5	350.8
<b>Other Assets</b>		
Development projects	13.8	8.1
Mining	23.2	21.9
Other	77.2	17.2
	114.2	47.2
	399.7	398.0

The deferred amounts subject to regulation are amortized and recovered in future periods through the tollmaking process.

Reference should be made to Note 20(b) with respect to provisions for carrying value of certain investments and other assets made in 1986.

Note 13.  
Pension  
Plans

The Company has a non-contributory pension plan and a Supplemental Retirement Plan ("SRP"). The non-contributory pension plan covers all employees who have completed one year of service and to December 31, 1987 provided a defined benefit pension based on length of service and career average earnings. The SRP provides a supplemental pension benefit to executives upon retirement. In 1987, the Company amended the pension benefit formula for both plans. Effective January 1, 1988, the employee's

final average earnings will be used in determining the pension benefit.

The Company contributes annually to the non-contributory pension plan the amount that is determined by the Company's actuary using the attained age normal method. Contributions are intended to provide for benefits attributed to service to date. Obligations under the SRP are not pre-funded, but are paid directly to retired members of the plan.

The components of the Company's pension expense are detailed as follows:

<i>(millions of dollars)</i>	1987	1986	1985
Pension costs for benefits earned during the current year	4.7	—	—
Amortization of transition amount	0.4	—	—
Expense for 1986 and 1985 based on funding method	—	6.6	5.3
Net pension expense	5.1	6.6	5.3

The cumulative difference between the amounts expensed and the funding contributions has been reflected in Deferred Charges and Other Assets in the statement of Consolidated Financial Position. The amount recorded in 1987 was \$0.4 million.

Based on an actuarial valuation dated December 31, 1986 and projected to January 1, 1988, the funded status of the Company's pension plans, after giving effect to the recent plan amendment, is:

<i>(millions of dollars)</i>	1987
Actuarial present value of current accumulated pension benefits	142.9
Pension plan assets at fair value	109.0
Deficit	33.9

Pension plan assets are at average market value using five-year moving average and include marketable equity securities, corporate and government debt securities, and mortgages. The discount rate used in determining the

actuarial present value of the projected pension benefit obligations was estimated to be 8.5%. The rate of the return on pension plan assets was estimated to be 8.5%.

Note 14.  
Related Party  
Transactions

Sales revenue from and payments by the Company for gas transportation services to each of Great Lakes and TQM, affiliates of the Company, were as follows:

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
<b>Gas Sales</b>			
Great Lakes	168.0	214.1	245.2
TQM	59.7	69.0	62.6
<b>Charges for Gas Transportation Services</b>			
Great Lakes	155.3	195.5	144.4
TQM	80.3	81.8	86.9

The recovery in the Company's regulated cost of service of charges by Great Lakes and TQM for gas transportation services is subject to the NEB's tollmaking process.

Reference should be made to Note 10 regarding loan transactions between the Company and certain of its employees for the purchase of common shares.

The Company also has contracts for the purchase of natural gas to which the Company's oil and gas subsidiaries are indirect parties. As the Company does not purchase the natural gas directly from the subsidiaries, neither the liability nor the total payments in any calendar year in respect to such purchase can be quantified.

As at December 31, 1987, BCE held approximately 49.3% of the Company's outstanding common shares and is a participant in the Company's dividend reinvestment and share purchase plan. Reference should be made to Note 10 with respect to common shares and common share purchase warrants sold to BCE during 1986.

**Note 15.**  
Restriction on  
Dividends

Declaration of dividends on both preferred and common shares is restricted under certain preferred share provisions and under several debt instruments. At December 31, 1987, under

the most restrictive provisions, approximately \$245 million was available for the payment of dividends on common shares.

**Note 16.**  
Effects of  
Tolls Decisions

(i) In July 1986, the Company filed an application with the NEB in which it sought to recover in tolls to be effective from January 1, 1987 increased costs incurred from August 1, 1986. On June 17, 1987 the NEB released its decision on the Company's application for tolls. The new tolls took effect on July 1, 1987. The Company had included in reported earnings for the period August 1 to December 31, 1986 a return of 14.50% on a deemed common equity of 30% pending the NEB's decision; however, in its decision the NEB established an allowed return on common equity of 13.10% on a deemed common equity of 30% for the same period. The effect of the decision was a reduction of previously reported 1986 earnings by \$8.4 million or seven cents per common share and

the 1986 comparative figures have been restated accordingly.

