

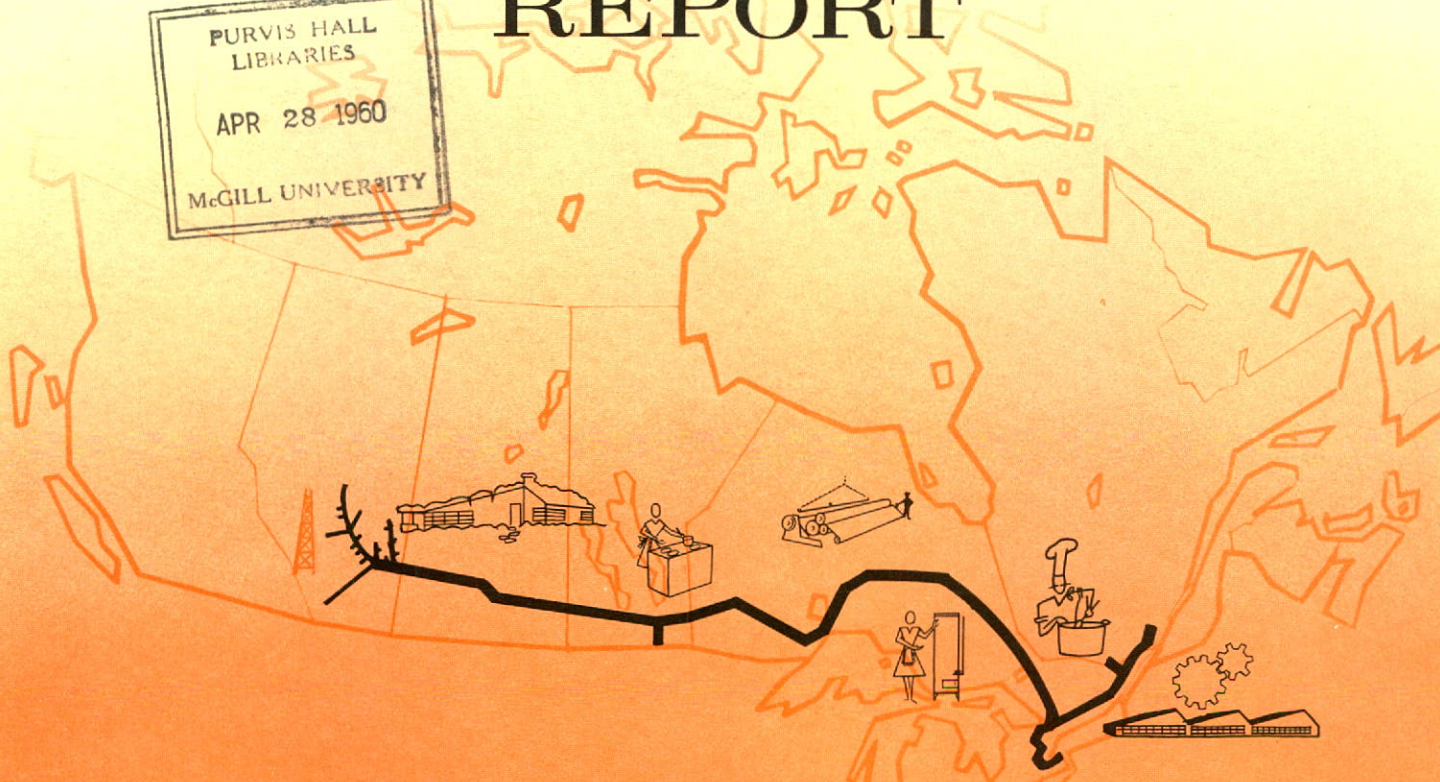
1958



TRANS-CANADA PIPE LINES LIMITED

ANNUAL REPORT

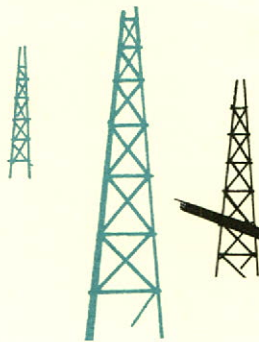
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TRANS-CANADA

PIPE LINES LIMITED



*annual
report*

1958

The final weld, signalling completion of the Trans-Canada natural gas line from Alberta to Montreal, was made at Kapuskasing, Ontario, during a driving snow and rain storm, at 6:46 p.m. on October 10, 1958.



