ALBERTA GAS TRUNK LINE ANNUAL REPORT 1977

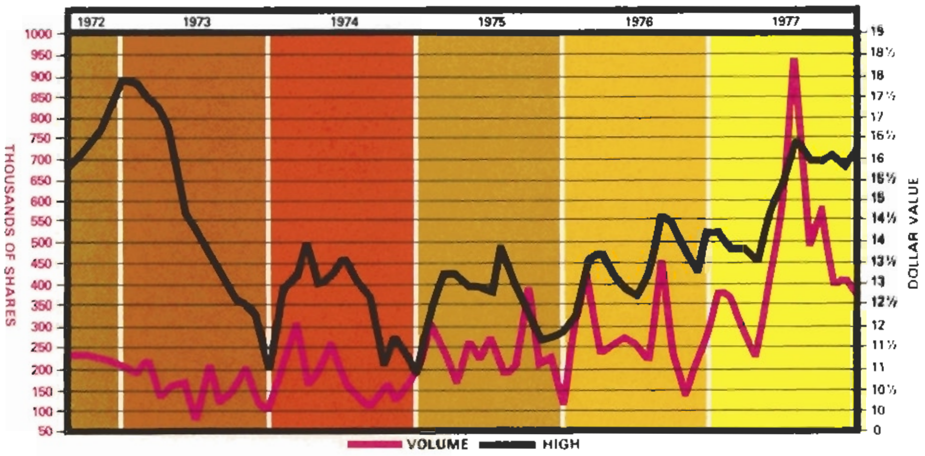
The Alberta Gas Trunk Line Company Limited is the major gas transmission company in Alberta.

The Company has expanded its areas of interests to include petrochemicals, gas buying and selling, and manufacturing.

The Company is one of the original co-sponsors of Foothills Pipe Lines (Yukon) Ltd., the parent company responsible for construction in Canada of the Alaska Highway Pipeline Project.

The Alberta Gas Trunk Line Company Limited is also participating in the Quebec and Maritimes Project and the Arctic Pilot Project.

Alberta Gas Trunk Class "A" Shares



Your Company continued substantial growth in 1977. Investment in service, petrochemical and production plant increased by 29 per cent during the year. Correspondingly, gross consolidated revenues rose by 30 per cent and net income by 46 per cent over 1976. These increases are primarily derived from the gas transmission, gas sales and services, and petrochemical operating segments.

The prospects for 1978 growth are even more encouraging than the 1977 performance in each of the Company's divisions: gas transmission, manufacturing, gas sales and services, petrochemicals and gas production.

The Company also participated in one of the major triumphs for Canadian enterprise with approval by almost every independent agency and inquiry within Canada and the United States of the Foothills-Northwest application to build the Alaska Highway natural gas pipeline. Following this project's approval by the Governments of Canada and the United States, a family of subsidiaries of Foothills Pipe Lines (Yukon) Ltd., in which your Company is an equal partner with Westcoast Transmission Company Limited, were established as directed by the National Energy Board.

In tandem with Northwest Alaskan Pipeline Company, which will build the Alaska section of the project, the Foothills Group is hard at work preparing to start construction of the pipeline as soon as the final stage of approval has been given by Parliament. This is expected during 1978. The common objective is that the project should be in place when the two governments want it. This means it should be constructed between 1980 and 1982 and be operational in 1983.

Reflecting the substantial surplus of natural gas reserves that have been developed in Alberta during the last two or three years, the Company's wholly-owned subsidiary, Algas Mineral Enterprises Ltd., more than doubled its gas deliveries in 1977 and substantially expanded its holdings of petroleum and natural gas properties.

The Company's construction program during 1977 resulted in the installation of 660 miles of new pipeline and about 70 new meter stations at a cost of $108 million. The construction program included the installation at Nordegg of a new and more efficient generation of compressor units, the Solar Mars, as the first stage in gradual replacement of older, less efficient units. As intended, substantial fuel savings are now being realized in the operation of the new unit.

New facilities were installed to enable additional gas deliveries to Westcoast Transmission for its British Columbia and other markets and to Many Islands Pipelines (Canada) Limited for use by Saskatchewan Power Corporation.

The Company also proceeded during 1977 with several research projects in the energy field. These include construction of a one-acre commercial greenhouse that will operate by using heat recovered from pipeline/compressor units at the Princess site; field testing for recovery of methane from coal; and completion of the first stage of investigation of the viability of converting coal to fuel gas and chemicals.

For the first time since 1969, the Company went to the U.S. capital market for external financing in 1977. This resulted in the successful arrangement of term financing to the extent of $388 million U.S. for the Company's ethylene subsidiary, The Alberta Gas Ethylene Company Ltd. The financing was on the basis of its contract to deliver ethylene to Dow Chemical of Canada, Limited from the new plant now being built near Red Deer, Alberta.

Another affiliate, Pan-Alberta Gas Ltd., which is 50 per cent owned and is controlled by the Company, was successful in increasing its sales of gas by almost 100 per cent in 1977. Like Algas Mineral Enterprises Ltd., and other Alberta companies, Pan-Alberta is actively searching for new domestic and export markets for surplus gas in the province. If hoped-for "gas swap" arrangements are completed involving the Governments of Alberta, Canada and the United States, Pan-Alberta will play a significant role in this venture, both to relieve the present surplus problem in Alberta and the gas shortage in the United States.

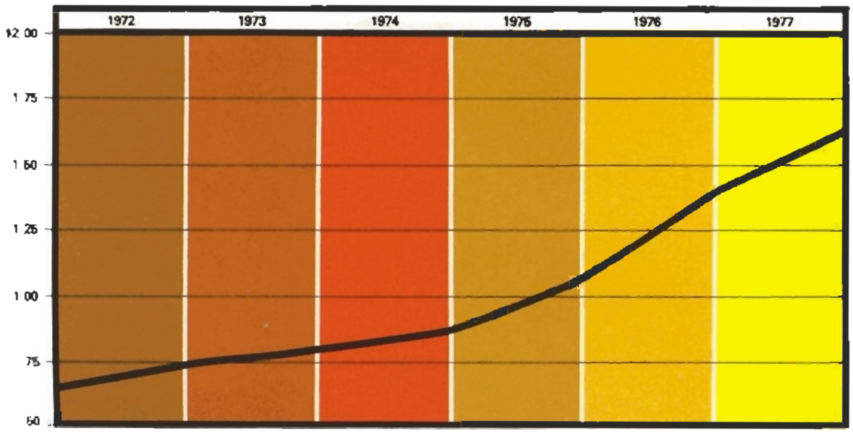
During 1977, the Company became a majority partner (60 per cent) with Petro-Canada in a new project intended to extend the Canadian gas transportation network to the main centres of population and industry east of Montreal and in New Brunswick and Nova Scotia. The new Company established for this purpose is Q & M Pipe Lines Ltd.

The Company also continued during 1977 to develop the Arctic Pilot Project, again as a partner with Petro-Canada, which in this case is the majority owner and operator. This project is pioneering a new era of Canadian expertise in the energy industry with its development of the technological and transportation requirements for the production and delivery of natural gas from under the Arctic Ocean and Arctic Islands.

Our two companies hope to have both these projects in operation in 1982.

REPORT TO SHAREHOLDERS

Earnings Per Common Share (Basic)



Another affiliate, Alberta Gas Chemicals Ltd., enjoyed a successful year of methanol production as both of its plants at Medicine Hat, Alberta, operated near capacity. It is proceeding with the design of a third 600 ton per day plant and brought into production late last year a malic and fumaric acid plant at Duluth, Minnesota. Our equal partner in Alberta Gas Chemicals Ltd. is Allarco Developments Ltd., whose chairman Dr. Charles Allard, has contributed greatly to the success of this affiliate.

During 1977, the Company was a major participant in the Public Utilities Board Inquiry into the Alberta cost of service. The Inquiry into methods and principles that should apply in determining the Alberta cost of service as established by the Natural Gas Pricing Agreement Act of 1975 was not completed in 1977, as earlier anticipated. It is now scheduled to be completed in 1978. But as stated in previous reports, the Company does not anticipate that any recommendations made by the Board to the Government of Alberta will have a material effect on its present financial position or prospects for future growth.

In the manufacturing field, moves taken during 1977 should strengthen the Company's position in future activities in the worldwide valve business.

Sales by WAGI to the Soviet Union and other eastern European countries maintained manufacturing revenues at a healthy level and these markets are expected to remain good for some time.

The strong performance of the Company this year is in large measure due to the excellent work and loyalty of its employees and special thanks is recorded here. Mention is also due this year to all the people who worked in a diligent, dedicated and effective manner to accomplish the approval by two separate nations of the Alaska Highway Pipeline Project. The same appreciation and thanks goes to the management and staff of Alberta Gas Ethylene, who have the responsibility now of completing and operating the primary plant to provide feedstock to Alberta's emerging petrochemical industry.

H.J.S. Pearson
Chairman of the Board

S.R. Blair
President and Chief Executive Officer

Calgary, Alberta, Canada March 3, 1978

HIGHLIGHTS

FINANCIAL	1977	1976	% Increase
Total revenues	$ 365,794,000	$ 281,561,000	29.9
Consolidated net operating income	$ 140,470,000	$ 104,172,000	34.8
Net income	$ 57,471,000	$ 39,417,000	45.8
Dividends accrued on preferred shares	$ 12,542,000	$ 8,121,000	54.4
Net income applicable to common shares	$ 44,929,000	$ 31,296,000	43.6
Net income per common share			
Basic	$ 1.64	$ 1.42	15.5
Fully diluted	$ 1.58	$ 1.34	17.9
Dividends paid per common share	$ 0.7344	$ 0.6136	19.7
Average number of common shares outstanding	27,421,000	22,021,000	24.5
Additions to plant, property and equipment	$ 233,988,000	$ 152,244,000	53.7
Investment in plant, property and equipment (cost)	$1,110,991,000	$ 863,007,000	28.7
Investment in plant, property and equipment (net)	$ 923,420,000	$ 712,674,000	29.6
Average rate base in gas transmission	$ 583,673,000	$ 516,627,000	13.0
Average rate of return on gas transmission	10.406%	10.375%	0.3
OPERATING			
Miles of gas transmission pipeline	6,228	5,413	15.1
Compression horsepower	482,360	467,335	3.2
Total gas transmission receipts (MMcf @ 14.65 p.s.i.a.)	1,919,147	1,822,695	5.3
Maximum day receipts (MMcf @ 14.65 p.s.i.a.)	6,473	5,820	11.2
Average day receipts (MMcf @ 14.65 p.s.i.a.)	5,258	4,994	5.3

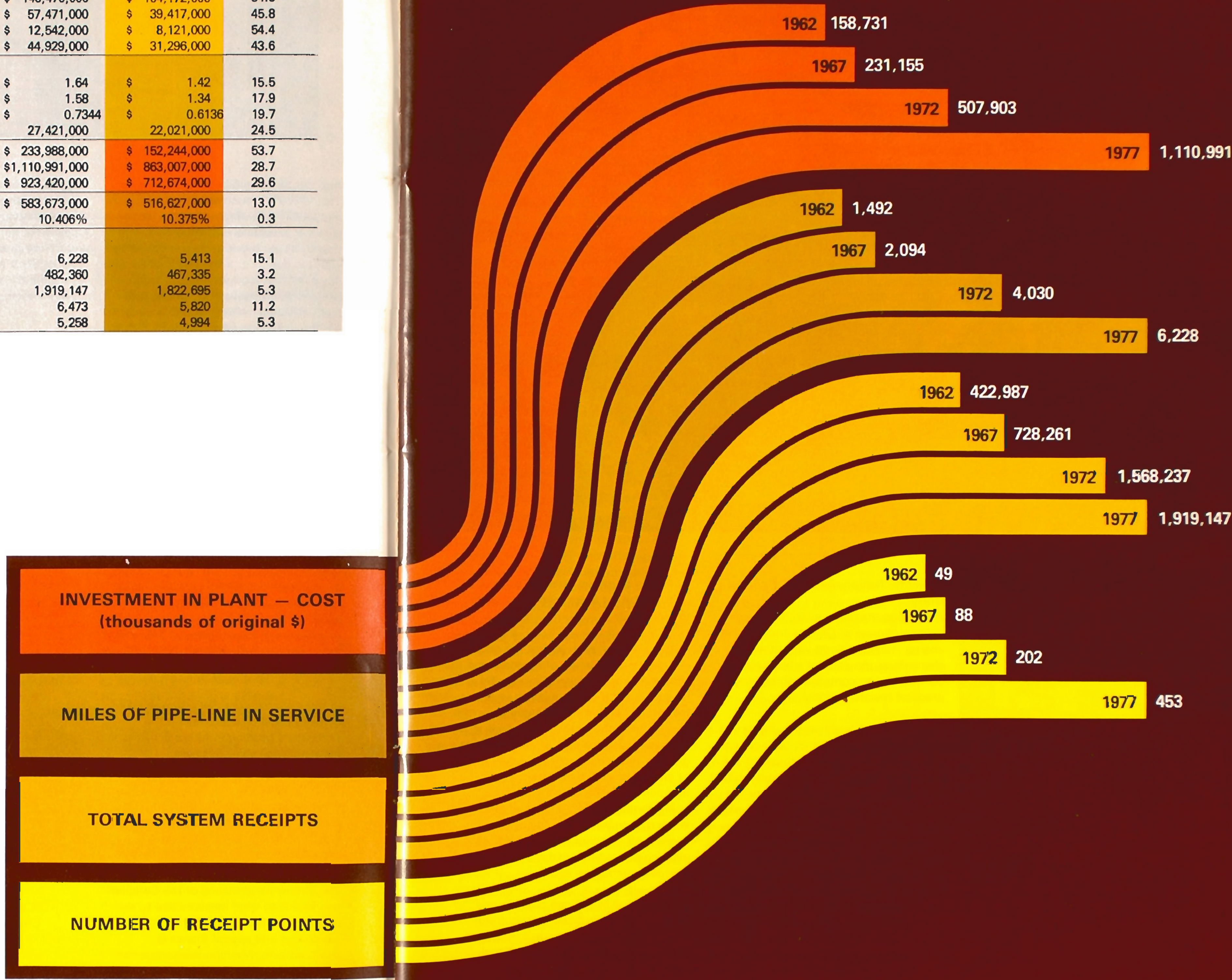
Computer Drafting.

Gas Control, Service Centre.

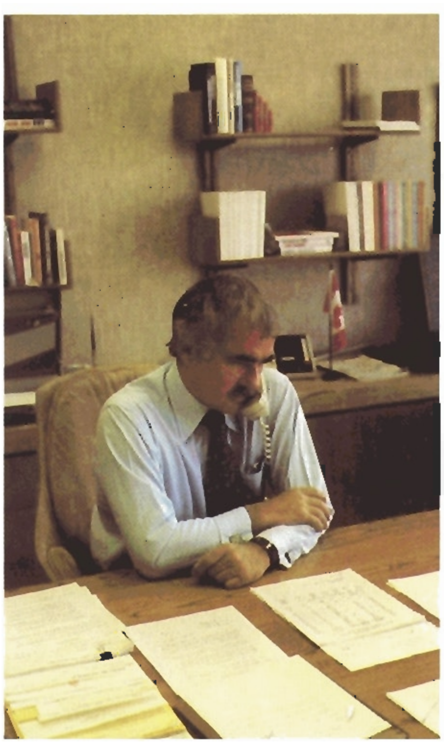
System Planning.