(ii) For tollmaking purposes an allowance for unaccounted for gas is included in the Company's cost of service. In its 1985 Tolls Decision the NEB established the allowance based on the Company's historical experience using a three-year average. The Company is matching, with retroactive effect from August 1, 1985, the tollmaking process in its accounts for unaccounted for gas, and accordingly, all unaccounted for gas gains or losses are being deferred and amortized over three years. The retroactive application in the Company's accounts of this matching of the tollmaking process resulted in a \$16.5 million reduction of retained earnings in 1985.

**Note 17.**  
Financial  
Charges

<i>Year Ended December 31 (millions of dollars)</i>	1987	1986	1985
Interest			
Long-term debt	266.6	301.9	307.7
Non-recourse loans	—	32.2	48.3
	266.6	334.1	356.0
Regulatory deferrals and amortizations	31.9	15.0	7.2
Non-regulatory foreign exchange losses/(gains)	43.6	27.7	(18.8)
Short-term interest and other financial charges (net)	47.0	6.8	11.9
Less: Interest capitalized on oil and gas properties	(9.7)	(2.4)	(12.2)
	379.4	381.2	344.1

Note 18.

Changes in Operating Working Capital	Year Ended December 31 (millions of dollars)	1987	1986	1985
Accounts receivable		(80.7)	212.5	(23.0)
Inventories		27.7	9.7	19.0
Accounts payable		44.0	(223.7)	(13.7)
Income taxes payable		67.4	20.0	16.9
Interest accrued		5.8	(8.0)	6.3
Decrease		64.2	10.5	5.5
Encor's operating working capital acquired		(4.9)	—	—
Decrease		59.3	10.5	5.5

Note 19.

Foreign Exchange Adjustment	December 31 (millions of dollars)	1987	1986
Balance at beginning of year		85.5	94.4
Translation adjustments during the year		(48.9)	(8.9)
Balance at end of year		36.6	85.5

Note 20.

The following provisions were made in the accounts of the Company:

Investment and Asset Provisions	(millions of dollars)	1987	1986	1985
a) Carrying value of oil and gas properties		—	100.6	43.7
b) Carrying value of certain investments and other assets		—	13.9	71.9
Total investment and asset provisions		—	114.5	115.6

**(a) Carrying value of oil and gas properties**  
Based on prices prevailing at December 31, 1987, no ceiling test adjustment to the carrying value of the Company's oil and gas assets was required.

The adoption of the CICA Guideline along with the significant decline in oil and gas prices during 1986 required the Company to reduce the carrying value of its oil and gas properties at December 31, 1986 by \$100.6 million net of related income taxes of \$7.8 million. The 1986 provision was computed based upon prices prevailing at December 31, 1986.

In 1985, the Company determined that it was more appropriate to account for capitalized costs of oil and gas properties on a country-by-country cost centre basis. Previously these costs were capitalized in a single cost centre. This change in accounting resulted in a provision in 1985 of

\$43.7 million, net of related taxes of \$10.6 million and prior period adjustments amounting to \$36.1 million net of related taxes of \$23.6 million.

**(b) Carrying value of certain investments and other assets**

In 1986, the Company made provisions in its accounts for investments in certain energy related projects and other minor assets. These provisions totalled \$13.9 million net of related income taxes of \$14.5 million.

In 1985, the Company made a provision for the carrying value of certain investments and other assets in the amount of \$71.9 million net of related income taxes of \$13.5 million. This provision related to mining assets, undeveloped oil sands properties and costs of certain deferred or terminated projects.

Note 21.

Commitments and  
Contingencies

### **Legal Proceedings**

By a judgment dated July 12, 1985, the Saskatchewan Court of Queen's Bench dismissed a claim brought by Saskatchewan Power Corporation ("Sask. Power") against the Company. On August 7, 1985, Sask. Power filed a notice of appeal. The appeal was heard on September 21, 22 and 23, 1987 and the Saskatchewan Court of Appeal reserved judgment.

The claim arises from alleged overpayments made under protest for gas sold to Sask. Power by the Company, and is in the amount of \$59.2 million plus accrued interest. Counsel to the Company is of the opinion that the Company should be successful in upholding the trial judgment.