TRANS-CANADA PIPE LINES LIMITED

Directors

Hon. Edouard Asselin, Q.C.	G. A. Gaherty	A. Deane Nesbitt
T. H. Atkinson	James W. Kerr	G. P. Osler
E. W. Bickle	E. D. Loughney	Frank A. Schultz
R. A. Brown, Jr.	M. A. MacPherson, Q.C.	N. E. Tanner
Chas. S. Coates	J. K. McCausland	Jules R. Timmins
John R. Fell	C. W. Murchison	J. Ross Tolmie, Q.C.

Officers

Chas. S. Coates	Chairman of the Board
James W. Kerr	President
Robert C. Berry, C.A.	Vice-President and Treasurer
H. Dix Fowler, P. Eng.	Vice-President, Engineering and Operations
N. John McNeill, Q.C.	Vice-President, General Counsel and Secretary

Head Office—326 Ninth Avenue West, Calgary, Alberta

Executive Office—92 King Street East, Toronto, Ontario

Transfer Agents—Common Shares—Montreal Trust Company—
Montreal, Toronto, Winnipeg, Calgary and Vancouver
The First National City Bank of New York—New York, N.Y., U.S.A.

Registrars—Common Shares—National Trust Company, Limited—
Montreal, Toronto, Winnipeg, Calgary and Vancouver
Bankers Trust Company—New York, N.Y., U.S.A.

Auditors—Peat, Marwick, Mitchell & Co.

The welders' "firing line" stretches across the rolling prairies of Western Canada during construction of Trans-Canada's 2,290-mile pipe line to Eastern Canada.

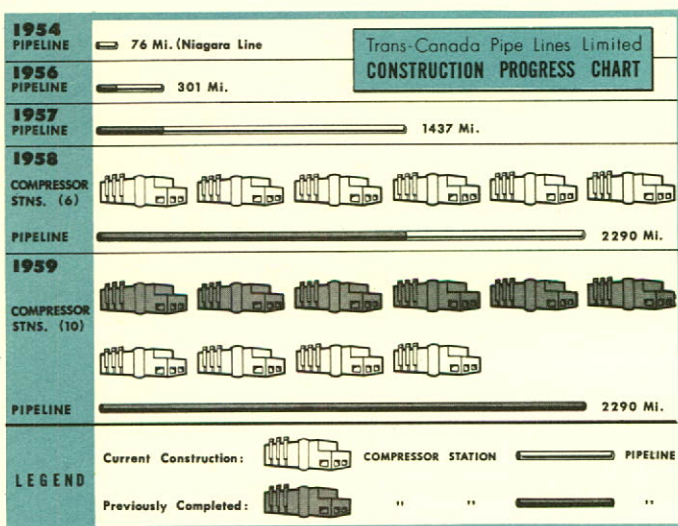


DIRECTORS' REPORT TO THE SHAREHOLDERS

Your Directors are pleased to present this third published Annual Report, covering the progress of your Company during the year ended December 31, 1958, including audited financial statements for that year. This is the first Report to the Shareholders since the completion of construction of the initial pipe line system and since the transition by your Company from construction to complete operation.

Construction

It was with a great deal of satisfaction and sense of achievement that your Company was able to announce completion of construction of the pipe line from Alberta to Montreal during the month of October, 1958, thus enabling your Company to provide natural gas service to customers throughout the 2,290-mile length of our system.



During the 1958 construction season 853 miles of 30-inch line from Port Arthur to Toronto were constructed, 367 miles of which were constructed for the Northern Ontario Pipe Line Crown Corporation, being the section of the pipe line between Port Arthur and Kapuskasing, Ontario. In addition, six compressor stations were constructed at the locations and with the initial installed horse-power shown below:

Location	Horse-Power
Burstall, Saskatchewan	10,200
Caron, Saskatchewan	10,200
Moosomin, Saskatchewan	10,200
Winnipeg, Manitoba	7,500
Port Arthur, Ontario (On Crown Section)	5,000
North Bay, Ontario	5,400
	48,500

As mentioned in the 1957 Annual Report, the above total horse-power represents an increase of 20,800 horse-power in excess of what had originally been planned for construction in the year 1958. Notwithstanding this additional horse-power built into the system in advance of original plans, it is significant that our entire initial system was completed and placed in operation ahead of schedule and within the originally estimated costs, thus enabling your Company to complete construction without resorting to supplementary financing other than short-term bank loans.

The 1959 construction program includes the construction of three compressor stations on the Crown Section and one compressor station on Trans-Canada's section of the line at Maple, Ontario just north of Toronto. The estimated cost of Trans-Canada's portion of this program is approximately \$2,500,000. Additional expenditures for construction of meter stations and other minor projects bring the aggregate estimated capital expenditure for the year 1959 to \$5,500,000. The cost of construction of the three compressor stations on the Crown Section will be borne by the Crown Corporation.