Computer Services.

RECORD OF GROWTH



Coating and wrapping pipe on a 42-inch project.



Projects, Nationalism and Canadian Unity

A fine opportunity exits in the present political climate of Canada for the energy industry, along with other elements of the country's business community, to contribute something practical toward national unity.

No one should question the urgency at this time of emphasis that Canada is a valid nation. (Valid nations just do not fracture into separate parts from internal forces). It is also the view of your Company's management that the validity of our country can be far better achieved in a strong economic climate than a weak one. Weakness invites political experimenting, sometimes dangerous. Alternatively, the strength for tolerance, patience and steady reform can be encouraged to some degree by the successful implementation of a variety of projects, particularly if they are led by Canadian companies.

What has Canadian ownership to do with this? A lot more than many seem to realize.

There is no practical, logical reason for any drawn-out climate of business and economic uncertainty in Canada. No nation on earth today enjoys a land mass richer in natural advantages the natural advantages of spaciousness in the second-largest area of any country, of great physical variety and beauty, and of enormous stores of resources. Even in a period when the whole globe is going through an experience of slow economic growth, Canadians have levelled off at a higher plateau of average per capita income than almost any other nation on earth.

We would all like to see inflation and unemployment reduced from current levels. The answer to both is increased output, using the skills of a national work force which, when furnished with

MESSAGE FROM THE PRESIDENT

plant of sufficient scale and modernization, will match productivity with anyone, anywhere. Some of the projects now planned by your Company will contribute substantially to such increase. This is important to national unity, especially as the impact extends into Quebec and the Maritimes. But the nationality of the owners and managers of your Company's projects, and other projects that may strengthen our country's economy, will also be an important factor in the knitting together of all the regions of Canada into a new spirit of unity.

Some have asked what the point of Canadian ownership can be for the Canadian sections of the Alaska Highway Pipeline if it is initially only going to handle natural gas for Americans. The point of Canadian ownership is that it contributes to our sense of national unity by offering some very clear and definite advantages to the whole Canadian community, not just to your Company and its partners. These advantages can be enjoyed, in one degree or another, by all sectors of our national community — academic, professional and governmental — and these advantages contribute definitely, if sometimes subtly, to that sense of self-confidence on which Canadian unity must ultimately be built. These are some of the advantages as we see them when our development projects are owned and managed by Canadians:

1. The revenues generate new capital for further investment in local, provincial or national developments, any one of which is a contribution to the Canadian whole. (Your Company knows directly that it could not have been instrumental in establishing an export-capable petrochemical industry in Alberta had our pipeline franchise not generated the revenues to let us venture into petrochemicals in the first place).

2. Achievements by Canadian owners and managers in industry and finance on a national or international scale spread pride, stimulation and confidence throughout a community, whether locally, provincially or nationally.

3. There is also the important effect that the familiarity of Canadian business decision-makers promotes local consultants, financial institutions, suppliers, subcontractors and so on into better opportunities.

4. The opportunities for leaders to gain experience and enjoy promotion without having to leave the home community are undeniable benefits.

5. Canadian ownership and management provides the fundamental assurance that the political and cultural leanings of the business decision-makers in our country will be those shaped by our national, regional and local communities.

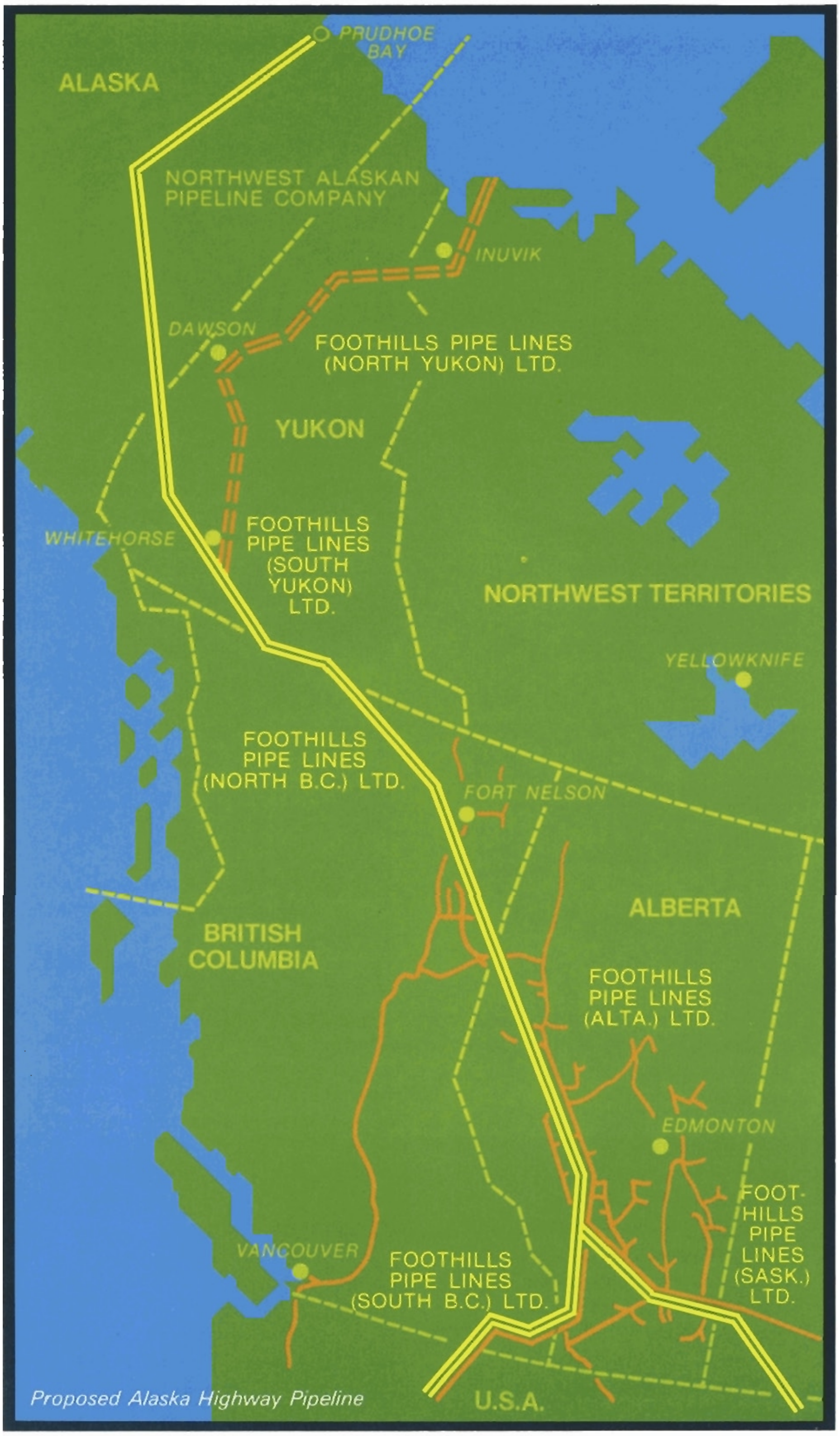
None of this should be taken as suggesting that imported ownership or management is bad in any inherent way. It is simply not ours, and when there is a choice of having others do our business or of doing it ourselves, we are better off doing it ourselves. There is a choice today, especially in the sellers' market that now exists for many commodities from Western Canada. It will be better for national confidence and unity if advantage is taken to increase the number of companies that are owned by Canadians and have their headquarters across Canada — — companies that are definitely "ours", particularly in sectors like energy where Canadian ownership, management and control has been minor up to now.

So your Company management believes that our success in applying this Canadian ownership principle to the Canadian sections of the Alaska Highway Project will definitely have a long-term positive impact on unity in Canada. The benefits, direct and indirect, will extend right across the country.

Another of your Company's projects that we believe could make a strong future contribution to Canadian unity is our planned Q & M Pipeline across eastern Quebec, New Brunswick and Nova Scotia. In this project, too, we intend to encourage the principle that Canadians should run their own show through as widespread Canadian ownership, management and control as possible, in every aspect of the pipeline.

No one can read Canada's future with certainty. But the right kind of energy and other business projects, led by Canadian companies creating an ever-widening multiplier effect of national self-confidence, will certainly make valuable contributions toward strengthening the sense of national patience to develop a purpose on which our country's future depends.

S.R. Blair



Proposed Alaska Highway Pipeline

A New Era
The Canadian section of the Alaska Highway Pipeline that your Company now is assigned to help build will be a new component of the transportation industry being developed and operated by Canadian companies.

As the Foothills group of companies and our United States partners go ahead with plans to build this pipeline, it will gradually be appreciated that we are not just financing another project; we are entering a new stage of industrial development in North America that is tremendously important.

Legislation
Foothills Pipe Lines (Yukon) Ltd. has studied the Northern Pipe Line Agency Act, Bill C-25, put before Parliament by the Canadian Government on February 3, 1978. It is the conclusion of Foothills' officers that the Act as drafted contains many provisions that would facilitate and expedite the commencement and management of construction of all Canadian portions of the project.

Construction of the project is scheduled to commence in 1980, except for the Yukon portion where pipe-laying will be deferred until 1981 to provide time for the negotiation of Yukon Indian land claims.

Under the terms of the Agreement between Canada and the United States entered into on September 20, 1977, the entire international gas pipeline system is scheduled for operation in 1983.

Cost Control
Some parties have compared the Alyeska Oil Pipeline with the Alaska Highway natural gas pipeline. It is expected that it will be possible to exercise better cost control on the natural gas pipeline for several reasons.

The building of the gas pipeline will draw heavily on the pioneering Arctic construction effort of Alyeska to avoid the pitfalls found in that experience. The gas pipeline will also enjoy the advantage of not crossing virgin territory. By following existing corridors, we expect to be able to develop more reliable project scheduling and move personnel, equipment and supplies to construction sites with relative ease. The gas pipeline will be buried for almost the entirety of its route, a much easier mode of construction than the above-ground technique required of Alyeska.

What Was Said
"It should be a cause of satisfaction to every Canadian that this very important pipeline will be built and that the Foothills part of it will be built in Canada, by Canadian companies . . ."

> Prime Minister Pierre Trudeau
> House of Commons
> January 24, 1978

"The Alcan proposal, taken together with the recently signed Agreement on Principles with Canada, demonstrates that our two countries working together can transport more energy more efficiently than either of us could transport alone."

> President Jimmy Carter
> Decision and Report to Congress on the Alaska Highway Project
> September 22, 1977

"The decision-making will come out of Alberta and it is going to have an economic impact on our province that will be very great indeed. This is a tremendously positive project for Alberta."

Premier Peter Lougheed
Edmonton, Alberta
September 9, 1977

Canadian Value
The project provides a valuable vehicle for Canada to connect its own frontier reserves to Canadian markets at the most appropriate time. To date, those in the Mackenzie Delta are the most economical to connect, even though they are not as great as hoped.

The provision for future hook-up of Delta gas reserves to the Alaska Highway Pipeline, via a Dempster Highway lateral, should be an inducement for continued gas exploration.

This project facilitates the potential for early deliveries of additional export volumes of gas from Alberta to the United States if the governments of Alberta, Canada and the United States can make the necessary arrangements for return of these volumes from Alaska supplies or some other satisfactory return of the equivalent energy. This concept could have significant benefits to those small independent producers who have shut-in gas in Alberta.

A part of the Alaska Highway Pipeline system could be pre-built from central Alberta south to the U.S. border as early as 1979 or 1980.

The Companies
Foothills Pipe Lines (Yukon) Ltd. of Calgary is the parent company responsible for the project in Canada. Foothills (Yukon) is currently owned by your Company and Westcoast Transmission Company Limited of Vancouver. The Alaska portion of the pipeline is the responsibility of Northwest Alaskan Pipeline Company, Salt Lake City, Utah, and its American partners — several large gas transmission companies in the United States.

Your Company and Westcoast Transmission intend to reduce their equity in due course to provide for an issue of shares to the general public of Canada. A 20 per cent interest in the company has been offered to TransCanada PipeLines Limited of Toronto.

Following the recommendations of the National Energy Board Reasons for

ALASKA HIGHWAY PIPELINE PROJECT

Alaska Highway facing southwest, Kluane Ranges in background.

Decision, July 4, 1977, Foothills (Yukon) announced the incorporation of six federal subsidiaries:

1. Foothills Pipe Lines (South Yukon) Ltd.
2. Foothills Pipe Lines (North B.C.) Ltd.
3. Foothills Pipe Lines (Alta.) Ltd.
4. Foothills Pipe Lines (Sask.) Ltd.
5. Foothills Pipe Lines (South B.C.) Ltd.
6. Foothills Pipe Lines (North Yukon) Ltd.

Foothills (Yukon) will be the majority owner of each segment of the project in Canada. In this manner, we will ensure one-company financing, consistent tariffs and uniform federal control over all segments, while retaining the advantages of construction management by the locally-experienced companies and integrated provincial gas gathering operators.

Financial
The Canadian financial advisors to the Foothills Group include Dominion Securities Limited; McLeod, Young, Weir and Company Limited; and Pitfield, Mackay, Ross and Company Limited; three of the largest and most successful dealers for many years in our country. Our U.S. financial advisor is the First Boston Corporation, one of the largest investment dealers in the United States, which in recent years, has placed more Canadian securities in the United States than any other company. The banking advisors are led by one of the largest Canadian chartered banks (supported by two other major Canadian chartered banks) and the largest American commercial bank. Their strong endorsement of the Foothills project and its financial ability is clearly on the record.

"Both the Canadian and U.S. governments are confident that the joint pipeline system they are proposing to their respective legislatures is economically sound and should be capable of being financed by the private sector."

