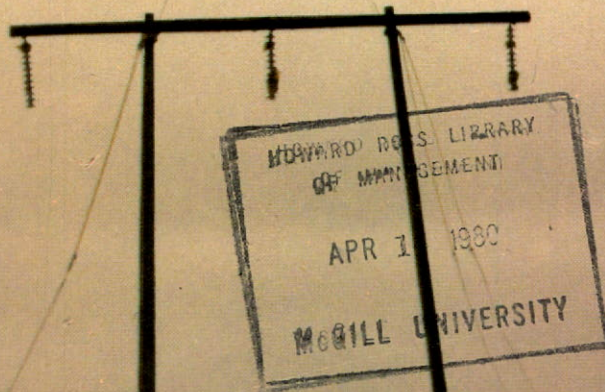
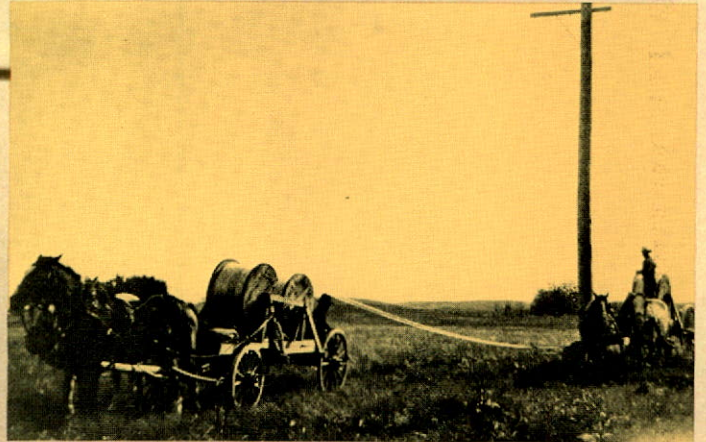
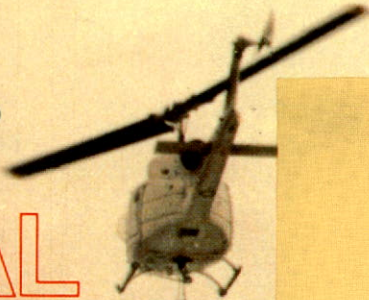


SASKATCHEWAN
POWER
CORPORATION

ANNUAL REPORT 1979



COVER: The old and the new methods of transmission line construction are shown. The horse-drawn mode of transportation in the early days is compared to the use of a helicopter by SPC in 1979.

Saskatchewan Power Corporation,
2025 Victoria Avenue,
Regina, Saskatchewan S4P 0S1

Board of Directors



Hon. J. R. Messer



Hon. G. T. Snyder



M. L. Heavin



F. M. Hodgkinson



A. N. Hynd



P. M. Kilburn



J. L. McPhee



L. Minogue



C. S. Mitchell



J. R. S. Sadler



L. H. Stevenson



D. F. Axtell

Hon. J. R. Messer, Chairman, Tisdale,
Minister of Mineral Resources

Hon. G. T. Snyder, Vice-Chairman, Moose Jaw,
Minister of Labour,
Minister of Government Services

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Homemaker

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Chairman, North-Sask Electric Ltd.,
Assistant Cabinet Secretary

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Deputy Minister, Revenue, Supply and Services

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Farmer

Mr. C. S. Mitchell, Sturgis,
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Farmer

Mr. J. R. S. Sadler, Regina,
Corporate Officer,
Crown Investments Corporation

Mr. L. H. Stevenson, Muscow,
Director, North-Sask Electric Ltd.
Farmer

Board Secretary

Mr. D. F. Axtell,
Corporate Secretary,
Crown Investments Corporation

Corporate Management

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Mr. E. B. Campbell, Deputy General Manager