Operations

The present system, which has capacity to deliver 300 million cubic feet of natural gas per day, has already reached a peak day delivery of approximately 265 million cubic feet. During the months of January and February, 1959 the system delivered, on an average day, approximately 220 million cubic feet to the various distributor customers from Saskatchewan to Montreal, thus commencing the long-term availability of the benefits of natural gas to a major part of the population of Canada.

The management of your Company is indeed proud of its field organization. Many of the personnel are housed at the actual compressor station sites to keep the system functioning smoothly 24 hours per day the year round. These operations are directed from field operating division headquarters located at Brandon, Manitoba and Port Arthur, North Bay and Napanee, Ontario.

Royal Commission on Energy

The Borden Royal Commission on Energy held hearings, involving the oil and gas industry, at various points in Canada during 1958 during the process of which your Company appeared and made submissions at Calgary in February, Toronto in July and Montreal in July. Submissions included full particulars on the organization and history of Trans-Canada, a long-term forecast of its markets, the Company's views on the subject of regulation and other important aspects of Trans-Canada's corporate life, past, present and future.

Late in October, 1958 the Commission released its first report, which dealt at length with various aspects of the oil and gas industry. Outstanding among its recommendations is the setting up of a National Energy Board and considerable extension of the present regulation of pipe lines in Canada. Your Company fully recognizes the need for a reasonable degree of regulation of our industry, but we are hopeful that any regulation which emerges as a result of the first report of the Borden Commission will give the industry leeway to expand and not place it in a strait jacket for the future. We are particularly opposed to the Commission's recommendation that the earnings of pipe lines be limited to a return on shareholders' equity only. We strongly urge that earnings be regulated on the basis of a fair rate of return applied to the amount of total capital invested in the net depreciated plant, which is the method almost universally employed in the regulation of pipe lines and gas utilities in both Canada and the United States.

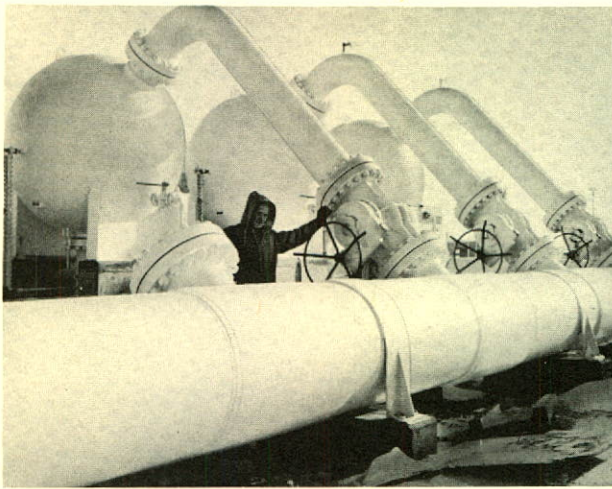
Prospects for Export to the United States

Late in 1958 the U.S. Federal Power Commission released its decision on the application of Midwestern Gas Transmission Company to construct facilities and to take gas into the United States middle West from Trans-Canada at Emerson, Manitoba. This decision turned down Midwestern's application, but left the way open for new applications to be filed in the future, at such time as a sufficient supply of gas is available to Trans-Canada to fulfil the requirements of Midwestern on the Northern part of that company's proposed system.

It is your Company's policy to vigorously pursue a program of acquiring additional gas reserves during 1959 to supply this export project, which will enable it to make application to Ottawa for a Canadian export permit and concurrently to support a renewed application by Midwestern before the Federal Power Commission in Washington.

Gas Supply

In January, 1959 the Alberta Oil and Gas Conservation Board granted to Trans-Canada a permit to export from the province of Alberta 1.1 trillion cubic feet of natural gas, in addition to the 4.35 trillion cubic feet which were previously under permit. This additional 1.1 trillion cubic feet will be augmented by an application for a further permit before the end of March, 1959. This would make available a total of approximately 5.9 trillion cubic feet to your Company. Further volumes will be required to fulfil the needs of the export project in the middle West. Your Company's management is presently engaged in a gas purchase program which, it is confidently expected, will result in the acquisition of gas reserves sufficient to supply all present and anticipated markets.



In sub-zero weather an operator at the Bursfall, Saskatchewan, compressor station turns a valve which allows natural gas to flow through the spherical gas scrubbers, or cleaners, before it enters the compressors.