The Honourable Allan MacEachen
Deputy Prime Minister and
President of the Privy Council
September 9, 1977

DIRECTORS

Chairman of the Board
H.J. Sanders Pearson
President and Chief Executive Officer
S. Robert Blair

J. Edward Baugh
Arthur J.E. Child
William J. Deyell
J. Joseph Healy
William A. Howard
Harold A. Irving
Peter L.P. Macdonnell
John R. McCaig
Frederick A. McKinnon
Robert L. Pierce
L. Merrill Rasmussen
Alastair H. Ross
Daryl K. Seaman

OFFICERS

Chairman of the Board
H.J. Sanders Pearson

President and Chief Executive Officer
S. Robert Blair

Executive Vice President
Robert L. Pierce

Senior Vice President
Robin J. Abercrombie

Senior Vice President
William J. Deyell

Vice President, Administration
Secretary to the Board
Dianne I. Narvik

Vice President and General Manager, Gas Transmission Division
Donald G. Olafson

Vice President and Controller
Douglas R. Hagerman

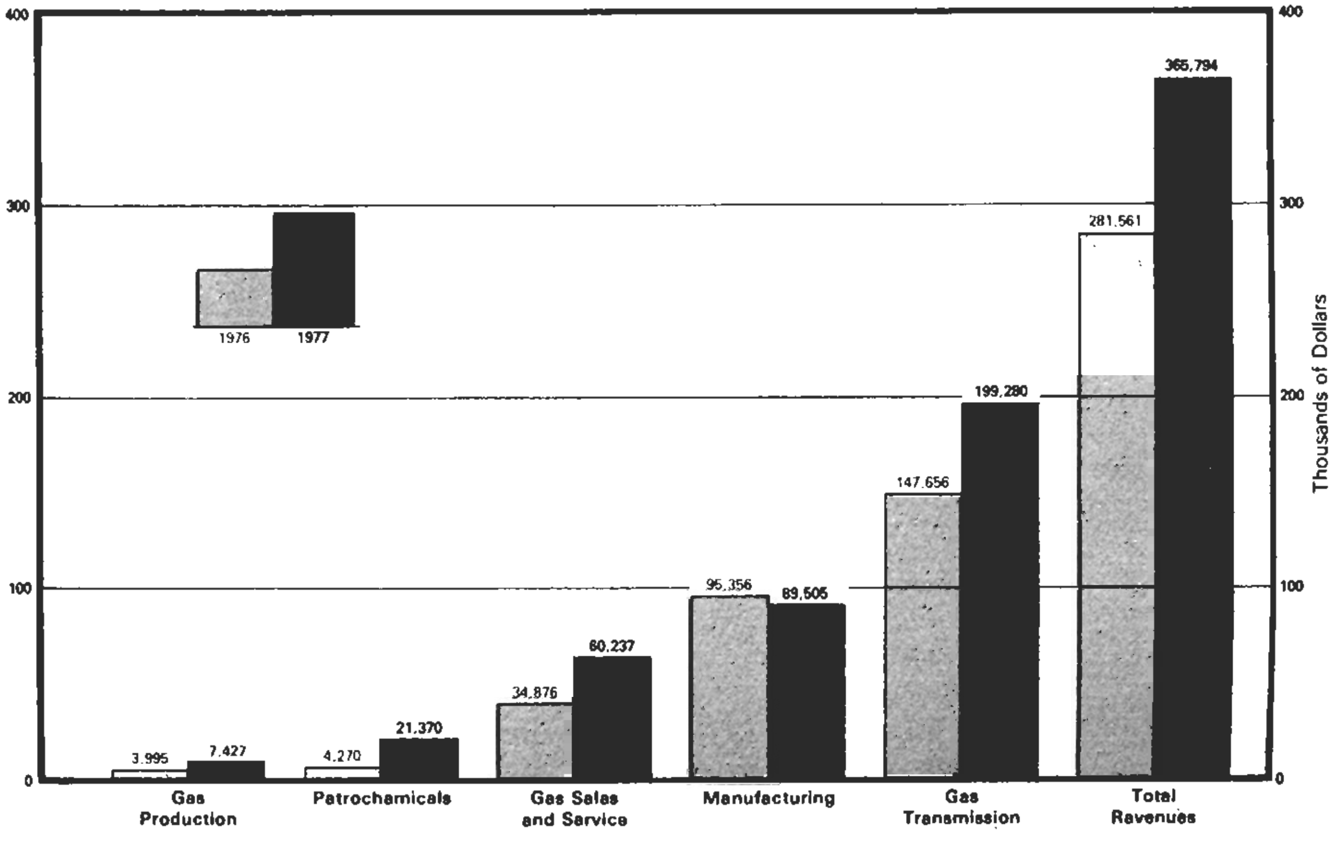
Treasurer
Ronald D. Dooley

Corporate Secretary
William H. McGannon

R.J. Abercrombie, D.R. Hagerman, R.L. Pierce, D.G. Olafson, A.J.E. Child, S.R. Blair, D.K. Seaman, W.H. McGannon, H.A. Irving, J.J. Healy, J.E. Baugh, J.R. McCaig, H.J.S. Pearson, P.L.P. Macdonnell, F.A. McKinnon, R.D. Dooley, D.I. Narvik, W.A. Howard, L.M. Rasmussen, W.J. Deyell, A.H. Ross

FINANCIAL SECTION

GROSS REVENUES BY OPERATING SEGMENTS



Summary

Financial results for the year 1977 continued to reflect the growth patterns in assets, revenues and net income that first became evident in 1975. Consolidated gross revenues this year reached almost $366 million, an increase of $84 million over 1976. Operating revenues were $345 million (roughly divided equally between gas transmission and other business activities) and were $77 million or 29% ahead of last year, principally due to the growth in revenues from gas transmission and from gas sales by Pan-Alberta. Other sources of income (primarily the allowance for funds used during construction for both gas transmission and petrochemicals) added some $20 million to revenues, an increase of about $7 million over 1976.

Cost of sales and operating expenses rose from $148 million in 1976 to $187 million in 1977, an increase of 26%. Most of the increase resulted from a greater volume of gas purchases by Pan-Alberta and from higher operating expenses for gas transmission. Provisions for depreciation, depletion and amortization increased by $9 million, or 31%, to a level of $39 million, primarily due to an increased asset base.

Consolidated net operating income (defined as income before interest costs, outside shareholder interests in partially owned subsidiaries, foreign exchange gains or losses, and income taxes) reached $140.5 million, an increase of $36.3 million over 1976. A major part (about $20 million) of the increase was derived from the collection of income taxes from gas transmission customers.

An unrealized gain of $2.2 million was booked in 1977 on the conversion into Canadian dollars of the financial statements of subsidiaries operating in Italy and the United States. The conversion at current rates of exchange of the significant working capital position of the subsidiaries was the major factor resulting in the gain, which added 5¢ per share to earnings.

Reportable net income rose in 1977 to $57.5 million, up 46% from the $39.4 million earned in 1976. Although consolidated net operating income was up by over $36 million, the increase of $3 million in the share of subsidiary profits to outside shareholders and higher income taxes of $19 million were off-setting factors. Basic earnings per common share for 1977 were $1.64 on an average of 27.4 million common shares outstanding, versus $1.42 earned in 1976 on an average of 22.0 million common shares, for an increase of 22¢/share or 15%.

For the period from 1974 to 1977, net income and basic earnings per common share have increased from $17.8 million to $57.5 million and from 85¢ to $1.64, respectively. These increases reflect compound annual growth rates of 48% for net income and about one-half that or 24%, for earnings per common share. During the same period, total shareholders' equity, both common and preferred, has grown from $194 million to $481 million, a compound annual growth rate of 35%.

Consolidated total assets exceeded $1 billion for the first time in the Company's history in June, 1977. This growth reflects the very significant investments that have been made since 1974 in gas transmission plant, petrochemical facilities, natural gas properties and manufacturing assets.

Gas Transmission

Total revenues from gas transmission activities were just under $200 million (including $5 million from interest during construction), an increase of $51.6 million over 1976. Excluding higher revenues derived from the rate of return on rate base (discussed below), the increase principally reflected higher charges to customers for operating expenses and fuel gas ($19.5 million), provision for depreciation of gas plant in service ($7.8 million), and income taxes collected ($19.6 million).

After deducting operating expenses and depreciation, this segment of the Company's activities generated $104.7 million in net operating income before recognition of interest costs on long term debt and before provisions for current and deferred income taxes. This is an increase of $28.2 million or 37% over last year. The major reasons contributing to this improvement were a higher average rate base which added $6.9 million to income, and the full year recovery of deferred income taxes from all of the principal customers. The increase in the rate of return on rate base from 10.375% to 10.75% on Dec. 1, 1977 did not make a significant contribution to net operating income in 1977.

Other Business Activities

Gross revenues from non-regulated activities aggregated $178.5 million in 1977 versus $138.5 million generated in 1976, an increase of 29%, with a greater volume of gas sales by Pan-Alberta primarily responsible. As well, the first operating revenues attributable to petrochemical facilities were realized in 1977 and this added $10 million to gross revenues.

The contribution to net operating income totalled $35.8 million, an increase of $8.1 million over last year. The significant factors in this increase are the revenues currently derived from petrochemical facilities now in operation or being built and which will operate under cost of service contracts.

FINANCIAL REVIEW

Capital Expenditures

Cash capital expenditures for plant, property and equipment in 1977 totalled $234 million, compared to $152 million in 1976. The largest component was for petrochemical plants and related pipelines under construction which aggregated $117 million, up $64 million over last year. Capital expenditures of $98 million on additions to natural gas transmission plant and of $12 million for petroleum and natural gas properties were roughly equivalent to the 1976 level. At year-end, there were also $62 million of gas transmission facilities under construction, which will be added to rate base in 1978 as work is completed.

A further $16 million was incurred in the year for other projects which are in progress or under study and which will benefit the future growth of the Company. These include about $8 million for northern gas transmission projects and a similar amount for other items including $6 million for the Arctic Pilot project to be carried out in conjunction with Petro-Canada.

During the year, the outside shareholder interest of 25% in Grove Valve was acquired for $3.8 million.

New Funds

In 1977, the Company obtained a total of $596 million in new funds representing the largest pool of funds ever utilized by the Corporation in any one year. Cash flow from operations generated $109 million, which is an increase from this source of $17 millior or 19% over 1976. A further $75 millior was arranged through the public issue of 7.60% Preferred Shares in Canada, and $410 million was obtained from long term debt. Most of the funds derived from new long term debt were arrangec by subsidiaries and represented project financing related to the construction of new petrochemical plants

Dividends

Dividend payments to the Company's common shareholders aggregated $20.2 million in 1977, based on a quarterly dividend rate of 18.36¢ per share for the Class "A" shares, which remained unchanged during the year.

Rate of Return

The rate of return on rate base included in gas transmission charges by the Company was changed on Dec. 1, 1977 to 10.75%. The previous increase was effective on Nov. 1, 1975 when the rate was increased to 10.375%. The average annual rate base in 1977 was approximately $584 million, an increase of $67 million over 1976.

The transportation contracts with the Company's major gas transmission customers provide that the Company will be paid transportation charges on a cost of service basis. This includes operating expenses, income and other taxes and depreciation of its pipeline and plant facilities, together with an annual return on the rate base which is comprised of the depreciated investment in plant and an allowance for working capital. The rates, tolls and charges set by the Company are subject to Provincial regulation. Financing costs, interest on debt and dividends on preferred and common shares are payable from the annual return.

Small volumes of gas are transported for other customers, principally utility and industrial companies. Rates for these services are designed to cover similar costs and annual return as provided with the cost of service customers.

The basis used by the Company for determining charges for depreciation, income taxes and rate of return on rate base are currently under review by regulatory authorities in Alberta. It is not expected that any variations which might be ordered will have a material effect on either the Company's financial position or its net income for 1977.

Common Shares

At December 31, 1977, there were outstanding 27.8 million Class "A" common shares and 1,653 Class "B" common shares. The Class "A" common shares are owned by 29,600 shareholders, of whom 15,800 or 54% were registered in Alberta. In addition, a number of residents of Alberta indirectly hold shares represented by institutions with addresses in other provinces.

The average common shares outstanding in 1977 were 27.4 million, compared to 22.0 million in 1976 and the increase reflects the issue in December 1976 of an additional 5.2 million Class "A" common shares. Additional shares were issued during 1977, primarily through the conversions of Series 1 Unsecured Debentures and 5⅞% Series "D" Preferred Shares.

CONSOLIDATED STATEMENT OF INCOME

Year Ended December 31
(thousands of dollars)

	Total		Gas Transmission		Manufacturing		Gas Sales and Services		Petrochemicals		Gas Production	
	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976
Revenue:												
Operating revenue (Note 1)	$345,472	$268,164	$182,270	$138,021	$85,444	$91,272	$60,237	$34,876	$10,094	$ —	$ 7,427	$ 3,995
Intersegment revenue	—	—	12,025	4,592	—	—	—	—	—	—	—	—
Other revenue —												
Allowance for funds used during construction	13,831	8,544	4,985	5,043	—	—	—	—	8,846	3,501	—	—
Royalties	3,307	3,233	—	—	3,307	3,233	—	—	—	—	—	—
Equity in earnings of affiliated companies	3,184	1,620	—	—	754	851	—	—	2,430	769	—	—
	365,794	281,561	199,280	147,656	89,505	95,356	60,237	34,876	21,370	4,270	7,427	3,995
Costs and expenses:												
Cost of sales and operating expenses	186,725	147,896	61,024	45,375	68,302	70,792	44,596	29,708	9,782	—	3,021	2,021
Intersegment costs	—	—	—	—	—	—	11,287	3,986	—	—	738	606
Depreciation and depletion	38,599	29,493	33,594	25,773	3,194	2,980	8	—	—	—	1,803	740
	225,324	177,389	94,618	71,148	71,496	73,772	55,891	33,694	9,782	—	5,562	3,367
Net operating income before the undernoted items	140,470	104,172	$104,662	$ 76,508	$18,009	$21,584	$ 4,346	$ 1,182	$11,588	$ 4,270	$ 1,865	$ 628
Interest and expense on long term debt (Net of interest income 1977 — $10,686; 1976 — $ 4,086)	28,055	29,470										
Minority interest	7,756	4,947										
Gain on foreign currency translation	(2,184)	—										
	33,627	34,417										
Income before income taxes	106,843	69,755										
Income taxes (Note 6):												
Current	26,708	11,396										
Deferred	22,664	18,942										
	49,372	30,338										
Net income (Notes 1 and 6)	$ 57,471	$ 39,417										
Earnings per common share:												
Basic	$ 1.64	$ 1.42										
Fully diluted	$ 1.58	$ 1.34										

See accompanying summary of accounting policies and notes

ALBERTA GAS TRUNK LINE

CONSOLIDATED BALANCE SHEET

Assets

	December 31 1977	December 31 1976
	(thousands of dollars)	
Current Assets:		
Cash and short term deposits	$ 80,365	$ 99,066
Accounts receivable	77,079	54,741
Inventories —		
Manufacturing	31,479	22,153
Other	12,825	9,103
Prepaid expenses	2,212	3,031
	203,960	188,094
Funds on Deposit for Construction Expenditures (Note 4)	251,633	—
Investments and Advances:		
Affiliated companies (Note 2)	16,952	13,890
Other	1,302	1,578
	18,254	15,468
Plant, Property and Equipment:		
Gas transmission plant (Note 1) —		
In service	786,051	684,350
Under construction	62,336	62,652
Petrochemical facilities under construction (Note 11)	186,784	58,965
Petroleum and natural gas properties	49,151	38,255
Manufacturing facilities	22,135	17,991
Other	4,534	794
	1,110,991	863,007
Less accumulated depreciation and depletion	187,571	150,333
	923,420	712,674
Deferred Costs:		
Unamortized debt discount and expense	4,441	4,938
Deferred charges (Note 3)	41,917	24,182
	46,358	29,120
	$1,443,625	$ 945,356