### **Contractual Guarantees**

#### *(a) Gas supply*

During 1982 and 1983, the Company concluded arrangements (referred to as the "Topgas Programs") with syndicates of banks and substantially all of its producers to finance its take-or-pay payments incurred up to and including the contract year ended October 31, 1983. Pursuant to the Topgas Programs, Alberta corporations controlled by the banking syndicates (the "Topgas Companies") advanced approximately \$2.7 billion to these producers in respect of these take-or-pay payments. Pursuant to contractual arrangements, recovery of the advances commenced in 1984 and is being effected in instalments by the nomination for delivery of prepaid gas. Scheduled recovery of all the prepaid gas will be completed not later than 1994. As at December 31, 1987, approximately \$1.0 billion of these advances had been repaid. Interest costs associated with the advances up to October 31, 1986 were included in the Company's Alberta Cost of Service. Interest costs subsequent to October 31, 1986 are being recovered by the Company through producers' agreements or pursuant to regulations made under the Alberta Take-or-Pay Costs Sharing Act.

Under the terms of the October 1985 Agreement on Natural Gas Markets and Prices between the

governments of Canada and the producing provinces, the price of natural gas ceased to be regulated effective November 1, 1986, and is now determined by negotiation between buyers and sellers. One of the underlying principles of the agreement is that direct sellers and buyers of natural gas should be allowed appropriate access to the Company's pipeline system. The Alberta Take-or-Pay Costs Sharing Act provides for the sharing of take-or-pay interest costs by other users of the Company's pipeline system where contracted transportation services were entered into after October 31, 1985 and further provides for a mechanism by which the interest costs related to both the advances associated with the Topgas Programs and the Company's take-or-pay payments continue to be allocated to the producers from which the Company purchases gas.

Under the agreements with the Topgas Companies, the Company will indemnify the Topgas Companies up to a combined maximum of \$360 million for any losses arising due to the inability or failure of a producer to deliver gas covered by this arrangement. The Company will also indemnify the Topgas Companies for any losses suffered as a result of a breach by the Company of its obligations or by reason of the failure to recover their interest costs from any other sources.

#### *(b) Financing of Northern Border Pipeline Company*

The debt financing of the Northern Border pipeline was provided by a syndicate of banks in a total amount of U.S. \$874 million. As at December 31, 1987, U.S. \$345 million has been repaid.

Under the terms of this debt financing the Company may be required to make available to the Northern Border partnership funds sufficient to enable the partnership to fully amortize the outstanding balance at the final maturity date in 1996. If the Company were required to make any payment pursuant to the foregoing it would have recourse against the partnership.

Oil and Gas  
Producing  
Activities  
(Unaudited)

The following financial information presents additional disclosure related to oil and gas producing activities. The Company's interests in synthetic oil projects are not reflected in this information.

(i) Capitalized costs

<i>December 31 (millions of dollars)</i>	1987	1986
Oil and gas properties		
Proved	2,522.8	1,770.4
Unproven	328.3	151.8
	2,851.1	1,922.2
Less: Accumulated depletion and depreciation	(635.5)	(545.0)
Net capitalized costs	2,215.6	1,377.2

(ii) Costs incurred

<i>Year Ended December 31 (millions of dollars)</i>	Acquisition				Total
	Proved	Unproven	Exploration	Development	
<b>1987</b>					
Canada	724.6	175.7	9.8	16.5	926.6
United States	0.6	6.2	7.9	12.9	27.6
Indonesia	—	—	7.0	1.3	8.3
Other Foreign	—	0.4	19.0	0.2	19.6
Total	725.2	182.3	43.7	30.9	982.1
<b>1986</b>					
Canada	—	2.3	18.4	20.9	41.6
United States	3.3	13.5	6.0	12.7	35.5
Indonesia	—	—	11.6	4.6	16.2
Other Foreign	—	0.9	16.5	0.8	18.2
Total	3.3	16.7	52.5	39.0	111.5
<b>1985</b>					
Canada	—	10.2	39.0	16.9	66.1
United States	10.5	19.7	25.9	15.0	71.1
Indonesia	—	—	13.3	0.8	14.1
Other Foreign	0.5	1.3	10.5	2.2	14.5
Total	11.0	31.2	88.7	34.9	165.8

(iii) Oil and gas reserves data

The Company's proved developed and undeveloped oil and gas reserves, other than the purchases of minerals in place in 1987, for the years 1987, 1986 and 1985 were determined by the Company, Dome Petroleum Limited and others. The purchases of minerals in place in Canada in 1987 reflect the reserves acquired in the acquisition of Encor Energy Corporation, Inc., which were determined by independent petroleum consultants.