Mr. W. R. Wiggins, Manager, Electric System

Mr. B. A. Steuart, Manager, Gas System

Mr. A. J. Bast, Director of Personnel

Mrs. K. D. Wellman, Corporate Legal Counsel

Mr. W. H. Correll, Manager,
Business and Information Services

Mr. L. J. Hickey, Acting Comptroller

Mr. M. F. Barabas, Director,
Research and Development

Regina
1980 March

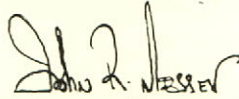
To His Honour,
C. Irwin McIntosh, Lieutenant Governor of
the Province of Saskatchewan

Sir:

I have the honour to submit herewith the Annual Report of the Saskatchewan Power Corporation for the year ended 1979 December 31, including the financial statements for the year duly certified by the Provincial Auditor and in the form approved by the Treasury Board, all in accordance with The Power Corporation Act.

I have the honour to be, Sir,

Your obedient servant,



Minister in Charge of the
Saskatchewan Power Corporation

Highlights

	<u>1979</u>	<u>1978</u>
	(\$ millions)	
Revenue from sales	385.8	331.6
Net Income	40.7	20.7
Funds from operations	79.9	57.6
Capital expenditures	<u>140.8</u>	<u>139.3</u>
Energy Sold		
— electricity (billions of kW·h) ..	7.9	7.3
— gas (billions of cubic feet)	111.0	107.9

General Manager's Report

During the past year, Saskatchewan Power Corporation (SPC) customers have experienced reasonable security of energy supply. Operating expenses have been controlled and maintained at minimum levels, consistent with serious inflation and escalating costs. Of necessity, retail rates had to be raised to compensate for increased gas supply costs and rising operating expenses. Despite the rate increases, customer costs in our large sparsely populated province are comparable to and often lower than utilities with smaller service areas and more concentrated markets. It is significant that this has been accomplished without subsidy.

Examination of the future outlook does not hold encouraging prospects for relief from the financial pressures affecting the entire economy. The Corporation cannot escape these consequences. It must and will direct its operations and planning to reduce the ultimate effects as much as possible.

Advantageous system conditions and negotiated returns from past operations have resulted in a good financial year for the Corporation. The level of earnings has permitted an increase to the rate stabilization reserve. Reinvestment of retained earnings has reduced the borrowing expenses for essential expansion programs. At the present high interest rates, the reinvestment of retained earnings provides a means of limiting future interest expense. This is important for the Corporation and for the provincial economy.

It must be recognized that many of the financial advantages of 1979 result from non-recurring events. We cannot assume the continuation of conditions favourable to system operations, including cold weather, abundant imported energy based on excess water for hydro generation in Manitoba nor rely on increased crude oil pumping.

A growing provincial population and a solid provincial economy have resulted in increases in the number of customers served and total energy demand. The Electric System served 10 125 new customers and the Gas System served 6923 new customers during 1979. Electric consumption increased by 7.6 per cent to almost 8 billion kilowatt hours and gas consumption increased by 2.9 per cent to 111 Bcf (billion cubic feet). It is significant that gas consumption for power generation decreased by 14.3 per cent, while consumption by other gas customers increased by 6.7 per cent.

By its mandate, the Corporation must maintain the ability to supply the energy needs of its customers. It is also essential that the Corporation continue to supply a secure energy position to a growing Saskatchewan economy. It is equally important that the use of capital, manpower and natural resources be controlled and limited to the need. Further, it is important to ensure the acceptability of the social and environmental consequences of the increased capability.

For many years, the Corporation has carried out a public program encouraging the wise use of energy. During the past year, the programs for energy conservation have been intensified. It is clearly in the Corporation's interest to avoid waste and thus unnecessary expansion in light of the high costs and resource usage involved. It is clearly in the customer's interest to reduce energy costs through conservation measures and by the prudent use of electric power and natural gas. The effects of conservation by customers are most apparent in the reduced gas consumption for residential heating. Programs which the Corporation co-ordinates and conducts in co-operation with other agencies will be continued and intensified. The conservation programs within the Corporation exceeded the targets for 1979 and higher goals have been set for 1980.

The field organization of both electric and gas systems was improved during the year to provide better response to customer needs, improved security of supply and increased productivity.