On behalf of the Board:

Robert L. Pierce, Director

R. Blair, Director

See accompanying summary of accounting policies and notes

Liabilities and Shareholders' Equity

	December 31	
	1977	1976
	(thousands of dollars)	
Current Liabilities:		
Bank loans	$ 4,559	$ 3,566
Accounts payable and accrued liabilities	69,859	44,080
Income taxes payable	21,616	13,312
Dividends payable	9,157	8,065
Interest accrued on long term debt	6,930	6,671
Long term debt instalments due within one year	23,433	21,491
	135,554	97,185
Long Term Debt (Note 5)	744,255	411,311
Other Long Term Liabilities	4,101	3,630
Deferred Income Taxes (Note 6)	62,653	40,747
Minority Interest in Subsidiary Companies	15,919	10,293
Shareholders' Equity:		
Capital stock (Note 7) —		
Preferred shares	210,597	142,254
Common shares	34,788	33,677
Contributed surplus	142,181	136,662
Reinvested earnings (Note 9)	93,577	69,597
	481,143	382,190
Contingencies and Commitments (Notes 1 and 11)		
	$1,443,625	$ 945,356

CONSOLIDATED STATEMENT OF REINVESTED EARNINGS

	Year Ended December 31	
	1977	1976
	(thousands of dollars)	
Balance at beginning of year	$ 69,597	$ 54,914
Net income for the year	57,471	39,417
	127,068	94,331
Less dividends paid or payable:		
Preferred shares	13,244	9,341
Common shares	20,247	15,393
	33,491	24,734
Balance at end of year	$ 93,577	$ 69,597

CONSOLIDATED STATEMENT OF CONTRIBUTED SURPLUS

	Year Ended December 31	
	1977	1976
	(thousands of dollars)	
Balance at beginning of year	$136,662	$ 80,897
Premium on issue of common stock (Note 7)	7,568	61,966
Gain on purchase of preferred shares for cancellation (Note 7)	399	678
Capital stock issue expenses written off	(2,448)	(6,879)
Balance at end of year	$142,181	$136,662

See accompanying summary of accounting policies and notes

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

	Year Ended December 31	
	1977	1976
	(thousands of dollars)	
Source of funds:		
Operations	$108,542	$ 91,423
Common shares	8,679	68,780
Less common shares issued on conversion of —		
Preferred shares	(1,135)	(898)
Debentures	(7,086)	(1,089)
Preferred shares	75,000	100,000
Long term debt	409,935	82,035
Other	1,849	826
	$595,784	$341,077
Use of funds:		
Plant, property and equipment —		
Gas transmission plant	$ 97,837	$ 82,682
Petrochemical facilities	116,689	52,555
Petroleum and natural gas properties	11,564	14,943
Manufacturing facilities	4,145	1,861
Other	3,753	203
	233,988	152,244
Funds on deposit for construction expenditures	251,633	—
Purchase of minority interest in Grove Valve and Regulator Company (Note 10)	3,793	—
Acquisition of WAGI International S.p.A. and Pennant-Puma Oils Ltd. (Note 10)	—	23,924
Less working capital acquired	—	15,763
	—	8,161
Deferred charges —		
Gas transmission — Northern projects	8,188	9,735
Other	8,239	1,377
Retirement of long term debt	69,904	52,058
Dividends —		
To shareholders	33,491	24,734
To a minority shareholder of a subsidiary	1,480	—
Cost of issuing securities	2,448	6,890
Purchase of preferred shares for cancellation	5,123	1,583
Working capital increase (decrease)	(22,503)	84,295
	$595,784	$341,077

See accompanying summary of accounting policies and notes

SUMMARY OF ACCOUNTING POLICIES

December 31, 1977

The principal accounting policies of The Alberta Gas Trunk Line Company Limited and its subsidiaries are summarized as follows:

Principles of consolidation

The consolidated financial statements include the accounts of the Company and all subsidiaries, principally:

100% Owned
- The Alberta Gas Ethylene Company Ltd.
- AGEC Security Corporation
- A.G. Industries International, Inc.
- A.G. Pipe Lines Inc.
- A.G. Pipe Lines (Canada) Ltd.
- Algas Engineering Services Ltd.
- Algas Investments Ltd.
- Algas Mineral Enterprises Ltd.
- Algas Resources Ltd.
- Grove Valve and Regulator Company (75% at December 31, 1976 — see Note 10)

Partially Owned
- Energy Equipment & Systems Inc. (80% owned)
- Pan-Alberta Gas Ltd. (50.005% owned)
- Q & M Pipe Lines Limited (60% owned)
- WAGI International, S.p.A. (53.3% owned — see Note 10).

Companies acquired have been accounted for using the purchase method. The excess investment in shares of subsidiaries is included in deferred charges and amortized on a straight line basis over 10 years.

The accounts of foreign subsidiaries have been translated to Canadian dollars using current rates of exchange for current assets and current liabilities, historical rates of exchange for non-current assets and non-current liabilities and average rates for the year for revenue and expenses, except depreciation which is translated at the rate of exchange applicable to the related assets. Gains or losses resulting from exchange adjustments are included in income.

The companies account for their investment in unincorporated petrochemical joint ventures by the proportionate consolidation method. The companies' share of aggregate assets and liabilities accounted for by this method as at December 31, 1977 is $58,800,000 and $1,400,000, respectively.

Inventories

Manufacturing inventories are carried at the lower of cost and net realizable value. Other materials and supplies are carried at cost.

Investments and advances

The Company accounts for its investment in two affiliated companies, Alberta Gas Chemicals Ltd. and Steel Alberta Ltd. (both 50% owned) by the equity method.

Other investments are carried at cost.

Plant, property and equipment

Plant, property and equipment is carried at cost.

An allowance for funds used during construction is capitalized when recoverable under cost of service contracts. For gas transmission plant under construction the rate is equivalent to the annual rate of return and for petrochemical facilities the rate approximates the agreed cost of capital. For plant not subject to cost of service contracts, related interest incurred during the construction phase is capitalized.

Depreciation of gas transmission plant is provided in an amount equal to the total depreciation charged under transportation contracts which approximates a composite annual rate of 4¾% on cost (1976 — 4%). Manufacturing facilities and other plant, property and equipment are depreciated on a straight line basis at annual rates varying from 5% to 20% which rates are designed to write these assets off over their estimated useful lives.

The companies follow the full cost method of accounting wherein all costs relative to the exploration and development of petroleum and natural gas properties, whether productive or non-productive, are capitalized and depleted on the composite unit of production method based on estimated proven reserves.

Unamortized debt discount and expense

These amounts are being amortized over the terms of the respective issues.

Deferred charges

Costs relating to Northern gas transmission projects and other projects which may benefit future periods are being deferred pending evaluation and completion of the projects. Deferred charges applicable to projects which have been evaluated and completed are being amortized on a straight line basis over periods of up to ten years. Deferred charges applicable to projects which have been terminated are expensed.

License agreements and patents are being amortized on a straight line basis over a period of eight years.

Long term debt

Short term borrowings which are expected to be repaid from the proceeds of long term financing are included in long term debt.

Long term lease obligations which relate to transactions which are similar in nature to a purchase have been capitalized and included in long term debt.

Income taxes

The companies follow the tax allocation basis of recording income taxes on all income except for gas transmission and certain petrochemical operations which are subject to cost of service contracts. Income taxes are provided on this source of income only to the extent that they are included in allowable costs of service under such contracts.

Earnings per common share

Earnings per common share are calculated using the weighted average number of shares outstanding during the period. The calculation of earnings per common share on a fully diluted basis assumes conversion of all securities and exercise of all stock options which would have a dilutive effect on earnings per share.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 1977

1. Gas transmission operations

Gas plant in service consists primarily of facilities for the transmission of gas owned by TransCanada PipeLines Limited, Alberta and Southern Gas Co. Ltd., Westcoast Transmission Company Limited, Westcoast Transmission Company (Alberta) Ltd., Consolidated Natural Gas Limited and Pan-Alberta Gas Ltd.

The transportation contracts with the above-named owners provide that the Company will be paid transportation charges on a cost of service basis which includes operating expenses, income taxes (see Note 6) and depreciation of its facilities together with an annual return on rate base, which was increased from 10⅝% effective November 1, 1975 to 10¾% effective December 1, 1977.

The Public Utilities Board of Alberta has scheduled hearings in 1978 to review the collection by the Company of deferred income taxes, its rates of depreciation on gas plant in service and its rate of return on rate base. The Company believes its basis of charging for these items in cost of service is just and reasonable and does not expect that any variations which might be ordered by the Board will have a material effect on either its financial position or its net income for 1977.

2. Investments and advances — affiliated companies

	December 31	
	1977	1976
	(thousands of dollars)	
Alberta Gas Chemicals Ltd.	$ 8,740	$6,432
Steel Alberta Ltd.	8,212	7,458
	$16,952	$13,890

3 Deferred charges

	December 31	
	1977	1976
	(thousands of dollars)	
Gas transmission — Northern projects	$26,210	$18,022
Arctic pilot project (Note 11)	5,838	—
License agreements and patents	1,706	2,222
Other	8,163	3,938
	$41,917	$24,182

4. Funds on deposit for construction expenditures

Proceeds from the issuance of the First Income Debentures (Note 5) are invested in certificates of deposit to be drawn down against petrochemical construction expenditures.

5. Long term debt

(thousands of dollars)	Maturity	December 31 1977	December 31 1976
First Mortgage Bonds			
5¼% Series A	1981	$ 8,513	$ 9,734
5¾% Series B (1977 — U.S. $21,372; 1976 — U.S. $25,621)	1981	21,372	25,621
5½% Series C	1985	9,949	11,171
8¾% Series D (1977 — U.S. $48,400; 1976 — U.S. $50,700)	1989	51,945	54,414
Secured Debentures			
6½% Series A	1981	10,198	10,811
5¾% Series B	1985	19,554	20,502
Unsecured Debentures			
7½% Series 1 (Convertible)	1990	19,119	26,205
9¾% Series 2	1990	18,479	18,880
9¼% Series 3	1990	16,676	16,975
8% Series 4	1991	46,715	47,590
8⅛% Series 5	1992	33,298	33,739
11⅞% Series 6	1995	59,165	60,000
		314,983	335,642
Ethylene Plant Financing			
8¼% Secured Notes (U.S. $275,000)	1998	303,035	—
5⅝% First Income Debentures (U.S. $275,000)	1987	303,035	—
5⅝% Second Income Debentures	1987	30,000	—
Less certificates of deposit (U.S. $275,000) pledged as security against the First Income Debentures		(303,035)	—
		333,035	—
Bank Loans		105,186	59,085
Other Loans		9,678	32,602
Long Term Lease Obligations		4,806	5,473
		767,688	432,802
Less instalments due within one year shown as current liability		23,433	21,491
		$744,255	$411,311

The First Mortgage Bonds are secured by a fixed and specific mortgage, pledge and charge and floating charge on the assets of the Company. The Secured Debentures are secured in the same manner, subject to prior charge of the First Mortgage Bonds.

The First Mortgage Bonds, Series B and Series D are payable in U.S. dollars and have been converted into Canadian dollars at par and 1.07325 respectively. Certain customers of the Company have agreed that the foreign exchange gain or loss relative to the principal and interest on these bonds is for their account.

In November 1977 The Alberta Gas Ethylene Company Ltd. (either directly or through a subsidiary) entered into several financing arrangements, principally:

(a) Note purchase agreements providing for the issuance of U.S. $325,000,000 Secured Notes (of which U.S. $275,000,000 had been issued to December 31, 1977) with provision, subject to certain conditions, for the issuance of further Secured Notes of up to U.S. $48,750,000.

The proceeds of the issuance of the Secured Notes are invested in certificates of deposit which bear interest at a rate equivalent to that due on the Secured Notes. The Secured Notes are guaranteed by Alberta Gas Ethylene and are secured by a first fixed and floating charge upon the ethylene plant, ethylene pipeline and related assets, and by assignments of certain related contracts.

(b) An Income Debenture purchase agreement providing for the issuance of First Income Debentures up to a maximum of U.S. $411,125,000 (of which U.S. $275,000,000 had been issued to December 31, 1977). The issuance of the Income Debentures must occur simultaneously with and is conditional upon the issuance of the Secured Notes. The First Income Debentures are secured by the certificates of deposit referred to in (a).

The take or pay contract with Dow Chemical of Canada Ltd. (see Note 11) provides that all foreign exchange gains or losses relating to the Funds on deposit (Note 4) and the First Income Debentures shall be included in cost of service.

(c) An agreement providing for the issuance of $30,000,000 Second Income Debentures secured by a second fixed and floating charge upon the ethylene plant, ethylene pipeline and related assets of Alberta Gas Ethylene and a second assignment of certain related contracts, in each case subordinated to the Secured Notes.

At December 31, 1977 bank loans are secured by natural gas properties as to $51,106,000 ($35,541,000 at December 31, 1976), shares of a subsidiary as to $5,851,000 ($8,240,000 at December 31, 1976), manufacturing inventories, facilities and accounts receivable as to $8,250,000 ($4,930,000 at December 31, 1976) and mature by agreement to 1989. The interest rate will vary during the term of the loans and approximated 9% at December 31, 1977 and 1976.

Other loans are secured by manufacturing facilities and petrochemical facilities under construction and mature by agreement to 1999. The effective interest rate on the loans varies and approximated 9% at December 31, 1977 and 1976.

Sinking fund and repayment requirements in respect of long term debt for the years 1979 to 1982 are: 1979 — $30,445,000; 1980 — $43,084,000; 1981 — $52,589,000; 1982 — $32,650,000.

6. Income taxes

The Company has arranged with certain of its customers to include in its gas transmission charges a portion of the income taxes which have been deferred to future years. Because income taxes related to the Company's transmission operations are a component of its transmission charges (see Note 1) the payment or deferral of such income taxes does not affect net income.

If the tax allocation basis of accounting (under which income tax expense is based on reported income) had been followed in respect of all customers in current and prior years, the cumulative amount of deferred income taxes would have been increased by approximately $66,000,000 to December 31, 1977 and $70,000,000 to December 31, 1976. $1,500,000 and $3,000,000 of these amounts are applicable to 1977 and 1976 respectively.

The 1977 provision for income taxes includes approximately $8,300,000 (1976 — $8,900,000) related to other than cost of service operations.