Oil (including natural gas liquids) is measured in thousands of barrels. Gas is measured in billions of cubic feet.

	Canada		United States		Indonesia and Other Foreign		Total	
	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
Proved developed and undeveloped reserves:								
January 1, 1985	66,961	896.6	3,537	86.6	5,295	—	75,793	983.2
Revisions of previous estimates	927	(29.0)	(98)	(17.6)	209	—	1,038	(46.6)
Purchases of minerals in place	—	—	1,622	2.0	21	—	1,643	2.0
Extensions and discoveries	3,206	21.5	1,797	14.9	1,386	—	6,389	36.4
Production	(5,014)	(30.9)	(632)	(4.4)	(1,296)	—	(6,942)	(35.3)
Sales of minerals in place	—	—	(55)	(0.4)	—	—	(55)	(0.4)
December 31, 1985	66,080	858.2	6,171	81.1	5,615	—	77,866	939.3
Revisions of previous estimates	(723)	(41.7)	(2,261)	(20.8)	275	—	(2,709)	(62.5)
Purchases of minerals in place	—	—	18	5.1	—	—	18	5.1
Extensions and discoveries	2,357	33.5	475	7.5	3,131	—	5,963	41.0
Production	(5,000)	(30.4)	(578)	(4.3)	(1,129)	—	(6,707)	(34.7)
Sales of minerals in place	—	(0.2)	(207)	(3.3)	(276)	—	(483)	(3.5)
December 31, 1986	62,714	819.4	3,618	65.3	7,616	—	73,948	884.7
Revisions of previous estimates	754	(9.6)	(47)	(4.6)	1,144	—	1,851	(14.2)
Purchases of minerals in place	74,000	695.2	—	—	—	—	74,000	695.2
Extensions and discoveries	2,584	10.3	1,116	6.7	1,491	—	5,191	17.0
Production	(5,194)	(32.0)	(567)	(5.7)	(1,411)	—	(7,172)	(37.7)
Sales of minerals in place	—	—	(655)	(4.5)	—	—	(655)	(4.5)
December 31, 1987	134,858	1,483.3	3,465	57.2	8,840	—	147,163	1,540.5
Proved developed reserves:								
January 1, 1985	56,528	641.7	2,214	35.7	3,615	—	62,357	677.4
December 31, 1985	54,871	599.2	3,897	40.2	3,151	—	61,919	639.4
December 31, 1986	51,528	538.7	3,152	50.4	4,877	—	59,557	589.1
December 31, 1987	110,166	901.2	2,761	43.4	5,388	—	118,315	944.6

There have been no major discoveries since December 31, 1987 that would cause a significant change from the proved reserves reported. Reserve quantities do not reflect any adjustments for changes in the price of oil and gas since December 31, 1987.

Proved reserves in Canada are determined by the deduction of freehold and overriding royalties but before the deduction of provincial royalties. Proved reserves in the United States are net of all royalties. Proved reserves in Indonesia and other foreign jurisdictions are attributable to the Company's gross working interest before host government takes.

**Financial Data**  
(Unaudited)

**(a) Selected quarterly financial data**

The following sets forth selected quarterly financial data for the four quarters of 1987 and 1986 in millions of dollars except for per share amounts. The results for the fourth quarter of 1986 and the first quarter of 1987 have been restated to reflect an NEB decision. Further details are disclosed in Note 16.

<i>Three Months Ended</i>	Mar. 31	June 30	Sept. 30	Dec. 31
<b>1987</b>				
Revenues	923.5	775.1	734.1	922.7
Income from operations	131.7	128.6	135.0	142.5
Net income	39.9	38.1	39.2	42.8
Net income applicable to common shares	29.2	28.8	29.9	33.5
Per common share data:				
Net income applicable to common shares	\$0.23	\$0.23	\$0.24	\$0.26
<b>1986</b>				
Revenues	1,287.9	993.5	864.8	999.1
Income from operations	152.4	124.8	128.9	112.1
Net income/(loss)				
Before investment and asset provisions	51.8	41.4	42.9	30.6
After provisions	51.8	41.4	42.9	(83.9)
Net income/(loss) applicable to common shares				
Before investment and asset provisions	41.1	30.7	32.2	19.9
After provisions	41.1	30.7	32.2	(94.6)
Per common share data:				
Net income/(loss) applicable to common shares				
Before investment and asset provisions	\$0.41	\$0.31	\$0.26	\$0.15
After provisions	\$0.41	\$0.31	\$0.26	(\$0.89)