Ongoing interrelated programs to improve the distribution services progressed significantly. Reorganization of manpower and equipment involved continued decentralization and an increase in the total staff and machinery located in rural service areas. Some redeployment and amalgamation of district headquarters was necessary within the rural areas in order to maintain system supply security and to improve customer information and response. Concurrently, the Regina Communications Centre for off-hours customer calls was expanded and at year-end this new service was available to about 65 per cent of all customers. Visual display units and central computer access were completed in all superintendency offices to provide information on customer account inquiries in a timely and efficient manner. At the same time, a new radio and telephone access system was provided by SaskTel for province-wide system communication. All of these steps are being taken to provide the communication, resource allocation and staff deployment needed to maintain a high level of decentralized customer service.



The importance of the large Boundary Dam Power Station and its economy were recognized by further efforts to improve the availability and reliability of this station. This work involved the continuation of programs to reorganize responsibilities, provide more adequate building facilities, and to carry out a general refurbishment of the plant. Since the upgrading programs were undertaken, availability of the station has shown steady improvement. In 1979, the gain was seven per cent. Long-term coal supply for this station was improved by the negotiation of two coal supply contracts and the addition of the 2570W 69 m³ (cubic metre) dragline as well as the continuation of the Corporation's Souris Valley mine.

A 230 kV (kilovolt) interconnection from Squaw Rapids in Saskatchewan to The Pas in Manitoba was completed in 1979. This third transmission tie between Saskatchewan and Manitoba further enhanced the reliability, capacity for interchange of economic sources and access to surplus Manitoba Hydro power.

The Gas System continued to experience an interim supply surplus as did most Canadian producers and utilities. To overcome this and enhance future security, reinjection of one reservoir in the Beacon Hill field started in late 1978. Regulatory authorization was received for storage in a second reservoir in this field and reinjection reached 4 Bcf in 1979. Storage in the East Cantuar reservoir reached 17.2 Bcf. The useful storage in the four Regina salt caverns was increased to a total of 3 Bcf.

Long negotiations with Alberta regulatory agencies resulted in a significant royalty refund from past gas supplies to the City of Medicine Hat from SPC holdings in the Many Islands Field of Alberta.

Negotiation of an agreement with Saskatchewan Oil and Gas Corporation (Saskoil) was completed under which unexplored properties in both Saskatchewan and Alberta were transferred to Saskoil. Overriding production royalties were retained by SPC on the properties. With the transfer, Saskoil assumes the responsibility for future exploration to increase reserves. Lands with proven gas reserves were retained by SPC. The responsibility for development and production of proven reserves for Saskatchewan use continues to remain with SPC under the agreement.

Although the construction schedule for the first unit at the Poplar River Power Station suffered serious delay, work continued and both the station and a new coal mine near Coronach are scheduled for commercial operation in 1980. Strenuous efforts were continued to identify and deal with concerns regarding the second 300 MW (megawatt) unit at the Poplar River Station. Commitments to adequately monitor the plant's operations were made by the Corporation. Backup contingency plans, based upon the monitoring systems, were also submitted. On the basis of a detailed analysis, the Provincial Government authorized construction of the second unit. This work was started in late 1979 and is proceeding.

The Corporation's relationship with both the International Brotherhood of Electrical Workers (Local 2067) and the Oil, Chemical and Atomic Workers (Local 9-649) continued in a spirit of mutual respect and understanding. As a result, benefits were achieved for the Corporation, its employees and its customers. Cooperation was most apparent in programs of public and employee safety and in staff organization.

Public safety programs and safety and training for employees were continued and intensified during the year. The training programs will provide the human resources which will be necessary to respond to high levels of retirement and replacement.

The Corporation's research and development activities continued to examine unique Saskatchewan conditions as a means of improving the electric and gas systems, and to examine areas affecting the utilization and conservation of energy by customers.

The continued efforts and dedication of Corporation employees made possible the achievements of the past year. I, therefore, wish to acknowledge their work and contribution.