7. Capital stock

	December 31	
	1977	1976
	(thousands of dollars)	
(a) Preferred shares		
(i) Preferred shares of a par value of $100 each		
Authorized — 2,000,000 shares		
Issued — Cumulative and Redeemable		
4¾% Series C — 155,960 shares (1976 — 168,083)	$ 15,596	$ 16,808
5⅜% Convertible Series D — 10,774 shares (1976 — 22,120)	1,077	2,212
(ii) Preferred shares of a par value of $25 each		
Authorized — 10,000,000 shares		
Issued — Cumulative and Redeemable		
7¾% — 916,971 shares (1976 — 929,596)	22,924	23,240
9¾% — 1,535,995 shares (1976 — 1,599,745)	38,400	39,994
9.76% — 2,304,000 shares (1976 — 2,400,000)	57,600	60,000
7.60% — 3,000,000 shares	75,000	—
	$210,597	$142,254

On November 23, 1977 the Company increased the authorized class of 6,000,000 preferred shares of the par value of $25 each to 10,000,000 preferred shares and designated 3,000,000 shares thereof as 7.60% Cumulative Redeemable Preferred Shares, which shares were issued and sold pursuant to an Underwriting Agreement dated November 23, 1977 for $75,000,000 cash. The 7.60% Preferred Shares are not redeemable until on or after February 5, 1983, at which time they are redeemable to February 15, 1984 at $26.25 per share plus accrued and unpaid dividends and at reducing amounts thereafter. In addition the Company shall annually, commencing in 1978, use all reasonable efforts to purchase for cancellation 90,000 7.60% Preferred Shares at a price not in excess of $25 per share plus accrued and unpaid dividends and costs of purchase.

The Company is required to call for redemption and redeem annually through the operation of cumulative mandatory sinking funds 64,000 9¾% Preferred Shares and 96,000 9.76% Preferred Shares at par value plus accrued and unpaid dividends. In addition, the Company may call for redemption and redeem annually, through the operation of non-cumulative optional sinking funds, 48,000 9¾% Preferred Shares and 72,000 9.76% Preferred Shares at par value plus accrued and unpaid dividends.

The Company is required to set aside on its books as Purchase Funds $2,175,000 annually or such lesser amount as would increase the Funds to $4,350,000 for the purchase for cancellation, if and when available, of its 4¾% Cumulative Redeemable Preferred Shares Series C and 5⅜% Cumulative Redeemable Preferred Shares Series D, at a price not in excess of $100 per share plus costs of purchase and, in the case of its 7¾% Cumulative Redeemable Preferred Shares, at a price not in excess of $25 per share plus accrued and unpaid dividends and costs of purchase.

The Preferred Shares Series C are redeemable at $103 per share on or before May 15, 1980, the Preferred Shares Series D at $106 per share on or before May 15, 1980 and the 7¾% Preferred Shares at $27 per share on or before May 15, 1979 and at reducing amounts after those dates.

During the year the Company purchased for cancellation 12,123 4¾% Preferred Shares and 12,625 7¾% Preferred Shares at a discount of $399,000 which has been credited to contributed surplus. In addition, 11,346 5⅜% Preferred Shares were converted into 127,071 Class "A" common shares and 63,750 9¾% Preferred Shares and 96,000 9.76% Preferred Shares were redeemed at par.

(b) Common shares

(i) Authorized:

32,000,000 Class "A" common shares of the par value of $1.25 each (non-voting except for the election of seven directors)

2,003 Class "B" common shares of the par value of $5.00 each

(ii) Issued:

	Shares		Par Value	
	Class A	Class B	Class A	Class B
			(thousands of dollars)	
Balance at December 31, 1976	26,935,065	1,653	$33,669	$ 8
Issued during the year	889,116	—	1,111	—
Balance at December 31, 1977	27,824,181	1,653	$34,780	$ 8

Class "A" common shares were issued during the year as follows:

		Consideration		
	Shares	Share Capital	Contributed Surplus	Total
		(thousands of dollars)		
On conversion of —				
5⅜% Preferred Shares Series D	127,071	$ 159	$ 976	$1,135
7½% Sinking Fund Debentures Series 1	720,045	900	6,186	7,086
On exercise of options granted to officers and employees	42,000	52	406	458
	889,116	$1,111	$7,568	$8,679

(iii) Reserved:

Class "A" common shares were reserved at December 31, 1977 as follows:

	Shares
For conversion of the 5⅜% Cumulative Redeemable Convertible Preferred Shares Series D until July 15, 1980, on a conversion basis of 11.20 common shares for each preferred share	121,329
For conversion of the 7½% Convertible Sinking Fund Debentures, Series 1 until July 15, 1982, on a conversion basis of 101.61 common shares for each $1,000 principal amount of Series 1 Debentures	1,942,681
Under stock option plans, options are outstanding to officers and employees to purchase 329,400 common shares at prices ranging from $11.25 to $15.25 per share (325,400 shares at December 31, 1976 at prices ranging from $9.375 to $13.25), exercisable in annual instalments on a cumulative basis from 1978 to 1982 and 396,450 common shares are reserved but unallocated	725,850
	2,789,860

8. Remuneration of directors and senior officers

The aggregate remuneration paid during the year by the Company and its subsidiaries to directors of the Company, as such, was $124,000 (1976 — $83,000) and, directly or indirectly to senior officers of the Company, as such, was $560,000 (1976 — $496,000).

In 1977 the aggregate amount paid in respect of the year 1976 to the trustee of the Company's Profit Sharing Deferred Bonus Plan for the benefit of senior officers was $210,000 (in 1976 — $204,000).

9. Anti-inflation program

The salaries, wages and dividends paid by the Company are subject to regulation under the Anti-Inflation Act. Management believes that the Company is in compliance with the requirements of the Anti-Inflation Act.

10. Acquisitions

On March 31, 1977 A.G. Industries International, Inc. purchased the 25% minority interest in Grove Valve and Regulator Company for $3,793,000 (U.S. $3,600,000) increasing A.G. Industries' ownership to 100%. The minority interest in the net income of Grove for the three months ended March 31, 1977 amounted to $328,000.

In 1976 Energy Equipment & Systems Inc. acquired 66⅔% of the issued and outstanding shares of WAGI International, S.p.A., an Italian corporation, for $9,000,000. In addition, Algas Mineral Enterprises Ltd. acquired 100% of the issued and outstanding shares of Pennant-Puma Oils Ltd. for $14,924,000.

The following pro-forma information shows the Company's consolidated operating results for the year ended December 31, 1976 as though the acquisition of WAGI and Pennant-Puma had occurred as of January 1, 1976.

Operating revenue and royalties	$288,828,000
Net income	$ 41,423,000
Earnings per common share:	
Basic	$ 1.51
Fully diluted	**$ 1.42**

11. Contingencies and Commitments

(a) Alberta Gas Chemicals Ltd. owns and operates two methanol plants at Medicine Hat, Alberta. The Company and the other shareholder have jointly and severally guaranteed bank loans in connection with construction of the first plant amounting to $10,680,000 at December 31, 1977 ($11,880,000 at December 31, 1976). The Company also has undertaken to co-operate with the other shareholder to the end of causing Alberta Gas Chemicals Ltd. to repay any bank indebtedness which may arise from a bank line of credit of $18,000,000 arranged to acquire and develop certain natural gas reserves to provide feedstock to the methanol plants. Similarly, the Company has undertaken to co-operate with the other shareholder to the end of causing Alberta Gas Chemicals, Incorporated, a wholly-owned subsidiary of Alberta Gas Chemicals Ltd., to meet all obligations which may be incurred under its line of credit of U.S. $3,200,000.

(b) In 1976 and 1977 the Company (either directly or through subsidiaries), Alberta Gas Ethylene, Dow Canada, Dome Petroleum Limited, Pacific Petroleums Ltd. and Alberta Energy Company Ltd. entered into several contracts with respect to the development of a petrochemical complex in Alberta, principally:

(i) Alberta Gas Ethylene has agreed to construct a 1.2 billion pound per year ethylene plant near Red Deer, Alberta at an estimated cost of $370,000,000, the production from which will be purchased by Dow on a cost of service basis under a take or pay contract;

(ii) Dow Canada, Dome, Pacific (either directly or through subsidiaries or affiliates), A.G. Pipe Lines (Canada) Ltd. and A.G. Pipe Lines Inc. have agreed to construct, own and operate the Cochin Pipe Line for the transportation of ethane and ethylene to eastern Canadian and United States markets. A.G. Canada and A.G. Inc. would have a 20% interest in this pipeline which is estimated to have a total cost of $320,000,000;

(iii) A.G. Canada, Dome and Alberta Energy have agreed to form a joint venture on an equal basis for the construction, ownership and operation of a pipeline gathering system and storage cavern for use in the transportation of ethane from extraction facilities to the ethylene plant and to the western terminus of the Cochin Pipe Line. The construction costs of the pipeline system and cavern are estimated to be $40,000,000;

(iv) Dome, acting as agent for the Company (to the extent of 20%), Dow, Pacific and itself, has agreed on a cost of service basis under take or pay contracts to purchase up to 40,000 barrels per day of surplus ethane from Alberta Gas Ethylene for shipment to the United States through the Cochin Pipe Line on a cost of service basis under a take or pay contract.

To December 31, 1977 the Company and its subsidiaries' share of the cost of these projects amounted to $179,667,000.

(c) In November, 1976 the Company and Diamond Shamrock Canada Ltd. agreed to form a limited partnership on an equal basis to construct, own and operate a polyvinyl chloride plant near Fort Saskatchewan, Alberta. The cost of the plant, having an annual capacity of 220 million pounds of polyvinyl chloride, is estimated to be $90,000,000. To December 31, 1977 the Company's share of the cost of this project amounted to $7,117,000.

(d) In March, 1977 the Company and Petro-Canada agreed to form a joint venture (Arctic pilot project) for the purpose of determining the economic feasibility of producing, processing and transporting natural gas from the Arctic Islands. The costs of feasibility studies are estimated to be $29,000,000 of which the Company's share would be $8,700,000. Costs incurred by the Company to December 31, 1977 for the project amount to $5,838,000.

(e) The Company is one of the principal sponsors of the Alaska Highway Pipeline Project which has as its objective the transportation of natural gas from Alaska through Canada to the United States of America. The Company may incur or be responsible for large expenditures in respect of the project.

Auditors' Report

To the Shareholders of The Alberta Gas Trunk Line Company Limited

We have examined the consolidated balance sheet of The Alberta Gas Trunk Line Company Limited as at December 31, 1977 and the consolidated statements of income, reinvested earnings, contributed surplus and changes in financial position for the year then ended. Our examination was 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 present fairly the financial position of the Company as at December 31, 1977 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Clarkson, Gordon & Co.

Calgary, Canada
February 24, 1978

Chartered Accountants

INTERPRETATION AND COMMENTS ON FINANCIAL RESULTS

Introduction
Following procedure started in the Annual Report for 1976, these two pages are to provide comments on the financial results for 1977 from the operational management point of view to analysts and shareholders. The comments are directed to the five segments of our investment which are operational in terms of producing services or commodities, revenues and contributions to operating income. The comments are more in the style of operating management's language than in accounting vocabulary; there is no difference in the result reported. Whenever the operations of our subsidiaries or affiliates involve competitive marketing or pricing situations, I will try to keep the comments useful to our shareholders but also not lose any advantage for our competitive positions.

Gas Transmission
This segment consists of the utility or service-type operations which have been provided by the Company since its birth, for measurement, quality control, gathering and transmission of virtually all of that natural gas which is delivered from the Province of Alberta to other markets and for some of the natural gas which is used by industrial, commercial and domestic consumers within the Province. In providing this service, the Company handles I believe a larger volume of natural gas than any other in North America; 1.92 trillion cubic feet in 1977. About the same throughput is projected for 1978. These operations are conducted under carefully contracted and audited cost of service arrangements. Net operating income from this segment in 1977 was $104.7 million. Based on a deemed common equity component of total capital, the return on common equity from gas transmission for 1977 calculated as 14.1%. When setting the rate of return from time to time, the Board of Directors of the Company follows established utility principles and precedents on reasonableness and adequacy of return.

I note, in this discussion, that the overall rate of return to common equity earned by the Company in 1977 was 17.5% after taking into the calculation return on non-utility investment averaging 36.4%.

In the gas transmission segment, the Company implements policy of the Province of Alberta by providing comprehensive service to any company which purchases or owns natural gas seeking delivery. I know that it provides these services with energetic pursuit of innovations to decrease unit costs to the industry and provide increasingly greater reliability of service and prompt expansion or extension of service when needed by others.

Many innovations have been so introduced and extensions provided, sometimes by arrangement with existing or new customers and sometimes initially at the investment risk of the Company, but in either case with the economies made available to the industry at large through the cost of service nature of the billings.

This work is also carried out under legislation which provides that a complaint may be filed by any party at any time on our charges to the Public Utilities Board of Alberta which has ultimate authority over their reasonableness.

After a period of seven years in which there had been no such complaint, we experienced filings by a number of the larger oil companies during 1977, first on our rates charged currently for depreciation and the inclusion of normalized income taxes, and then subsequently on our rate of return to capital. Concurrently the Company has been engaged as one of the principal parties in hearings conducted by the Public Utilities Board of Alberta into all of the components of gas transmission and gas acquisition charges which are included in the industry-wide Alberta cost of service. In those proceedings the Company's staff and consultants provided a complete explanation and defense of our gas transmission charges, historic and current, and rather more importantly, they offered suggestions to accomplish improved rationalization and simplification for the future of rate and tariff structures that now include some unnecessary complications and variations.

Eventual outcome of the Public Utility Board's findings on the form and reasonableness of our charges, and of any direction of the Government of Alberta thereto, is not known at present. However, in general, I do believe and expect that the past and current performance of the Company in providing this set of services in Alberta will be judged satisfactory. I hope that any variations in the future form of our charges will be rather in the direction of simplification while maintaining the Company's ability to respond effectively and fairly to service requests, than in any direction of imposing severe management constraints or reducing the level of return considered reasonable.

During the year assessment of Alberta as one of the largest and most prolific gas source areas in North America has become all the more enthusiastic. There is a great deal to be done to keep up to the service needs in this area and we have a Company that has shown it can do that.

At January 1, 1978, the net rate base was $617 million and the overall rate of return in effect was 10¾%, having been increased from 10⅝% effective December 1, 1977. There was also $62 million of gas transmission facilities still under construction from the 1977 program. New gas transmission projects scheduled for 1978 are estimated to total $70 million. Of the total $132 million in projects to be completed or started during the year, we expect that about $75 million will actually be spent on a cash basis during 1978. These figures do not include some gas plant investment prospects, storage for example, which have not yet been authorized but are likely to materialize during the year.

Manufacturing
The principal contributions to net operating income in manufacturing of $18.0 million in 1977 came from our two valve manufacturing subsidiaries, the largest contribution being WAGI International S.p.A. which operates factories in Italy. WAGI had another excellent year all around in production, cost control and international sales and it enters 1978 with a good backlog. We are arranging to increase our net interest in this company from 53% to 66⅔%. In 1977 there was a dividend paid by WAGI which netted about $2.4 million (U.S.) to us.

Our other valve operation, Grove Valve and Regulator Company, didn't do as well as in 1976 because of a tight market and price environment in North America, however, it did keep operating in the black and its product is known for quality. During the year we increased our ownership in this company from 75%

to 100%. We also began to plan the installation of valve manufacturing capability in Canada to meet some of the requirements of the Alaska Highway Pipeline and other imminent projects.