**(b) Price range of common shares**

The Company's common shares are listed on the Vancouver, Alberta, Winnipeg, Toronto, Montreal and New York stock exchanges. The Toronto Stock Exchange is the principal market on which the Company's common shares are traded.

The following table sets forth the quarterly high and low sales prices of the Company's common shares as reported by The Toronto Stock Exchange and New York Stock Exchange respectively:

	Toronto Stock Exchange		New York Stock Exchange	
	High	Low	High	Low
	<i>(Cdn.\$)</i>		<i>(U.S.\$)</i>	
<b>1987</b>				
First Quarter	\$21.50	\$16.63	\$16.38	\$12.13
Second Quarter	21.50	17.25	16.50	13.00
Third Quarter	19.50	17.38	14.75	13.13
Fourth Quarter	18.38	13.88	14.13	10.50
<b>1986</b>				
First Quarter	\$21.75	\$17.00	\$15.50	\$12.00
Second Quarter	20.38	16.00	14.63	11.50
Third Quarter	18.13	15.50	13.13	11.25
Fourth Quarter	17.63	15.63	12.63	11.25



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**Information  
for Foreign  
Investors**

In Canada there are no restrictions on the export or import of capital which affect the Company's remittance of dividends, interest or other payments to its non-resident security holders.

Dividends paid by the Company to shareholders outside of Canada are subject to Canadian non-resident withholding tax. This tax is generally at

the rate of 15% for the United States and other countries where Canadian tax treaties apply and 25% for non-treaty countries.

Interest payable on the Company's debt securities held by non-residents may be subject to Canadian withholding tax depending upon the terms and provisions of such securities.

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**Dividend  
Reinvestment  
and Share  
Purchase  
Plan**

This Plan allows common and preferred shareholders of the Company to conveniently purchase additional common shares of the Company by reinvesting their cash dividends and by making optional cash payments.

Shares acquired through the Plan with reinvested dividends are purchased at 95% of the average market price and shares acquired with optional cash payments are purchased at 100% of the

average market price. There are no brokerage commissions payable under the Plan since participants purchase the new common shares directly from the Company and all administrative costs of the Plan are paid by the Company.

Shareholders who wish more information regarding the Plan should contact the Shareholder Relations department at the Company's Toronto office.