Financial

The following pages of this report include the consolidated balance sheet of Trans-Canada Pipe Lines Limited and subsidiary companies as at December 31, 1958 with comparative figures as at December 31, 1957, the consolidated statement of operations and deficit for the two years ended December 31, 1958, together with notes thereto and the report of the Company's auditors thereon. The statement of operations reflects the results of service throughout part of the system during the months of January to October, and the results of operations throughout the entire system during the months of November and December. As an indication of the effect of full operation following completion of construction, gas sales during the ten months to October 31, 1958 amounted to a total of \$4,316,056 as compared to total sales for the two months November and December, 1958 of \$4,369,585.

The statement of operations also includes the results of leasing the Niagara-Toronto line up to the end of October, at which time the lease of this line terminated upon Western Canadian gas becoming available to the Toronto area, and the line became a part of the Trans-Canada transmission system and has been operated by your Company since that time.

A significant change was made in 1958 in the handling of the credit for interest charged to construction, which previously had been credited to Capital Surplus. It was considered more appropriate treatment to credit this interest charged to construction in the statement of operations, and in conjunction with this decision, the balance of Capital Surplus at December 31, 1957 was transferred to the Deficit account.

All of the foregoing resulted in a consolidated net loss for the year of \$48,343 and concludes with a Deficit balance at December 31, 1958 of \$85,429.

Organization

On December 3, 1958 Mr. N. E. Tanner relinquished the post of Chairman of the Board, which post he had held since mid 1957. He was succeeded as Chairman by Mr. Charles S. Coates, who had been President since 1957 and Executive Vice-President and General Manager prior to that time. Mr. Coates was succeeded as President of the Company by myself. The contribution that Mr. Tanner and Mr. Coates have made to the successful organization and to the completion of initial construction of the Trans-Canada project is most significant. I am sure, that this great contribution and achievement will be applauded by all shareholders, employees and others who have been associated with them.

On behalf of the Board of Directors and, I am sure, on behalf of the shareholders, I extend to all of our staff sincere appreciation for their unbounded efforts in bringing the major construction program to fulfilment and in always working earnestly for the progress of your Company. The story of Trans-Canada Pipe Lines Limited and the contribution of its employees is told in the descriptive brochure entitled "Natural Gas Goes East," which is being mailed to you with this Annual Report.

On behalf of the Board of Directors,

March 17, 1959

President.

TRANS-CANADA P

And Subsidiaries

Consolidated

December 31, 1958 (With comparative figures for 1957)

ASSETS

	December 31, 1958	December 31, 1957
Plant, Property and Equipment —at cost (Note 1):		
Gas plant in service.....	\$249,355,657	\$130,310,772
<i>Less</i> accumulated depreciation (Note 2).....	2,185,568	624,743
	<u>247,170,089</u>	<u>129,686,029</u>
Construction work in progress.....	7,327,470	12,825,436
	<u>254,497,559</u>	<u>142,511,465</u>
Investment —at cost:		
The Alberta Gas Trunk Line Company Limited shares.....	4,025	4,025
Current Assets:		
Cash (Note 3).....	7,012,887	22,021,269
Cash and securities on deposit with trust company for payment of debenture interest.....	2,147,916	6,501,430
Temporary cash investments—at cost.....	—	3,940,000
Accounts receivable.....	3,245,180	1,419,790
Deposits recoverable under gas exchange agreement.....	946,778	1,946,619
Materials and supplies—at cost.....	3,776,055	—
Line pack gas—at cost.....	467,202	308,423
Prepayments and deposits.....	81,870	—
	<u>17,677,888</u>	<u>36,137,531</u>
Deferred Charges:		
Unamortized debt discount and expense.....	8,788,742	6,557,588
Other.....	75,558	125,588
	<u>8,864,300</u>	<u>6,683,176</u>
Capital stock issue expense.....	1,754,469	1,750,034
Organization expense.....	36,068	36,068
	<u>\$282,834,309</u>	<u>\$187,122,299</u>



PIPE LINES LIMITED

Utility Companies

Balance Sheet

(Comparative figures at December 31, 1957)