F. G. Ursel
General Manager

Generation Statistics

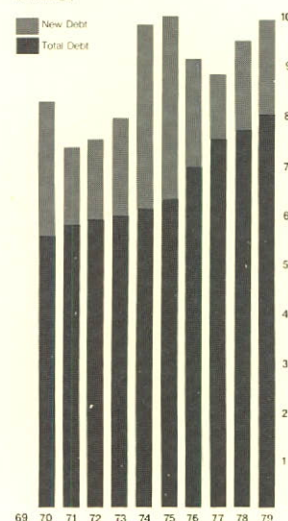
	1979 Rated Generating Capacity (kW)	1979 Gross Generating (kW·h x 10 ³)	1979 Generation % Increase or (Decrease) From 1978
HYDRO			
Squaw Rapids	280 000	925 823	(10.98)
Coteau Creek	187 000	676 704	(6.89)
Total Hydro	467 000	1 602 527	(9.30)
STEAM			
Boundary Dam	874 500	5 678 030	10.45
Estevan	70 000	338 996	0.51
A. L. Cole	108 000	27 482	(41.40)
Queen Elizabeth	232 000	747 687	(7.02)
Regina "A"	65 000	3 752	(37.79)
Total Steam	1 349 500	6 795 947	7.27
INTERNAL COMBUSTION			
Success	45 000	198	(77.08)
Landis	70 000	45 012	(60.45)
Total Internal Combustion	115 000	45 210	(61.58)
Total Generation	1 931 500	8 443 684	2.72
Less Station Service		501 932	3.26
Net Generated		7 941 752	2.69
Net Purchased		1 009 159	102.16
Net System kW·h		8 950 911	8.72
Northern Diesel Plants	7 575	7 477	14.29
Northern Purchases		23 116	16.34
Total	1 939 075	8 981 504	8.74
Annual Peak Load (Net) (1979-12-10-17:50)	1 632 000		
Annual Peak Load (Gross) (1979-12-10-17:50)	1 702 000		
Minimum Load (Net) (1979-07-05-05:00)	585 000		

Gas Supply Sources

Billions of Cubic Feet at 14.65 psia

SOURCES	1979	1978	% Increase (Decrease)
ALBERTA			
TransCanada PipeLines	54.4	50.1	8.6
Field Suppliers	17.4	15.3	13.7
SPC Production	17.4	13.4	29.9
Total (Alberta)	89.2	78.8	13.2
SASKATCHEWAN			
Field Suppliers	34.7	34.1	1.8
SPC Production	1.8	2.2	(18.2)
Total (Saskatchewan)	36.5	36.3	0.6
Total Volume Delivered	125.7	115.1	9.2
Less Storage, Fuel and Other Uses	14.7	7.2	103.8
Total Sold	111.0	107.9	2.9

EFFECTIVE RATES
OF INTEREST
(percentage)



Financial Summary

Revenue

The Corporation received total revenue of \$398.0 million in 1979, an increase of \$55.7 million or 16.3 per cent over 1978.

Gas sales revenue increased to \$169.6 million with only modest growth in volume. A significant part of the increase represents higher costs the Corporation must pay for its natural gas supplies which, in turn, are passed on to customers.

Electric sales revenue increased by 15.7 per cent to \$216.2 million. Electric rates were increased to residential and farm customers by 7.5 per cent in June, after two years of constant rates. Rate increases for other customer categories were processed at various times in 1979.

Expenses

Total expenses for 1979 were \$357.3 million, an increase of \$35.7 million or 11.1 per cent. Cost of gas sold rose by \$7.0 million or 7.6 per cent on a volume increase of 2.9 per cent. The continuing rise in the cost of gas is a result of the Federal Government policy of gradually increasing domestic oil and gas prices toward world prices.

Operating and maintenance expenses increased 16.1 per cent. Higher costs of materials and supplies and increased labor costs were major factors in this in-

crease. A larger amount of long-term debt outstanding at higher average interest rates resulted in net interest expense of \$62.3 million, an increase of \$3.9 million over 1978.