TransCanada  
PipeLines  
Limited

FINANCIAL	1987	1986	1985	1984	1983
<i>(millions of dollars except where indicated)</i>					
<b>Revenues</b>					
Pipeline	\$3,057.1	\$3,912.5	\$4,367.0	\$4,214.3	\$3,459.7
Oil and gas	\$ 211.5	\$ 201.2	\$ 301.5	\$ 241.0	\$ 163.5
Other	\$ 86.8	\$ 31.6	\$ 33.0	\$ 17.2	\$ 11.0
	\$3,355.4	\$4,145.3	\$4,701.5	\$4,472.5	\$3,634.2
<b>Income from Operations</b>	\$ 537.8	\$ 518.2	\$ 644.3	\$ 586.2	\$ 528.3
<b>Income from Investments</b>	\$ 122.9	\$ 118.2	\$ 114.3	\$ 140.6	\$ 100.9
<b>Net Income for the Year</b>	\$ 160.0	\$ 52.2	\$ 162.5	\$ 247.9	\$ 218.5
<b>Net Income Applicable to Common Shares</b>	\$ 121.4	\$ 9.4	\$ 117.7	\$ 206.4	\$ 182.3
<b>Net Income per Average Common Share</b>					
Basic—before provision	\$ 0.96	\$ 1.13	\$ 2.40	\$ 2.41	\$ 2.13
—after provision	\$ 0.96	\$ 0.09	\$ 1.21	\$ 2.22	\$ 2.03
<b>Funds Generated from Operations</b>	\$ 341.8	\$ 431.5	\$ 505.5	\$ 441.5	\$ 381.4
Per average common share	\$ 2.71	\$ 3.92	\$ 5.21	\$ 4.75	\$ 4.24
<b>Assets</b>					
Plant, property and equipment					
Pipeline	\$2,459.4	\$2,474.9	\$2,511.1	\$2,567.7	\$2,614.6
Oil and gas	\$2,320.4	\$1,473.9	\$1,575.4	\$1,566.7	\$1,349.6
Other	\$ 59.2	\$ 38.0	\$ 26.4	\$ 15.1	\$ 13.1
Investments—pipelines	\$ 344.5	\$ 376.3	\$ 401.7	\$ 450.6	\$ 441.5
Total assets	\$6,669.3	\$5,951.3	\$6,322.2	\$6,291.7	\$5,530.0
<b>Capitalization</b>					
Long-term debt	\$3,063.5	\$2,173.8	\$2,215.0	\$2,276.4	\$2,218.0
Non-recourse loans	\$ —	\$ —	\$ 398.0	\$ 441.0	\$ 501.1
Shareholders' equity					
Total	\$2,122.3	\$2,093.9	\$1,818.5	\$1,711.0	\$1,393.5
Common	\$1,678.3	\$1,649.5	\$1,373.5	\$1,268.1	\$1,049.4
Per common share at year end	\$ 12.99	\$ 13.39	\$ 13.89	\$ 13.32	\$ 11.54
<b>Capital Expenditures</b>	\$ 190.4	\$ 185.0	\$ 217.7	\$ 351.8	\$ 237.1
<b>Dividends Declared per Common Share</b>	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.00	\$ 0.75
<b>Common Shares Outstanding</b>					
<i>(millions)</i>					
Year end	129.2	123.2	98.9	95.2	90.9
Weighted average	126.3	110.2	97.0	93.0	89.9
<b>Number of Shareholders</b>					
December 31	24,062	24,259	21,143	21,652	22,415
<b>Number of Regular Employees</b>					
December 31	2,016	2,026	1,945	1,938	1,953

*Investment and Asset Provisions, as described in Note 20 to the Consolidated Financial Statements on page 66 are included in Net Income for the Year for the years 1986, 1985, 1984 and 1983 respectively. In addition, certain 1986 amounts have been restated as disclosed in Note 16 on page 65.*

TransCanada  
PipeLines  
Limited

OPERATING	1987	1986	1985	1984	1983
<b>Pipeline Operations</b>					
Gas delivered for sales and transportation (millions of cubic metres)					
annual	32 633	33 085	34 134	32 922	28 576
maximum day	123	130	125	131	121
Kilometres of pipeline— including loop line	10 600	10 593	10 593	10 632	10 626
Compressor power (kilowatts)	1 023 200	1 020 500	1 020 500	1 020 500	1 020 500
<b>Oil and Gas Operations</b>					
Liquid sales volumes (barrels per day)					
Crude oil					
Canada—conventional	11,644	11,365	11,138	11,043	9,655
—synthetic	846	803	801	541	691
United States	1,439	1,484	1,687	817	190
Indonesia and other foreign	3,699	3,148	3,500	1,991	1,208
Natural gas liquids					
Canada	3,188	2,987	3,117	2,364	1,773
United States	115	99	43	50	110
	20,931	19,886	20,286	16,806	13,627
Natural gas sales volumes (millions of cubic feet per day)					
Canada	84.9	80.8	87.3	80.0	63.4
United States	15.5	11.6	12.0	5.3	1.5
	100.4	92.4	99.3	85.3	64.9
Sulphur (long tons per day)					
Canada	180	189	187	172	188

Note: Oil and gas sales volumes for Canada are gross and include all volumes attributable to the Company's working interests before the deduction of royalties. Sales volumes for the United States are net of royalties. Sales volumes for Indonesia are attributable to the Company's gross working interest before government takes. Daily sales volume is calculated by dividing total sales for the respective year by the number of days in that year.

Shareholders and others desiring additional information on TransCanada PipeLines may request a copy of the booklet "Operating and Statistical Information—1987" from Mr. R. G. Lloyd, Director, Investor Relations, TransCanada PipeLines, P.O. Box 54, Commerce Court West, Toronto, Ontario, M5L 1C2.