LIABILITIES

	December 31, 1958	December 31, 1957
Shareholders' Equity:		
Capital stock (Note 4):		
Preferred—Authorized 1,000,000 non-voting shares of a par value of \$50.00 per share		
Common—Authorized 10,000,000 shares of a par value of \$1.00 per share		
—Issued and outstanding:		
1958, 5,858,683 shares and		
1957, 5,853,184 shares	\$ 5,858,683	\$ 5,853,184
Premium on issue of common shares	48,585,592	48,483,280
	<u>54,444,275</u>	<u>54,336,464</u>
Less deficit—per Consolidated Statement of Operations and Deficit (Note 5)	85,429	537,287
Shareholders' equity	<u>54,358,846</u>	<u>53,799,177</u>
Long Term Debt (Note 6)	199,000,000	120,000,000
Bank Loans Payable in 1960	17,720,000	—
Current Liabilities:		
Accounts payable	4,770,055	5,985,606
Interest accrued	3,798,242	2,980,743
Amounts on deposit from customers for gas held in storage	—	1,883,618
Gas returnable under gas exchange agreement	946,778	—
Advances on Northern Ontario Section of main line	1,578,022	1,604,894
	<u>11,093,097</u>	<u>12,454,861</u>
Allowance for United States exchange (Note 7)	662,366	868,261
Commitments (Note 8)		
APPROVED ON BEHALF OF THE BOARD:		
J. W. KERR, <i>Director</i>	<u>\$282,834,309</u>	<u>\$187,122,299</u>
J. K. McCAUSLAND, <i>Director</i>		

(See accompanying notes to financial statements.)



TRANS-CANADA PIPE LINES LIMITED *And Subsidiary Companies*

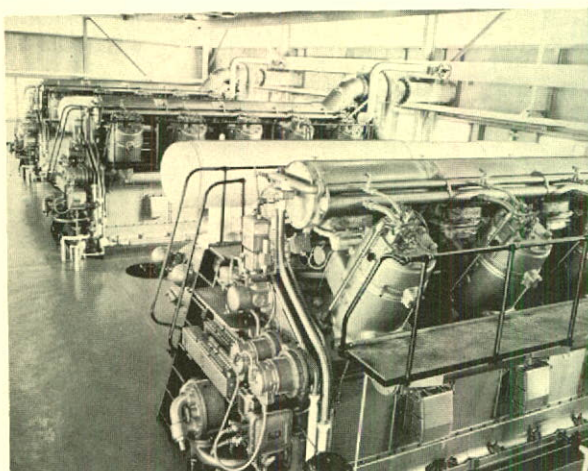
CONSOLIDATED STATEMENT OF OPERATIONS AND DEFICIT

Year Ended December 31, 1958

(With comparative figures for the year ended December 31, 1957)

	Year Ended December 31, 1958	Year Ended December 31, 1957
Operating Revenues:		
Gas sales	\$ 8,685,641	\$ 188,018
Revenue from gas plant leased to others	332,464	251,750
	<u>9,018,105</u>	<u>439,768</u>
Operating Revenue Deductions:		
Cost of gas sold	3,612,545	87,407
Gathering charges—The Alberta Gas Trunk Line Company Limited	852,321	20,634
Operation and maintenance	1,891,000	325,292
Rental of Northern Ontario Section of main line	885,422	—
Depreciation	1,638,406	181,926
Taxes—provincial and municipal	887,765	85,510
	<u>9,767,459</u>	<u>700,769</u>
Operating loss	749,354	261,001
Other Income:		
Interest revenues	238,836	756,722
	<u>510,518</u>	<u>(495,721)</u>
Interest and Other Deductions:		
Interest on long term debt	9,115,909	5,973,210
Amortization of debt discount and expense	184,452	113,756
Other interest	318,380	—
Interest charged to construction (credit)	(10,080,916)	(5,970,497)
Write-off of non-construction costs	—	804,548
	<u>(462,175)</u>	<u>921,017</u>
Net loss for the year	48,343	425,296
Deficit at beginning of year	664,808	316,876
Capital surplus at beginning of year transferred	(127,521)	(204,885)
Adjusted deficit at beginning of year	537,287	111,991
Adjustment of accumulated depreciation on Niagara Section (Note 2)	(500,201)	—
Deficit at end of year	<u>\$ 85,429</u>	<u>\$ 537,287</u>

(See accompanying notes to financial statements.)



Interior of compressor station at North Bay, Ontario, showing V-type natural gas fueled engines.

TRANS-CANADA PIPE LINES LIMITED *And Subsidiary Companies*

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 1958

1. Plant, Property and Equipment

The initial transmission system, extending from the Alberta/Saskatchewan border to Montreal, Quebec, was completed in October 1958. The cost of the Trans-Canada portion of this system, including five initial compressor stations and the Company's preliminary surveys, engineering and other costs are now classified as Gas Plant In Service. Also included is the Niagara Section, which was built in 1954 by the Company's wholly owned subsidiary, Western Pipe Lines, and previously carried as gas plant leased to others.