Earnings

Net earnings for the Corporation were \$40.7 million, compared to \$20.7 million in 1978.

During 1979, the Corporation increased the rate stabilization reserve by \$7.7 million. The reserve balance of \$13.7 million at 1979 December 31 has been segregated from earnings retained in the Corporation during years when uncontrollable factors such as weather and water flow conditions contributed to a better than average return on the Corporation's assets.

The reserve will be used to cushion rate increases in future periods when less than average returns are experienced by the Corporation.

Capital Expenditures and Financing

Expenditures for electric capital projects and future gas supply and facility additions totalled \$140.8 million. Ongoing construction for the first unit at Poplar River Power Station as

well as major transmission facilities made up a significant portion of the total expenditure.

To finance the capital construction and operations, the Province borrowed in the Canadian market and advanced \$60.0 million to the Corporation. The sale and leaseback of the Coronach dragline contributed a further \$32.0 million.

Capital Program

Expenditures by major category were as follows:

	1979	1978
	(\$ million)	
Electric Plant		
Generation	73.8	84.9
Transmission . . .	18.4	14.6
Distribution . . .	23.6	16.5
	115.8	116.0
Gas Plant		
Exploration & Production . . .	10.1	6.1
Gathering, Treatment & Compression . .	1.3	1.7
Transmission & Storage6	3.4
Distribution . . .	6.8	7.2
	18.8	18.4
General Plant . . .	6.2	4.9
Total	140.8	139.3

Supplying Energy

Customers

The Corporation continued to serve a growing number of customers with electricity and natural gas.

The number of electric customers at year-end was 347 997, an increase of 10 125. New customers included 7500 in the residential category. At year-end, there were 215 684 gas customers, an increase of 6923 over 1978. Most of these were residential customers.

Demand for Energy

Total gas demand increased 2.9 per cent to 111 Bcf for the year. Residential and commercial customers used five per cent more gas while industrials were up three per cent.

During the year, Corporation power plants used 14.3 per cent less gas than in 1978, while growth for all other customers averaged 6.7 per cent.

Despite the fact that 1979 was a colder than normal year, the average gas consumption per customer was below pre-1975 levels, indicating that customers are adopting conservation measures.

The maximum use of natural gas in a 24-hour period was 624.3 MMcf (million cubic feet) 1979 February 16. The record was 636.4 MMcf set in 1977.

Consumption of electricity increased by 7.6 per cent over 1978 to nearly eight billion kilowatt hours.

Residential and farm categories used 6.8 per cent more electricity. Consumption by industrial customers increased 8.4 per cent over 1978, with most growth caused by oil pipeline pumping. Commercial consumption grew 9.1 per cent over 1978.

The net provincial peak load in the electric system was 1 632 000 kW (kilowatts), a 3.6-per-cent increase over 1978.

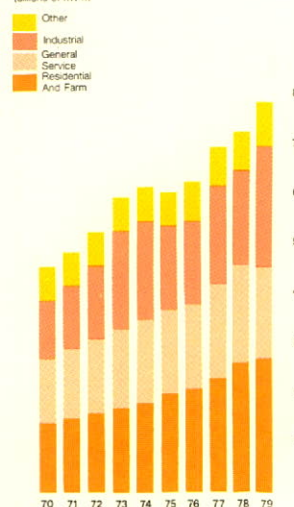
A potential peak of a further 4000 kW was avoided by cut-backs in supply to industrial customers with interruptible provisions in their contracts.

The maximum daily consumption of electricity was 32 444 594 kW·h (kilowatt hours) on 1979 February 16. This was 3.9 per cent greater than the daily maximum in 1978.