**Directors**

JAMES M. CAMERON  
President, Pipeline Division  
TransCanada PipeLines Limited, Toronto

JOHN H.C. CLARRY, Q.C.\*  
Counsel, McCarthy & McCarthy, Toronto

J. V. RAYMOND CYR  
President, BCE Inc., Montreal

A. JEAN DE GRANDPRÉ, Q.C., O.C.\*  
Chairman and Chief Executive Officer,  
BCE Inc., Montreal

RUSSELL E. HARRISON\*  
Director,  
Canadian Imperial Bank of Commerce,  
Toronto

ROBERT H. JONES\*  
Chairman,  
Investors Group Inc., Winnipeg

ROBERT H. KNIGHT\*  
Partner, Shearman & Sterling, New York

GERALD J. MAIER  
President and Chief Executive Officer  
TransCanada PipeLines Limited, Toronto

GORDON P. OSLER  
Chairman, TransCanada PipeLines Limited,  
Toronto; Chairman, North American  
Life Assurance Company, Toronto

HERBERT C. PINDER  
President, Saskatoon Trading Company  
Limited, Saskatoon

HARRY G. SCHAEFER  
Vice Chairman of the Board and  
Chief Financial Officer,  
TransAlta Utilities Corporation,  
Calgary

J. STUART SPALDING  
Executive Vice-President, Finance  
BCE Inc., Montreal

NEIL J. STEWART  
Corporate Director, Calgary

ALLAN R. TAYLOR  
Chairman and Chief Executive Officer,  
The Royal Bank of Canada, Toronto

\*Member of the Audit Committee

**Principal Officers**

**Corporate**

GORDON P. OSLER  
Chairman

GERALD J. MAIER  
President and Chief Executive Officer

JAMES M. CAMERON  
President, Pipeline Division

H. NEIL NICHOLS  
Executive Vice-President

MITCHELL T.G. GRAYE  
Senior Vice-President, Finance  
and Treasurer

GEORGE M. HUGH  
Senior Vice-President, Pipeline Division

C. KENNEDY ORR  
Senior Vice-President

RICHARD D. WALKER  
Senior Vice-President

KENNETH G. WHITESIDE  
Senior Vice-President, Administration  
and Control

BRIAN F. HILL  
Vice-President and Executive  
Assistant to the President and Chief  
Executive Officer

RAYMOND F. SIM  
Vice-President and Corporate Secretary

JOHN W. STINSON  
Vice-President, Human Resources

ROBERT B. HODGINS  
Corporate Controller

**Wholly Owned Operating Divisions  
and Subsidiaries**

**Pipeline Division**

JAMES M. CAMERON  
President

GEORGE M. HUGH  
Senior Vice-President

GEORGE C. BRITTON  
Vice-President

GAVIN J. COUPER  
Vice-President, Engineering and  
Operations

ARTEL A. DOULOFF  
Vice-President, Transportation

CRAIG R. FREW  
Vice President

DEREK E. HENWOOD  
Vice-President, Pipeline Investments

STEVEN JAKYMIW  
Vice-President, Rates

JAMES W.S. MCOUAT, Q.C.  
Vice-President, Legal & Regulatory  
Affairs

RAY T. SMITH  
Vice-President and Controller

ARTHUR A. WILKINS  
Vice-President

**Western Gas Marketing Limited**

C. KENNEDY ORR  
President and Chief Operating Officer

JOHN ANTHONY  
Vice-President, Marketing

H. FRED BUTTON  
Vice-President, Market Planning  
and Development

R. GLEN CAUGHEY,  
Vice-President, Canadian Sales

ROBERT D. HALE,  
Vice-President, U.S. Sales

DAVID G. HANSON,  
Vice-President, U.S. Gas Supply

BARRY G. LUFT  
Vice-President, Gas Supply

WILLIAM A. SCOTLAND,  
Vice-President, Government Relations  
and Administration

MERV J. SIMON,  
Vice-President, Operations

**TCPL Resources Ltd.**

SANDRO SILENZI  
Vice-President, Exploration

RAY G. SAWKA  
Vice-President

A. RAYMOND TRAVERS  
Controller

**Encor Energy Corporation Inc.**

H. EARL JOUDRIE  
President and Chief Executive Officer

**Wesely Energy Company**

JACOB I. MORROW  
Executive Vice-President and  
General Manager

**Cancarb Limited**

A. RUSSELL STEELE  
President and Chief Operating Officer

**IPEL KOPP Ltd.**

RICHARD D. WALKER  
Chief Executive Officer

DONALD C. INGRAM  
President

**Kopp GmbH International Pipeline  
Services**

RICHARD D. WALKER  
Chief Executive Officer

GUNNAR G. KOPP  
President

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**Corporate Offices**
**Executive Office**