The Crown Section of the line consisting of the 676 miles from the Manitoba/Ontario border to Kapuskasing, Ontario, together with the Port Arthur compressor station was also completed in 1958 by the Company for Northern Ontario Pipe Line Crown Corporation. Accordingly, the cost of this phase of the initial construction program is not included in the Company's accounts.

2. Depreciation Policies

Depreciation is accumulated on plant classified as Gas Plant In Service. Up to October 31, 1958 reduced depreciation was taken to allow for partial use of the sections of the line in service and the accrued depreciation on the Niagara Section accumulated in prior years was adjusted to give effect to this policy with a consequent credit to Deficit of \$500,201; thereafter, on the initiation of complete operations, depreciation has been provided at 3½% per annum on a straight-line basis on the pipe line system.

3. Cash Balances

Included in the bank balances are fixed deposits of \$3,860,000 representing \$4,000,000 U.S. which the company had agreed to maintain as average minimum balances with United States banks. During the month of January 1959, arrangements were completed to reduce such minimum balances to \$2,000,000 U.S.

4. Capital Stock

During the year ended December 31, 1958 a total of 5,499 common shares were issued for a cash consideration of \$107,811. Of this amount \$5,499 was credited to the Company's capital stock account and \$102,312 to the premium on issue of common shares account. The issue of these shares resulted from the exercise of stock options previously granted to key officials and employees of the Company either pursuant to individual contracts of employment, or under the Incentive Stock Option Plan adopted by the Company in 1957. At December 31, 1958 options on 34,501 shares were outstanding under the Incentive Stock Option Plan. At December 31, 1958 there also remained unexercised an option on 2,500 shares at \$8 per share under an individual contract of employment, which option was exercised on January 9, 1959.

Under the terms of a "Note Purchase Agreement" certain shareholders of the Company will, under certain circumstances, be obligated to purchase from the Company its 5½% Subordinated Convertible Income Notes up to a principal amount of \$21,000,000 and in any event will have the right to purchase such notes up to an amount of \$7,000,000. The notes will be convertible, after July 1, 1964, into common shares at a conversion price of \$15.00 per share or at such adjustment of that price as required to provide protection against dilution. The conversion of notes to shares could initially result in the issue of a maximum of 1,400,000 or a minimum of 466,667 additional shares.

Payment of dividends is restricted under the provisions of the Deed of Trust and Mortgage securing the First Mortgage Pipe Line Bonds and the Indenture securing the Subordinated Debentures.

5. Statement of Operations and Deficit

This statement includes the results of partial operation for the months from January to October and, following completion of the initial transmission system, full operation for the months of November and December 1958.

In conformity with the practice followed by other gas transmission companies, interest charged to construction was credited against interest and debt charges of 1958, whereas in prior years, the amounts involved were netted in Capital Surplus. The comparative figures for 1957 have been adjusted to reflect this change. Interest charged to construction has been calculated at rates of 7% to December 31, 1956, and thereafter at 8%, based on actual construction costs.

6. Long Term Debt

The following issues were outstanding as at December 31:

	Authorized	Issued and Outstanding	
		1958	1957
5¼% Notes Payable to Banks, due 1962 (Secured by 5¼% First Mortgage Pipe Line Bonds due 1978—United States series).....	\$ *	\$ 5,000,000	\$ 7,262,000
5¼% First Mortgage Pipe Line Bonds due 1978—United States series	100,990,000	95,990,000	29,391,000
5½% First Mortgage Pipe Line Bonds due 1978—Canadian series..	23,010,000	23,010,000	8,347,000
5.60% Subordinated Debentures due 1987—United States series...	20,833,300	20,833,300	20,833,300
5.85% Subordinated Debentures due 1987—Canadian series.....	54,166,700	54,166,700	54,166,700
	<u>\$199,000,000</u>	<u>\$199,000,000</u>	<u>\$120,000,000</u>

* Of \$20,000,000 5¼% Notes due 1962 authorized and issued, \$15,000,000 has been repaid from the proceeds of sales of an equivalent amount of 5¼% First Mortgage Pipe Line Bonds due 1978—United States series.

Sinking fund payments commence in 1961 for the First Mortgage Pipe Line Bonds and in 1969 for the Subordinated Debentures. Debt discount and expense is being amortized over the periods of the respective issues.

As required by Article 5.28 of the Deed of Trust and Mortgage, direct reference is made to the fact that the Company's gas purchase and sales contracts and the contracts with The Alberta Gas Trunk Line Company Limited and Northern Ontario Pipe Line Crown Corporation are mortgaged and pledged under the Deed.