The remaining component of our manufacturing segment is Steel Alberta Ltd., 50% owned which contributed to the $0.8 million from equity in earnings of affiliates through its minority interest in Interprovincial Steel and Pipe Corporation Ltd.

We are pleased with our investments so far in manufacturing and in future will be interested in expanding these activities in Canada, the United States and Europe. Measured on return on investment, the WAGI operation has proven the most attractive that we have undertaken anywhere to date. Because of the scale of growth of our investments in petrochemical production and in new gas transmission projects planned over the next several years, it will probably be that our efforts in manufacturing will continue to be modest in proportion. A few new investments or acquisitions are expected to be assessed during 1978.

Gas Sales and Service

Pan-Alberta Gas Ltd., which the Company owns as to slightly more than 50% but controls as a marketing arm and reports on full consolidation, continued to increase sales to $59 million for 1977. Under the Alberta cost of service rules in effect for 1977, it received an excessively low profit margin on sales, less than one-third of one percent, for its regular deliveries. A non-recurring profit from completion of a major export transaction provided virtually all of this segment's net operating income of $4.3 million, before deducting partner's interest and income taxes.

Pan-Alberta is by a wide margin the most active marketing company in development of new markets for natural gas produced in the Province. It is covering for future Canadian requirements the supply to the Q & M Pipeline proposal and the Yukon Territories and is also negotiating a short-term sale to the United States to be integrated with the pre-building plan for the southern section of the Alaskan Highway pipeline. Its sales should increase very substantially over the next several years and we trust and expect that it will be allowed a profit margin on all of its regular sales in the future, reflecting the useful job which its management is accomplishing.

The one other company in this segment, Algas Engineering Services Ltd., contributed net operating income of just $0.1 million in 1977 for work principally contracted by gas distribution co-ops in Alberta. The scale of this work was reduced in 1977 as forecast by these notes a year ago.

Petrochemicals

The petrochemical segment is now moving quickly in contribution to net operating income of $11.6 million for 1977.

Our original petrochemical investment by 50% ownership in Alberta Gas Chemicals Ltd. is regarded by us as satisfactory. Both methanol plants are capable of producing at over their rated capacity and 1977 sales totalled 115 million U.S. gallons, delivering into a tight market. Alberta Gas Chemicals is honouring the price provisions of original short-term contracts in spite of the large rise in natural gas value and cost. The Energy Resources Conservation Board has approved its next two primary methanol manufacturing plants and a malic acid plant has begun production at Duluth, Minnesota. Even in the past difficult year, our equity in this affiliate's earnings was $2.4 million.

The remainder of the income from this segment derived from our role in the large Alberta Petrochemical complex, which is based upon the conversion of ethane extracted by others from gas streams in Alberta and delivered to the plant of The Alberta Gas Ethylene Company Ltd., a wholly-owned subsidiary. This project is proceeding as intended for operational start-up in mid-1979. Construction is on schedule and according to plan, with the one exception being that the preliminary cost estimates for the polyvinyl chloride plant being built with Diamond Shamrock Canada Ltd. were too low and have been revised as construction commences. The complex is vitally important to the companies involved and to Alberta and Canada and is receiving great management attention.

Gas Production

Our wholly-owned subsidiary, Algas Mineral Enterprises Ltd., advanced its investment in natural gas properties plus ancillary oil property to about $50 million by the end of the year and its contribution to net operating income to $1.9 million. As with virtually all smaller Canadian producers, it ended 1977 with much of its gas production capability shut in awaiting markets. It has therefore directed its 1978 program more to exploratory examination of land positions than to urgent development for production of its already identified gas properties. While lands and producing properties in Alberta and western Canada are commanding very high prices at present, we believe that it is sound in the long-term growth of our Company to follow an aggressive course of increasing our investment position, and from time to time we give very careful assessment to the acquisition of production properties of larger scale.

S.R. Blair

ALBERTA GAS TRUNK LINE

TEN YEAR REVIEW

FINANCIAL		1977	1976	1975	1974	1973	1972	1971	1970	1969	1968
(in thousands of dollars)	Operating revenue	$ 345,472	268,164	140,416	89,860	78,715	64,666	56,351	45,469	31,930	27,929
	Equity in net income of affiliates	$ 3.184	1,620	1,993	135	—	—	—	—	—	—
	Other income (excluding interest income)	$ 17,138	11,777	5,458	1,228	1,668	2,635	1,027	1,248	2,006	262
	Costs and expenses	$ 186,725	147,896	66,338	31,434	23,099	19,664	16,162	13,409	8,715	7,079
	Depreciation and depletion	$ 38,599	29,493	20,861	13,112	12,408	11,227	10,282	8,090	6,211	6,008
	Net operating income	$ 140,470	104,172	60,668	46,677	44,876	36,410	30,934	25,218	19,010	15,104
	Interest and expense on long term debt (net of interest income)	$ 28,055	29,470	25,015	22,546	24,124	22,343	19,535	15,236	9,190	8,154
	Other deductions (net)	$ 5,572	4,947	415	—	—	—	—	—	—	—
	Income before income taxes	$ 106,843	69,755	35,238	24,131	20,752	14,067	11,399	9,982	9,820	6,950
	Income taxes	$ 49,372	30,338	9,188	6,321	5,884	—	—	—	—	—
	Net income	$ 57,471	39,417	26,050	17,810	14,868	14,067	11,399	9,982	9,820	6,950
	Dividends accrued on preferred shares	$ 12,542	8,121	2,940	3,021	1,524	1,611	1,826	2,143	2,280	1,630
	Net income applicable to common shares	$ 44,929	31,296	23,110	14,789	13,344	12,456	9,573	7,839	7,540	5,320
	Net income per common share										
	Basic	$ 1.64	1.42	1.08	0.85	0.79	0.75	0.66	0.59	0.62	0.49
	Fully diluted	$ 1.58	1.34	1.04	0.83	0.77	0.74	0.64	0.57	0.60	—
	Dividends paid per common share	$ 0.7344	0.6136	0.52	0.445	0.42	0.3975	0.375	0.375	0.375	0.3525
	Average common shares outstanding during year (thousands)	27,421	22,021	21,344	17,371	16,793	16,530	14,584	13,368	12,224	11,208
	Working capital (deficiency) at year end	$ 68,406	90,909	6,614	15,179	(4,663)	2,716	5,590	(5,696)	(5,864)	(5,078)
	Additions to plant, property and equipment	$ 233,988	152,244	108,306	44,255	26,804	44,604	60,892	82,808	68,251	23,132
	Investment in plant, property and equipment (cost)	$1,110,991	863,007	680,009	578,448	535,009	507,903	463,761	404,003	321,611	254,046
	Investment in plant, property and equipment (net)	$ 923,420	712,674	558,472	477,539	446,396	432,000	398,622	348,384	274,615	214,154
	Average rate base	$ 583,673	516,627	449,067	438,411	416,167	386,000	355,169	294,766	212,550	197,800
	Average rate of return	10.406%	10.375%	9.66%	9.00%	9.00%	8.75%	8.42%	8.13%	8.00%	7.50%
	Long term debt (less due within one year)	$ 744,255	411,311	377,369	305,370	315,113	315,329	292,013	251,316	176,980	132,024
	Shareholders' equity										
	Preferred shares	$ 210,597	142,254	45,413	47,982	30,547	32,142	33,888	41,607	44,548	46,475
	Common shares	$ 270,546	239,936	162,674	146,190	103,455	95,694	86,508	54,331	49,428	33,808
STATISTICAL	Shareholders and employees										
	Number of preferred shareholders	12,111	12,524	6,894	7,195	7,977	8,289	8,833	10,385	10,781	11,087
	Number of common shareholders	29,555	26,405	23,508	23,184	22,148	21,374	22,277	21,838	22,543	23,452
	Number of employees	1,264	1,130	995	892	762	781	701	577	442	322
GAS TRANSMISSION OPERATIONS	Miles of pipeline in system	6,228	5,413	4,728	4,313	4,113	4,030	3,493	3,246	2,778	2,198
	Compression horsepower	482,360	467,335	449,417	427,867	420,535	365,635	355,955	315,945	209,125	60,015
	Total system receipts (MMcf @ 14.65 psia)	1,919,147	1,822,695	1,766,390	1,714,394	1,691,273	1,568,237	1,396,282	1,237,845	1,029,899	858,352
	Maximum day receipts (MMcf @ 14.65 psia)	6,473	5,820	5,595	5,471	5,478	5,043	4,489	4,263	3,826	3,041
	Average day receipts (MMcf @ 14.65 psia)	5,258	4,994	4,839	4,697	4,634	4,285	3,825	3,391	2,822	2,345

COMPANY LOCATIONS

Head Office
2800 Bow Valley Square 2
205 - 5th Avenue S.W.
P.O. Box 2535
CALGARY, Alberta
T2P 2N6 231-9100

Other Calgary Offices:
Calgary Service Centre
7210 Blackfoot Trail S.E.
P.O. Box 2535
CALGARY, Alberta
T2P 2N6 252-8821

Works Department
2611 - 58th Avenue S.E.
P.O. Box 2535
CALGARY, Alberta
T2P 2N6 272-2445

Edmonton Offices:
Petroleum Plaza
North Tower
9945 - 108th Street
EDMONTON, Alberta
T5K 2G6 426-0766

Edmonton Service Centre
15810 - 114th Avenue
P.O. Box 3240, Station 'D'
EDMONTON, Alberta
T5L 4J1 452-5723

District Offices:
District No. 1 Headquarters
9615 - 52nd Street S.E.
P.O. Box 2535
CALGARY, Alberta
T2P 2N6 279-7201

District No. 2 Headquarters
P.O. Box 819
BROOKS, Alberta
T0L 0J0 362-2838

District No. 3 Headquarters
P.O. Box 1808
EDSON, Alberta
T0E 0P0 723-3371

District No. 4 Headquarters
P.O. Box 1650
VEGREVILLE, Alberta
T0B 4L0 632-3336

Offices of Principal Subsidiaries and Affiliates
Alberta Gas Chemicals Ltd.
400 - 11456 Jasper Avenue
EDMONTON, Alberta
T5K 0M1 482-6361

Alberta Gas Chemicals Ltd. (Plant)
P.O. Box 1090
MEDICINE HAT, Alberta
T1A 7H1 527-8141

Algas Mineral Enterprises Ltd.
400 Bow Valley Square 2
205 - 5th Avenue S.W.
P.O. Box 2870
CALGARY, Alberta
T2P 2M7 231-9640

Algas Resources Ltd.
450 Bow Valley Square 2
205 - 5th Avenue S.W.
P.O. Box 9294
CALGARY, Alberta
T2P 2W5 231-9683

Foothills Pipe Lines (Yukon) Ltd.
Foothills Pipe Lines (South Yukon) Ltd.
Foothills Pipe Lines (North B.C.) Ltd.
Foothills Pipe Lines (South B.C.) Ltd.
Foothills Pipe Lines (Alta.) Ltd.
Foothills Pipe Lines (Sask.) Ltd.
1600 Bow Valley Square 2
205 - 5th Avenue S.W.
P.O. Box 9083
CALGARY, Alberta
T2P 2W4 265-8100

Foothills Pipe Lines (Yukon) Ltd.
308 Steele Street
WHITEHORSE, Yukon
Y1A 2C5 (403) 667-7624

Foothills Pipe Lines (Yukon) Ltd.
Suite 930, Metropolitan Life Bldg.
99 Bank Street
OTTAWA, Ontario
K1P 5A3 (613) 236-7163

Grove Valve and Regulator Company'
6529 Hollis Street
OAKLAND, California, 94608
(415) 655-7700

Pan-Alberta Gas Ltd.
350 Bow Valley Square 1
202 - 6th Avenue S.W.
Box 9660
CALGARY, Alberta
T2P 2R9 265-1763

O & M Pipe Lines Ltd.
1017 Crown Trust Company Building
1130 Sherbrooke Street, West
MONTREAL, Quebec
H3A 2M8 (514) 845-0168

O & M Pipe Lines Ltd.
1700 Bow Valley Square 1
202 - 6th Avenue S.W.
P.O. Box 2535
CALGARY, Alberta
T2P 2N6 231-9610

The Alberta Gas Ethylene Company Ltd.
2200 Bow Valley Square 2
205 - 5th Avenue S.W.
P.O. Box 9150
CALGARY, Alberta
T2P 2W4 263-8130

The Alberta Gas Ethylene Company Ltd. (Plant)
JOFFRE, Alberta
T0C 1S0 (403) 343-8211

The Alberta Gas Ethylene Company Ltd.
5015 - 48th Street
RED DEER, Alberta
T4N 1S9 (403) 343-7447

WAGI International, S.p.A.
P. le del Caravaggio, I/D 00147
ROME, Italy (6) 524-0241

SOLICITORS
Howard, Dixon, Mackie, Forsyth

AUDITORS
Clarkson, Gordon & Co.

Stock Exchange Listings
CLASS "A" COMMON SHARES
Alberta Stock Exchange
Montreal Stock Exchange
Toronto Stock Exchange

PREFERRED SHARES
Alberta Stock Exchange
Toronto Stock Exchange
Montreal Stock Exchange for
7.60% Preferred Shares only

TRANSFER AGENTS AND REGISTRARS
PREFERRED SHARES
Crown Trust Company in
Montreal, Toronto, Winnipeg, Calgary and Vancouver
Canada Permanent Trust Company
as agent for Crown Trust Company
in Edmonton and Regina
Royal Trust Company as agent for
Crown Trust Company in Halifax
for 7.60% Preferred Shares only.
CLASS "A" COMMON SHARES
National Trust Company, Limited in
Montreal, Toronto, Winnipeg, Calgary, Edmonton and
Vancouver
Canada Permanent Trust Company
as agent for National Trust Company, Limited in Regina
CLASS "B" COMMON SHARES
National Trust Company, Limited in Calgary

GAS TRANSMISSION DIVISION

Internal automatic welding on the 42-inch Carstairs project.

Through corporate reorganization in 1977, gas transmission became a separate division within Alberta Gas Trunk Line. The division is responsible for all activities relating to the ownership, construction and operation of the transmission system in Alberta.

Engineering & Construction

During 1977, approximately 70 new meter stations and 660 miles of pipe were installed at a cost of $108 million. Major projects completed in 1977, but initiated in 1976 were the Foothills 36-inch extension, the Edson 36-inch mainline addition, and the Solar Mars second-generation gas turbine compressor installation at Nordegg. The two extensions, totalling 120 miles of 36-inch were installed to access reserves in the Peace River area. The installation and evaluation of the Solar Mars unit is the Company's first step in replacing older, less efficient units and this 10,300 horsepower unit has demonstrated operating efficiencies in excess of 30 per cent with substantial fuel gas savings.

Twenty-three miles of 42-inch mainline loop were installed after being economically justified on fuel gas savings alone. The division took advantage of the opportunity to evaluate new big inch construction techniques and materials. Among the new techniques evaluated was the CRC fully automatic field welding equipment.