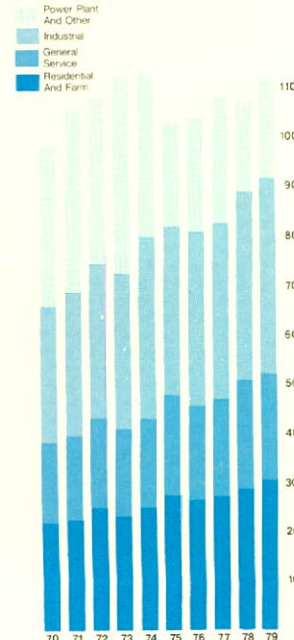
Energy Supply

During 1979, the system's electrical energy continued to be supplied by thermal and hydro generation. Each source provided approximately the same percentage of energy as in 1978, with hydro plants providing 18 per cent, thermal stations providing 71 per cent, and the remaining 11

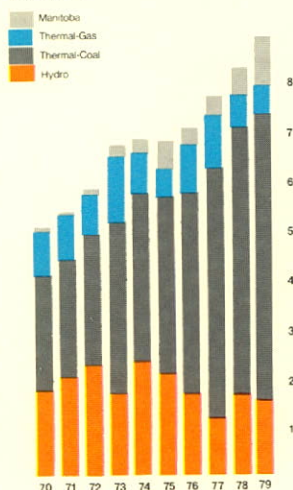
ELECTRICITY SOLD
(billions of kW·h)



GAS SOLD
(billions of cubic ft. @ 14.65 psia)



ELECTRICITY SOURCES (billions of kW·h)



per cent being imported hydro energy.

Boundary Dam Power Station, Estevan, and Estevan Generating Station used 4 670 000 Mg (megagrams) of lignite coal in 1979, an increase of 9.6 per cent over 1978. The Boundary Dam station provided close to 60 per cent of the total system requirements.

Use of Alberta sub-bituminous coal at Queen Elizabeth Power Station, Saskatoon, decreased by 23 per cent from 1978, and produced 3.9 per cent of the system electric energy.

The electric system has continued to rely less on the more expensive natural gas for thermal generation, with gas consumption in power plants declining by a further 1.1 Bcf from 1978 levels of 7.9 Bcf.

The lower than average hydro generation resulted from low river flows. The South Saskatchewan River recorded only 73 per cent of median flow while the North Saskatchewan River was 94 per cent of median flow.

The Corporation purchased 1 009 159 MW·h (megawatt hours) of electrical energy from Manitoba Hydro, an increase of just over 100 per cent over the energy imported in 1978.

The Corporation continues to draw from its natural gas sup-

plies in underground storage facilities as required to meet peak customer demands. Storage caverns in Regina were expanded, bringing the usable storage at Regina to 3.1 Bcf. Total usable storage in the province is now 14.0 Bcf with the Corporation's storage facilities able to produce up to 280 MMcf daily or 44.8 per cent of peak day needs for 1979.

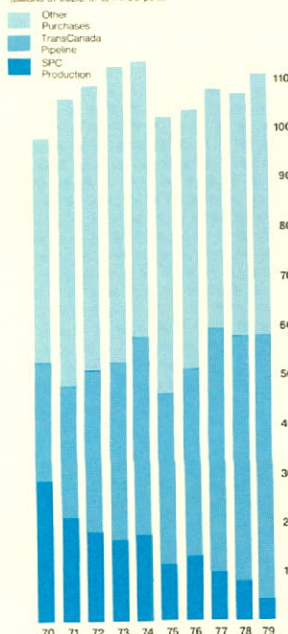
Cost of Energy

The Corporation is facing continued increasing costs in providing energy to customers. Among the major factors in cost increases are rising fuel prices.

During 1979, rates were increased for all electric customers. On January 01, rates for large industrial customers went up by an average of 18 per cent. Rates for other industrial and commercial customers increased 11 per cent February 01. Residential and farm customers experienced an increase of 7.5 per cent in June.

Gas rate increases to a maximum of 7.5 per cent were applied to residential and small commercial customers in June. This was followed by a further six cents per thousand cubic feet increase to all customers in August as a result of an Alberta border price increase at that time.

GAS SOURCES (billions of cubic ft. @ 14.65 psia)



The Utility Grows

As the economy of the province continues to grow, the number of customers and the energy needs of the customers also increase. To meet these needs, the Corporation continues to prepare for expansion of its energy facilities.