7. Principles of Conversion

The Allowance for United States Exchange contains the exchange differential received or provided when the United States series of Subordinated Debentures and First Mortgage Bonds were sold. Against this exchange differential has been charged the discount which arose from recording the charges in respect of United States disbursements in Canadian dollars, reduced by the net credit resulting from converting those assets and liabilities originating in United States dollars to their Canadian equivalents at the rate of exchange effective December 31, 1958.

8. Commitments

Under the terms of an agreement dated November 21, 1955 the Company shall purchase from Northern Ontario Pipe Line Crown Corporation the Crown Section as soon as the Company can arrange the necessary financing. The price will be set by formulae which take into account prior rental payments but which allow for a minimum price. The Company is leasing the Crown Section from the Crown Corporation and will bear all operating and maintenance expenses and pay rental to the Crown Corporation. The rental payments are set by formulae that take into account the volume of throughput and the maximum agreed rate of return that the Crown Corporation may receive on its investment.

AUDITORS' REPORT TO THE SHAREHOLDERS

We have examined the consolidated balance sheet of Trans-Canada Pipe Lines Limited and its subsidiary companies as of December 31, 1958 and the consolidated statement of operations and deficit for the year ended on that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the consolidated balance sheet and consolidated statement of operations and deficit present fairly the consolidated financial position of Trans-Canada Pipe Lines Limited and its subsidiary companies at December 31, 1958 and the results of their operations for the year ended on that date, all in conformity with generally accepted accounting principles applied on a consistent basis, except for the changes in recording reduced depreciation for partial use of the pipe line and in the method of recording interest during construction as set out in Notes 2 and 5 to the financial statements, with which changes we concur.

Toronto, Ontario, February 17, 1959.

PEAT, MARWICK, MITCHELL & Co., Chartered Accountants.

OPERATING A NATURAL GAS PIPE LINE

Natural gas is one of the oldest fuels known to and used by man—the Chinese used it more than a thousand years ago for drying salt from sea water—but only the comparatively recent development of the long-distance transmission systems, such as that now being operated by Trans-Canada Pipe Lines Limited, has brought natural gas to its present prominence in modern living.

The housewife in Montreal preparing the family breakfast on her modern natural gas range is too preoccupied to reflect that at that very moment a processing plant in Alberta is producing sulphur, butane and other by-products while preparing further supplies of natural gas for her use. The smelter worker who checks his charts as he adjusts the natural gas flame is unaware that across Canada drillers, operators, engineers, welders, meter readers, dispatchers and maintenance men are at work making available an abundant supply of natural gas for a myriad of uses.

The natural gas does not flow directly from the well to the pipe line, to the home or blast furnace. Once the gas has been found, and the search is a continuing one, the producing companies must then prepare it for delivery. Trans-Canada buys gas from approximately 50 producing companies, including both the small independent firms and the large operators.

All the gas has to be “scrubbed” or cleaned, before it is delivered to the pipe line and in some gas fields the scrubbing is done at relatively small dehydration plants. At other fields, the gas contains such varied by-products that costly processing plants must be built. Here the producer removes sulphur, propane, butane, gasoline and other petroleum products before the natural gas is ready for its end use.

The gas, having been “scrubbed,” is then delivered to The Alberta Gas Trunk Line Company Limited. This is a pipe line system in Alberta which collects the gas at the fields and transports it to Trans-Canada at the western terminus of its system known as the “Saskatchewan Gate,” one mile within the Alberta border near Burstall, Saskatchewan.

The gas sold to Trans-Canada is metered and measured at the fields and again at the “Saskatchewan Gate.” Immediately after having been measured, the gas enters the first of a chain of compressor stations built across the country to help move the gas on its way to homes and industries to the East.

Trans-Canada’s compressor stations, costing upwards of \$3,500,000 each, overcome the substantial drop in pressure which is inherent in long-distance gas transmission lines due to friction of the gas against the walls of the pipe. Although the gas may leave the field under substantial pressure, without compressor stations it would barely “trickle” from the pipe line to the customers many hundred miles away. The compressors raise the pressure as required and return the gas to the pipe line sending it on its way to the consumer.

Although the Trans-Canada line is built to operate at up to 936 lbs. per square inch pressure, gas enters the average home at a pressure of about seven ounces. As the gas leaves the transmission line it enters the “city gate,” and it is measured both by Trans-Canada and the distribution company buying the gas. Depending on local requirements, the gas passes through a series of regulators which reduce the pressure in steps down to the gentle flow at the burner.