Two pipelines completed to facilitate the export of 162 MMCFD of gas from Alberta were the Gordondale lateral pipeline (73 miles of 16-inch in northwestern Alberta to deliver a maximum of 125 MMCFD to B.C.) and the Cold Lake lateral (79 miles of 10-inch, enabling the delivery of 37 MMCFD to Saskatchewan). These projects were completed at a cost of approximately $20 million.

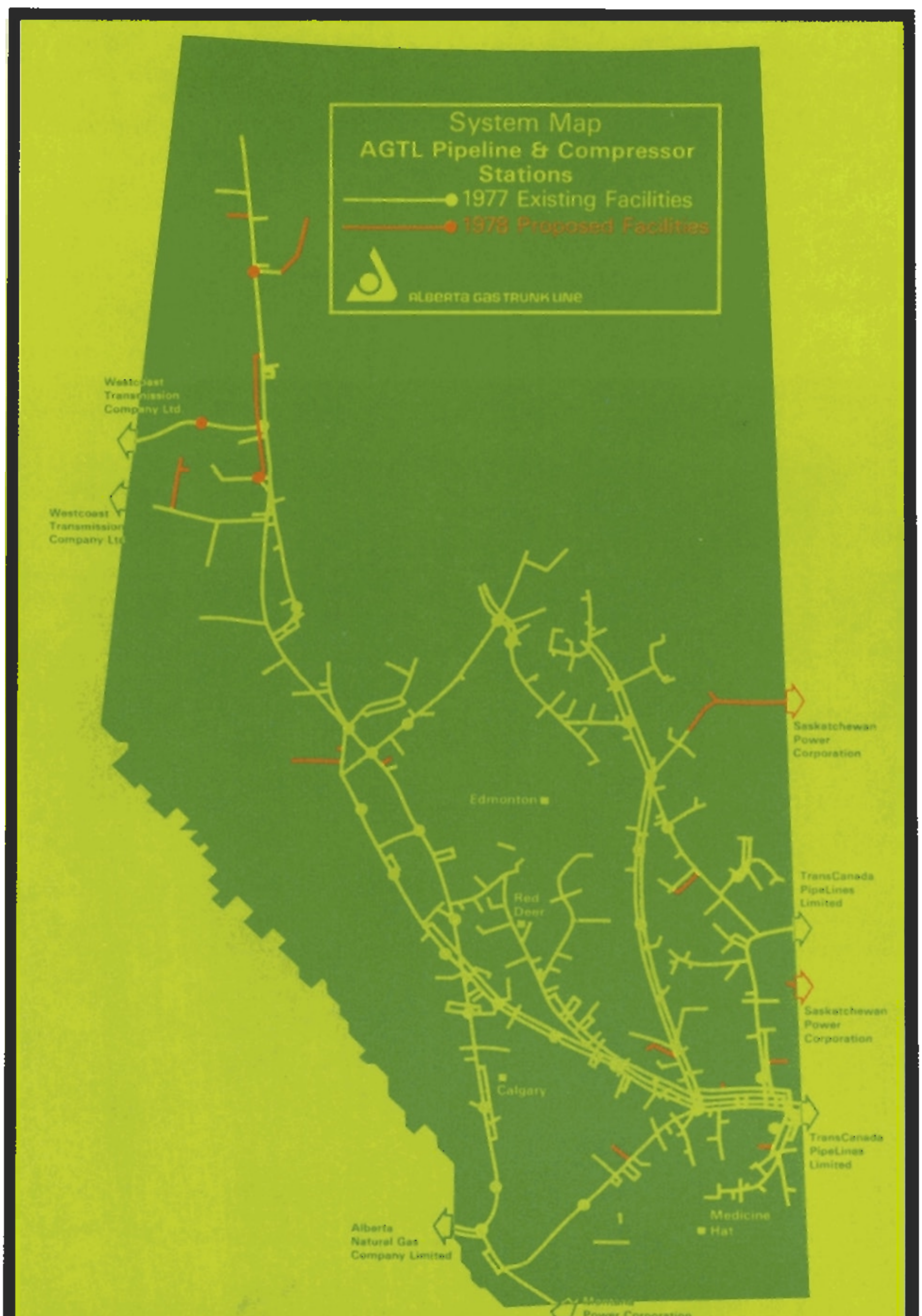
Compressor Engineering designed and built a 3,800 hp gas turbine mobile compressor unit and installed it at the Knight compressor station near Edson. The design concept effectively housed the compressor unit and auxiliary equipment on two trailers. The package is truly portable and gives the company flexibility in meeting transmission requirements associated with newly developed gas fields.

Two projects of significance continued into 1978. Pipeline engineering will complete the installation of 40 miles of the 30-inch Peace River extension during the first quarter of 1978 on a winter construction program. The remaining 41 miles will be installed this summer. Secondly, compression engineering is working with several major equipment manufacturers to develop a combined cycle compressor unit suitable for remote operation. Such a combined cycle system is expected to exhibit thermal efficiencies in excess of 40 per cent.

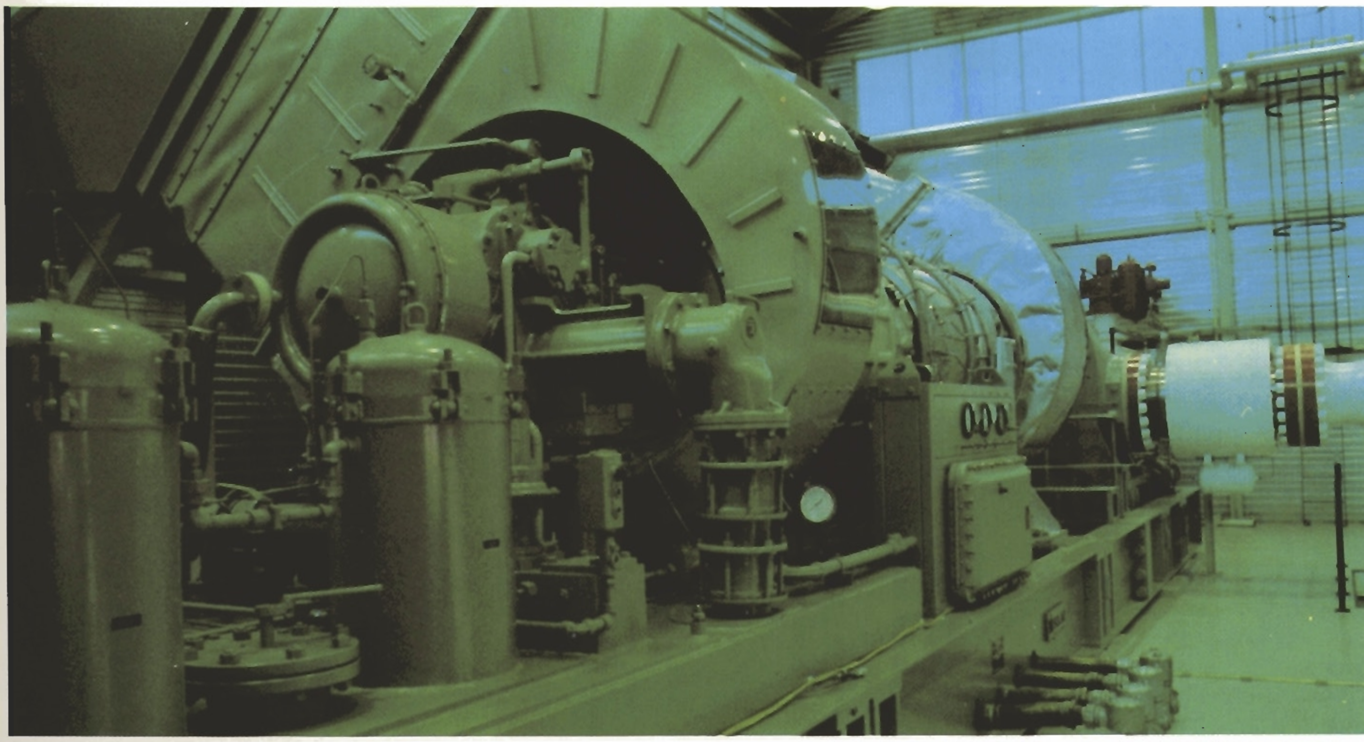
The division established an energy conservation section. This group has established a program of employee awareness seminars, energy conservation workshops and industry communications. Construction of a one acre commercial greenhouse using waste-heat from compressors and the purchase of a pipeline evacuation compressor are energy conservation projects which the group initiated during the past year.

Operations

The gas transmission division employs approximately 750 people who are charged with the responsibility of accomplishing the safe and efficient day-to-day operation of approximately 6,200 miles of pipeline, 450 meter station sites and 33 compressor stations. Following a thorough internal study concerned with optimizing manpower,



In 1977, the Company received natural gas at about 450 points in Alberta and delivered it to gas utilities, co-ops and industry in Alberta and other customers at the Saskatchewan, British Columbia and U.S.A. borders.



Solar Mars gas turbine installed at the Nordegg compressor station.

the operations section was divided into gas control and measurement, technical services, southern area operations and northern area operations.

AGTL continues to lead gas transmission companies in the areas of automation and computer assistance for gas control. The implementation of an additional program package, developed internally during the past two years and scheduled to be on stream early this year, will aid the gas controllers in maintaining optimum operation of the increasingly complex gathering and transmission system.

General
In 1977, the system planning department commissioned a number of gas reserve studies. The information gathered is used in conjunction with shipper and producer data to effect long-range planning.

The computer services department completed a five-year projection of computer requirements. As almost every aspect of the division is increasingly dependent on computer assistance, expansions in this area will have significant impact on further streamlining the division's activities. To this end, the Company is reviewing the application of a packaged management information/accounting system.

Regulatory Matters
During 1977, the Company was a major participant in the Public Utilities Board Inquiry into the Alberta cost of service. The Inquiry is scheduled to be completed in 1978.

Pursuant to the provisions of Section 30(2) of the Company's Incorporating Act, complaints have been filed with the Public Utilities Board of Alberta by certain natural gas producers. Specifically, the complaints are with respect to the Company's depreciation rates and its treatment of income taxes and rate of return incorporated in the calculation of its cost of service. Two hearings have been scheduled to take place during the first half of 1978.

The system development services department was established in 1977 to monitor regulatory matters, and co-ordinate Company submissions to regulatory bodies.

GAS SALES AND SERVICE AND GAS PRODUCTION

Drilling rig near Canmore working on the coal demethanation project.

Pan-Alberta Gas Ltd. (50.005 per cent owned) purchases Alberta gas for sale to customers primarily outside Alberta. Last year Pan-Alberta's maximum day sale to Westcoast Transmission Company Limited was increased from 58 MMCFD to 200 MMCFD. Through 1977, sales to Gaz Metropolitain, inc. of Montreal and Saskatchewan Power Corporation averaged 27 MMCFD and 17 MMCFD respectively. Total gas sales increased from 27 BCF in 1976 to 53 BCF in 1977.

Pan-Alberta is actively exploring new domestic and export markets for the surplus gas in Alberta. It could play a significant role in any "gas swap" ventures that may take place to alleviate both the present Alberta surplus and the American shortages. Gas surplus to Alberta's and Canada's needs may be exported to the U.S. under a"swap back" agreement that could ensure that the equivalent energy would be returned to Canadians at some point in the future when it is determined Canadian markets will be able to absorb it.

In the past year, Algas Resources Ltd. commenced a field testing program in the Alberta foothills region for the recovery of methane from coal. Also, initial investigation into the viability of coal conversion to fuels, gases and chemicals was completed.

During 1978, Algas will continue these programs and pursue opportunities for investment in other alternate energy sources, renewable energy systems, and waste heat sources for agricultural applications.

Algas Mineral Enterprises Ltd. (AMEL), a wholly-owned subsidiary of the Company, is primarily engaged in the exploration and production of natural gas in Alberta. It produced 5,852 MMCF (gross before royalty) of gas (including oil and natural gas equivalence) during 1977 as compared to 2,595 MMCF in 1976. As is the case with many gas producers in Alberta, this company has proven gas reserves developed which will go on production when a market outlet is found.

In 1977, operations were adjusted to include those of Pennant-Puma Oils Ltd. which was acquired in 1976, together with other petroleum and natural gas properties. Detailed below is AMEL's exploration and development program for this past year:

WELLS	GAS		OIL		DRY		TOTAL	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Exploratory	17	9.9	2	1.2	10	5.6	29	16.7
Development	26	2.8			4	0.3	30	3.1
Total	43	12.7	2	1.2	14	5.9	59	19.8

During 1977, AMEL continued the active evaluation of petroleum and natural gas rights previously held and acquired a further 50,000 gross acres (27,000 net acres) all located in Alberta. Expenditures for petroleum and natural gas rights, seismic work, exploration and development drilling were $10 million.

AMEL continues to actively search for major acquisitions of companies with good Alberta exposure in natural gas rights and production.

The Company is continuing to examine the possibilities of gas storage in Alberta. Such a facility would be used to achieve operational efficiencies within the gas transmission system, and provide additional deliverability to meet "peak-day" requirements for Alberta and points downstream.

Construction of the ethylene plant, Joffre, Alberta.

PETROCHEMICALS

Construction of the world-scale ethylene manufacturing plant by The Alberta Gas Ethylene Company Ltd., a wholly-owned subsidiary of the Company, proceeded on schedule during 1977.

The $350 million plant at Joffre, Alberta, with a design capacity of 1.2 billion pounds per year, is scheduled to go on stream in the fall of 1979 and at year-end was approximately 30 per cent complete. All financing requirements for this plant were completed in 1977 in the United States and Canada.

A priority for Alberta Gas Ethylene in 1978 is the planning, development and staffing of its operating organization. Senior managerial appointments were made during 1977 and will continue to be made into mid-1978.

Engineering, procurement and construction of the plant are contracted to Dow Chemical of Canada, Limited as Alberta Gas Ethylene's agent. Dow Canada is also under a long-term take or pay contract to purchase the plant's entire production.

The ethylene plant will use ethane feedstock which has been contracted from four extraction plants in Alberta. Two plants are located in Empress and one each near Cochrane and Edmonton.

The ethane will be transported from extraction facilities to Joffre via a pipeline system being built by Alberta Ethane Development Company Limited, a joint venture equally owned by A.G. Pipe Lines (Canada) Ltd. (a wholly-owned subsidiary of the Company), Dome Petroleum Limited and Alberta Energy Company Ltd. The 400-mile ethane pipeline system will also extend to the western terminus of the Cochin pipeline near Fort Saskatchewan.

The ethane joint venture has also contracted for and will operate an ethane storage cavern near Fort Saskatchewan, having a capacity of about 500,000 barrels. Estimated cost of the gathering system and storage facility is $40 million. With the exception of the storage facility, construction of the gathering system is complete.

Ethylene manufactured at Joffre will be transported to Dow Canada at Fort Saskatchewan, near Edmonton, and to the western terminus of the Cochin pipeline via a pipeline to be constructed and owned by Alberta Gas Ethylene. Algas Engineering Services Ltd., a wholly-owned subsidiary of the Company, is under contract to provide engineering, design, and procurement and to oversee construction of the ethylene pipeline. Work to acquire right-of-way for the line was under way in 1977.