P.O. Box 54, Commerce Court West  
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**Registered Office**

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**Subsidiary Offices**

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Suite 3700, 250-6th Avenue S.W.  
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Telephone (403) 269-5611

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Kopp GmbH International  
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Encor Energy Corporation Inc.  
300-5th Avenue S.W.  
Calgary, Alberta  
T2P 3X9  
Telephone (403) 231-6000

**Subsidiaries**

Cancarb Limited

IPEL KOPP Ltd.

Kopp GmbH International  
Pipeline Services

TCPL Great Lakes Ltd.

TCPL Investments AG

TCPL Nederland B.V.

TCPL Resources Ltd.

TransCan Holdings Ltd.

TransCanada Border PipeLine Ltd.

TransCanada Iroquois Ltd.

TransCanada PipeLine Alaska Ltd.

TransCanada PipeLine USA Ltd.

TransCanada PipeLines Finance  
USA Ltd.

Wessely Energy Company

Western Gas Marketing Limited

Western Gas Marketing USA Ltd.

**Affiliates**

Great Lakes Gas Transmission  
Company

Sable Gas Systems Limited

Trans Québec & Maritimes  
Pipeline Inc.

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**Investor Information**
**Common Shares**

Transfer Agents and Registrars:  
Montreal Trust Company,  
Montreal, Toronto, Winnipeg,  
Regina, Calgary and Vancouver,  
Bank of Montreal Trust  
Company, New York

**Preferred Shares**

Transfer Agents and Registrars:  
\$2.80 cumulative redeemable  
first preferred shares  
National Trust Company,  
Montreal, Toronto, Winnipeg,  
Calgary and Vancouver

Cumulative redeemable  
retractable first preferred shares  
series E, series H, series I and  
Series J  
The Royal Trust Company,  
Montreal, Toronto, Winnipeg,  
Regina, Calgary and Vancouver

Cumulative redeemable  
convertible first preferred shares  
series G are transferable at the  
office of the company in Toronto.

**Stock Exchanges**

Common and preferred shares are  
listed on the Toronto, Montreal,  
Vancouver, Alberta and  
Winnipeg stock exchanges. The  
common shares are also listed on  
the New York Stock Exchange.  
The common share warrants are  
listed on the Toronto and  
Montreal exchanges.

**Stock Symbols**

Common shares: TRP  
Common share warrants: TRP.WT  
\$2.80 cumulative redeemable first  
preferred shares: TRP.PR.A  
Cumulative redeemable retractable  
first preferred shares:  
Series E: TRP.PR.E  
Series H: TRP.PR.H  
Series I: TRP.PR.I  
Series J: TRP.PR.J

**Bonds**

Trustee:  
National Trust Company, Toronto

Registrar Canadian Series:  
9¼% and 8⅞% first mortgage pipe  
line bonds,  
National Trust Company, Montreal,  
Toronto, Winnipeg, Calgary and  
Vancouver

Co-Registrars U.S. Series:  
16% and 16¾% first mortgage  
pipe line bonds,  
National Trust Company and  
Morgan Guaranty Trust Company  
of New York

Co-Registrars U.K. Series:  
16½% first mortgage pipe line  
bonds,  
National Trust Company and  
The Royal Bank of Scotland plc,  
London, England

**Debentures**

Trustee and Registrar:  
Central Trust Company,  
Montreal, Toronto, Winnipeg,  
Calgary and Vancouver

10% series A sinking fund,  
9¾% series B sinking fund,  
9% series C sinking fund,  
8⅞% series D sinking fund,  
9% series E sinking fund,  
11½% series F sinking fund,  
9.60% series G sinking fund,  
18% series H sinking fund,  
11.70% series I,  
11.40% series J,  
10.45% series K,  
and 10.80% series L debentures

**Form 10-K**

The company's report to the  
Securities and Exchange  
Commission on Form 10-K is  
available to common  
shareholders at no charge by  
writing to:

Shareholder Relations  
TransCanada PipeLines  
P.O. Box 54  
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Toronto, Canada  
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