Behind the mechanics of an operating pipe line are the men who run the compressor stations, maintain the line and dispatch a sufficient supply of gas whether it be for the family’s Saturday night baths or the needs of a giant industry, in the heat of summer or the cold of the Canadian winters.



Underwater blasting of rock, Winnipeg River near Kenora, Ontario, to provide ditches in which to lay dual pipe.

Operations along the Trans-Canada system are broken down into divisions which in turn are broken down into districts. Superintendents are in charge of both divisions and districts. The district superintendent and the compressor station operators are required to live at the station sites. Trans-Canada has built attractive modern homes, complete with all facilities and utilities and the families at the stations form small integrated communities.

The divisions are almost small pipe line systems in themselves. Their equipment includes side-boom tractors, bulldozers, back-hoe and drag-line shovels, welding equipment, air compressors, various types of trucks and snowmobiles. The pipe line is patrolled regularly. Specially trained pilots skim the tree-tops and maintenance men walk the line.

The dispatching section of the operations department plays a key role in operating the pipe line. It is the nerve centre around which the entire system operates. The dispatchers determine how much gas will be taken from various fields, the pressure requirement from each compressor station and how much gas is to be delivered at each city gate.

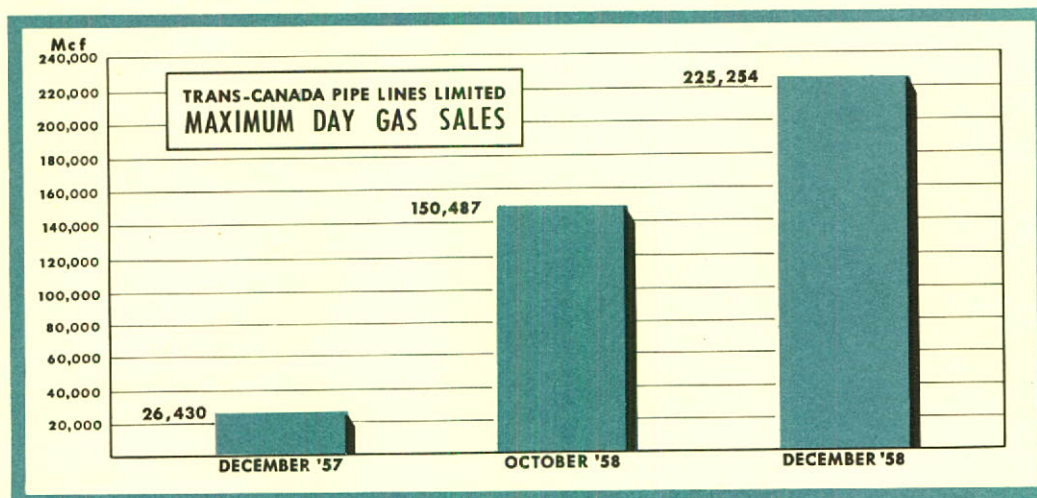
Distribution company customers of Trans-Canada advise the dispatch section every seven days of their requirements for the following week and also make daily variations, when necessary. The dispatchers in Toronto tabulate requirements and advise their counter-parts in Trans-Canada's Calgary office. In Calgary the dispatch section maintains a log of all gas contracts and from these gas requirements from each producer are calculated. Dispatchers at Alberta Gas Trunk Line and operators at the producing fields are notified, and the supply of gas entering the Trans-Canada system is thus raised or lowered according to demand.

There are emergencies, of course, such as a sudden winter storm striking perhaps only one area. Immediately the dispatch section is notified and arrangements are made for the extra demand, usually from the line pack, the gas stored in the pipe line. Meanwhile, the producers increase their supply to the system and the line pack used for the emergency is replaced.

Typical of all sections of operations, dispatch works around the clock. Communications with Calgary, the compressor stations and divisional headquarters are maintained by a private leased telephone line. Division offices are able to contact field workers immediately by two-way car radio.

Thus whether it be a dispatcher on the graveyard shift, a pilot skimming the Sand Hills of Saskatchewan, or a gauge reader in a foothills processing plant, all are doing their part to keep the gas flowing through the world's longest natural gas pipe line to homes and industry.

Natural gas literally has moved a long way since the days of the early Chinese. In fact, it has been said that Canadians are living in the Natural Gas Age. Trans-Canada Pipe Lines Limited is proud of its role in hastening this new era, and is alert to its responsibilities today and in the future.



In Northwestern Ontario hundreds of miles of rock had to be blasted from the right-of-way and the ditch before cleaning and priming of the pipe could be done.