The Cochin pipeline system will transport quantities of ethane and ethylene surplus to Alberta's requirements to markets in Eastern Canada and the United States. At December 31, 1977, ownership interests in the Cochin pipeline are held through subsidiaries as to 36⅔% by Dome, 33⅓% by Dow Canada, 20% by the Company and 10% by Pacific Petroleums Ltd. Construction of this 1,870-mile line is near completion and it is expected to be in operation by mid-year.

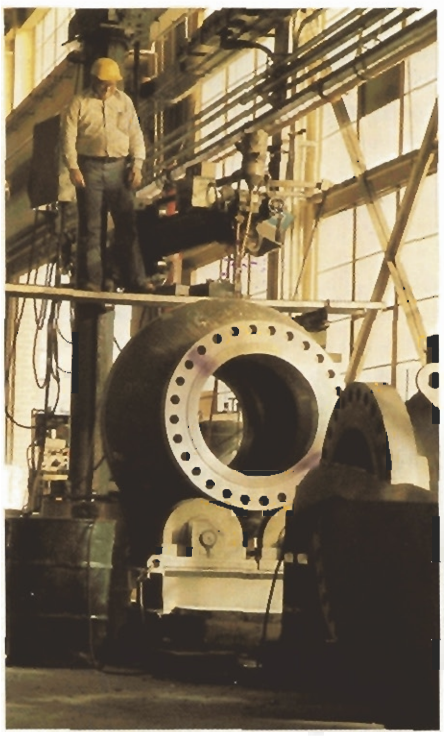
Of the ethylene purchased by Dow Canada, 700 million pounds per year will remain in Alberta for upgrading. Dow Canada is constructing two plants to manufacture ethylene oxide-ethylene glycol and vinyl chloride monomer from ethylene.

Diamond Shamrock Alberta Gas Limited Partnership effectively owned equally by the Company and Diamond Shamrock Canada Ltd., has contracted to purchase vinyl chloride monomer from Dow Canada for further upgrading to polyvinyl chloride at a new plant near Fort Saskatchewan. This plant, now under construction, has a design capacity of 220 million pounds per year, and is expected to go on stream in 1979.

Alberta Gas Chemicals Ltd. (AGCL) has experienced a very successful year of methanol production from its operations at Medicine Hat. Virtually all the operating problems have been eliminated, and the two plants operated near capacity throughout the year.

Although there exists a temporary weakness in the methanol market in North America, long-term prospects appear favourable. To meet this expected demand, AGCL is proceeding with the design of a third 600-ton per day plant. Negotiations for the required natural gas feedstock are in progress. The malic and fumaric acid plant in Duluth, Minnesota, was completed during 1977 and attained operation in December of 1977. The market for these products continues to be firm.

MANUFACTURING



Large diameter valve.

Manufacturing interests of the Company include Grove Valve and Regulator Company, WAGI International, S.p.A., and Steel Alberta Ltd. Grove Valve and Regulator Company manufactures ball and gate valves primarily for the pipeline industry and has production facilities in California and Nevada. WAGI International S.p.A. manufactures a wide range of industrial and pipeline steel valves in Italy.

In 1977, the Company acquired full ownership of Grove and new executive appointments were made. We anticipate that these steps will strengthen our position in the world-wide valve business.

Continued strong sales by WAGI to the USSR and other Comecon countries, to the European Economic Community, and to the Middle East maintained that company's good performance record. Based on the growing energy developments in these areas, indications are that the healthy markets will continue for some time. While Grove's domestic United States and Canadian pipeline markets and subsequent sales declined during 1977, royalty income from several world-wide licensees remained strong. During the year, Grove supplied a large order of its new design pipeline valve to a major gathering and transmission service in Canada and United States.

Clean room facility at Grove Manufacturing.

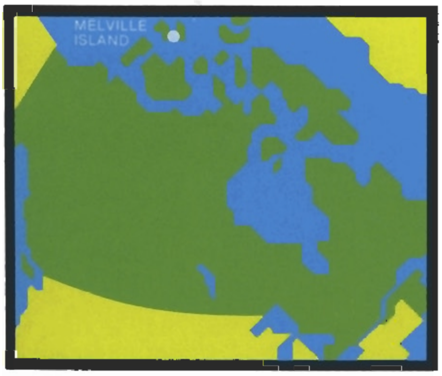
The progress during the year towards certification of the Alaska Highway Pipeline Project and its associated Canadian content policies have brought closer into focus the Company's previously expressed hope for a valve manufacturing facility in Canada. Work in this regard is progressing through various studies towards an anticipated decision during 1978.

Valve assembly, Reno, Nevada.

Concurrent with our investigations into the feasibility of establishing a Canadian valve manufacturing facility is our continued monitoring and investigation of energy product related manufacturing initiatives in Canada. Although most of those studied last year did not meet our objectives, some proposals continue to be investigated.

The Steel Alberta Ltd. affiliate which owns 20 per cent of the issued shares of Interprovincial Steel and Pipe Corporation Ltd. (IPSCO) of Regina proceeded towards its provincial steel industry objective by additions to its management staff and pursuit of several initiatives in line with its objectives. The Company continues to support these initiatives as well as to maintain IPSCO's market position.

ARCTIC PILOT PROJECT



Ice pressure ridge ten feet high near Melville Island.

The Company is continuing to support the development of the Arctic Pilot Project, a joint venture between Petro-Canada, AGTL and Melville Shipping Ltd. The objective of this project is to construct and operate facilities designed to transport 250 MMCFD of natural gas, in liquefied form, from the Drake Point field on Melville Island to North American East Coast markets.

While a pilot project, the complete operation is intended to be commercially viable and will greatly increase Canada's knowledge and expertise in year-round Arctic operation for the following areas: production from offshore and onshore gas wells; pipeline transmission; gas liquefaction facilities; and ice-breaking tankers.

Production from the Drake Point field will be gathered from one offshore well now being drilled and nine onshore wells. The gas will then be pipelined 100 miles to Bridport Inlet, the site of the liquefied natural gas (LNG) plant. The plant will be mounted on a single barge and moored to a permanent wharf structure with storage facilities and personnel accommodations similarly barge-mounted and moored to adjacent wharves.

The basic construction costs for barge-mounted facilities are lower with less risk of overrunning the total cost or time schedule and have the added advantage of minimizing on-land infrastructure in the Arctic. Storage facilities are being designed to hold 18 days of production (200,000 cubic meters of LNG — equivalent to 4.4 BCF of natural gas). The two ice-breaking tankers required will each carry 140,000 cubic meters of LNG (equivalent to 3.1 BCF of gas) and will sail from Bridport Inlet on an average of once every 12 days. The tankers will have strengthened hulls for Arctic ice and propulsion generating 200,000 horsepower.

Intensive field studies are under way for the preparation of an Environmental Impact Statement. Preliminary evaluations include engineering analyses of pipelining, plant design, construction logistics and LNG tanker operations in the Canadian Arctic. Contractors and consultants with Arctic experience are being used extensively, optimizing Canadian content. Project development activities are proceeding for submission of applications to the National Energy Board, the Department of Transport and the Department of Indian and Northern Affairs by mid-1978.

In 1977, your Company joined with Petro-Canada to establish Q & M Pipe Lines Ltd., which is 60 per cent owned by us and 40 per cent by Petro-Canada.

The primary objectives of this nationally-oriented project are:

- To support the Canadian Government's policy of maintaining as much energy self-reliance in Canada as possible by extending the country's natural gas pipeline system to the Atlantic coast.

- To contribute a major new economic tie across the regions of the country by making gas from Western Canada available for the first time to consumers in Atlantic Canada.

- To improve Canada's balance-of-payments situation by reducing dependency on imported energy resources.

- To encourage increased development of natural gas reserves in Canada and particularly Alberta by expanding the domestic market for Canadian gas.

The Q & M Project will extend the present system of natural gas pipelines in Canada from Montreal to Halifax and Cape Breton Island. With its completion, the national system will then stretch from Atlantic to Pacific, and have the potential to handle gas from offshore and the Arctic.

Q & M will also provide for early development of new markets within Canada for the present and growing excess of gas supply in Alberta and future surplus expected in British Columbia. The National Energy Board has recognized the vital importance of new markets for excess Alberta gas supplies if Canadian reserves are to continue being expanded. In its report, Reasons for Decision — Northern Pipelines, the Board noted that there is a surplus producibility of natural gas at present in Alberta. If it could be sold and delivered, the Board report said, the sale would encourage exploration and development in Alberta, "thereby lifting the level of the (gas) deliverability curve over what it would otherwise be until certainly the late 1980's."

The addition of eastern Quebec, New Brunswick and Nova Scotia to the Canadian pipeline system will provide a new market for Alberta gas that will be modest initially, but will become increasingly significant during the next ten to fifteen years. Beyond that time period, the region will provide a market for gas developed in the Canadian Arctic or offshore Atlantic areas.

The project will be a medium-sized gas mainline starting at the present eastern terminus in Montreal of the TransCanada PipeLines Limited system. The prime route runs south of the St. Lawrence River from the western

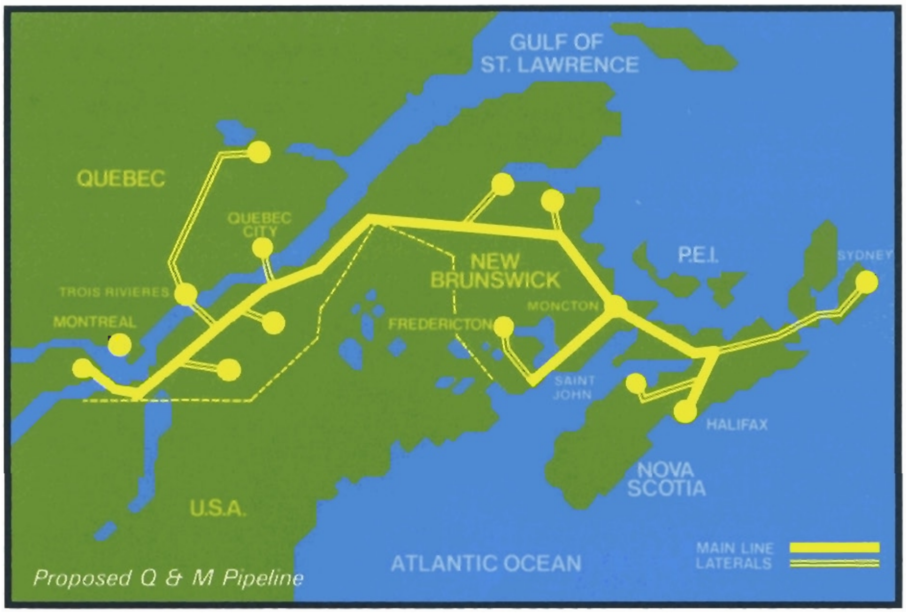
Pipeline river crossing.

Q & M PROJECT

Fredericton, New Brunswick.

Old Quebec City, Quebec.

Sydney, Nova Scotia.



Proposed Q & M Pipeline

outskirts of Montreal to a point northeast of Quebec City, and then across New Brunswick and Nova Scotia.

The present plan envisages initial flows of natural gas in the market area in 1980, and completion of the system in 1981.

The initial supply of Alberta gas for the Q & M Project will be provided by Pan-Alberta Gas Ltd. of Calgary. The quantities of gas needed are included in amounts already found surplus to Alberta's needs by the Alberta Energy Resources Conservation Board (AERCB). Late 1977 estimates of uncontracted gas available in Alberta ranged to well over one billion cubic feet per day and these volumes are more than adequate to supply Q & M market areas for the foreseeable future.

Q & M will operate as a gas transmission service under federal regulation. It will transport gas to the city gate of major centres in the Eastern Canadian market areas it proposes to serve.

Photographs represent regions and not specific pipeline route areas.

GENERAL PROGRAMS

Corporate Donations
In 1977, the Company donated approximately $450,000 to 245 organizations involved in various community activities. A nine-member volunteer committee administers the main portion of the funds with some funds being allocated directly to operations for small Alberta communities. Major beneficiaries included The United Way, The 1978 Commonwealth Games Capital Fund, and a university drive.

The Company made a substantial donation to The John Howard Society in Calgary to initiate an employment course for ex-inmates.

The highest percentage of donations was made in the health and welfare fields.

Environmental
An in-house group of environmental personnel directs or applies environmental protection requirements to applicable facets of the Company's operation. The Company keeps abreast of government policies and guidelines and maintains good rapport with special interest groups. By establishing environmental standards and integrating these criteria into the design and construction processes, and by implementing aerial surveillance, environmental inspection and reclamation procedures, environmental concerns can be largely minimized or mitigated.

Minority Employment
We have continued to place Indian and Metis employees on staff in 1977 as a priority employment practice which was initiated in late 1976. To date, we have these employees in five different departments involved in such diverse disciplines as measurement technicians, controls and electrical technicians, drafting, clerical and operations. These employees represent the various groups of people such as Metis, status and non-status Indians in approximately equal numbers. The program progressed in 1977 to the extent that they now account for approximately five per cent of our staff.

Employee Training
In addition to supporting conventional staff development, the Company conducts a series of workshops to meet specific needs of our employees. These activities range from pipeline maintenance programs to highly technical computer control systems.

A scene from an Alberta Ballet Company production.

Employees of the John Howard Society in Calgary.

Commonwealth Stadium, Edmonton, site of 1978 Commonwealth Games.

ALBERTA GAS TRUNK LINE

– Incorporated by Special Act under the Laws of Alberta

The Alberta Gas Trunk Line Company Limited, a public company, was incorporated in 1954 by a Special Act of the Alberta Legislature. Its corporate objects include: to act as a carrier and purchaser of gas, to construct pipelines and plants, to purchase and develop hydrocarbon resources, to engage in petrochemicals, manufacturing, engineering, industrial research and development. It is owned by 29,555 shareholders, 97.6 per cent in Canada; about one half of its common shares are held by Canadian investment institutions and the other half by individual investors across Canada, including 15,828 individuals in Alberta. Its preferred shares are also held by Canadian institutional and individual investors.

Duplicate Annual Reports
Some holders of AGTL securities receive more than one copy of our annual report and other material mailed to shareholders. We make an effort to eliminate duplications of such mailings; however, if securities are registered in different names and addresses, multiple copies will be received. Those security holders receiving more than one copy of material should contact the appropriate registrar to either consolidate their holdings under one name if they are with respect to the same security, or in the event that they hold more than one security, advise the appropriate registrar that no material is required.

Annual Meeting
The Annual Meeting of the shareholders of the Company will be held at the Calgary Inn, Calgary, Alberta, on May 19, 1978, at 2:00 p.m.

Les personnes désirant des exemplaires en français du présent rapport sont priées de s'adresser au Secrétaire de la Compagnie.

P.O. Box 2535, CALGARY, ALBERTA
T2P 2N6

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B.A. Abrahams
F.L. Adams
J.M. Godfrey
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ALBERTA GAS TRUNK LINE

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