Construction on one of the major facets of the Corporation's expansion, the Poplar River power project, continued at an active pace during 1979.

Work continued on the first unit at Poplar River with installation of the boiler and mechanical and electrical auxiliary equipment as well as the coal and ash handling facilities.

Some key developments in the construction activities were completion of the turbine assembly in September and a hydro static test of the boiler in October.

Preparation for commissioning has started and will continue until the station begins commercial operation in 1980.

The work force on the first unit at Poplar River reached a peak of 631 in October. The Corporation provided food and lodging for 505 of these workers at its camp on the construction site.

The Saskatchewan government has authorized the Corporation to proceed with construction of the second unit at the Poplar River station for completion in the winter of 1982-83.



Poplar River Power Station, Coronach, Sask.



Erection of structures for new inter-provincial tie-line between Saskatchewan and Manitoba.

In order to remain close to the construction schedule, design was started early in 1979. Site work started late in 1979, following project approval in November.

The Corporation completed a third interprovincial tie-line with Manitoba. The new 230 kV (kilovolt) transmission line was constructed between Squaw Rapids and The Pas, Man. Total length of the line is 169 km, with 116 km on the Saskatchewan side.

Some of the work was done when the ground was frozen early in the year. The remainder of the line was completed under severe construction conditions involving difficult muskeg terrain and unfavorable weather.

The structures used were specially designed, utilizing wood poles supported by screw-type foundation anchors and side guys. In one section of the extremely severe muskeg conditions, 17 of the structures were erected by helicopter.

A 138 kV line was built to supply power to two new draglines installed at existing mines at Estevan and Bienfait. The project consisted of a 4.6 km double circuit and a 19.3 km single circuit line.

The Corporation built 7.4 km of single pole, single circuit 138 kV line to serve an oil pipeline pumping station at Eyehill.

Construction began on a 72 kV power line from Turtleford to a new substation near Paradise Hill to meet increasing loads in the area. The Corporation constructed new 72 - 25 kV substations at Prince Albert South, Cory and Morse.

Other new power lines in 1979 included 599 km of 14.4 kV single phase lines and 220.5 km of 25 kV three phase line.

The Corporation's northern subsidiary, North-Sask Electric Ltd., continued to grow to meet the electrical needs of Northern Saskatchewan residents. Major expansion activities in 1979 included the installation of two 250 kW generating units at Fond du Lac and Southend. A distribution system and generating facilities were also commissioned to serve residents of Missinipe.

The utility increased its construction staff complement at Buffalo Narrows because of the larger number of customers in the area.

The growth in the north is also reflected in the over-all increase in electrical consumption of 21.1 per cent.

Expansion in the gas system consisted largely of ongoing activity to acquire and develop further natural gas reserves in Saskatchewan and Alberta. These involved a total investment by the Corporation of \$9.2 million in 1979, bringing total expenditures since the program began in 1972 to \$90.8 million.

A new agreement came into effect October 01 involving transfer of exploration responsibilities to Saskatchewan Oil and Gas Corporation (Saskoil), with Saskatchewan Power Corporation retaining the responsibility for contracting, developing and producing of natural gas from existing fields for Saskatchewan consumers.

In 1979, the Corporation purchased General American Oil's remaining interest in the Beacon Hill field. The Corporation now has proven reserves, either through ownership or contract, to a total of some 2503 Bcf, enabling the Corporation to meet future gas requirements for 22.5 years at 1979 rate of consumption.

Maintaining the System

Renovations

While expanding the system to meet growing demand for energy, the Corporation is continuing to upgrade and update existing facilities to increase efficiency and keep abreast with other changes.

Upgrading took place on several transmission lines including Elstow to Wolverine (138 kV), Condie to Wolverine (230 kV) and North Battleford to Queen Elizabeth (138 kV), Assiniboia to Poplar River (230 kV) and Assiniboia to Pasqua (138 kV).

The Corporation also improved and increased the capacity of many of its substation facilities.

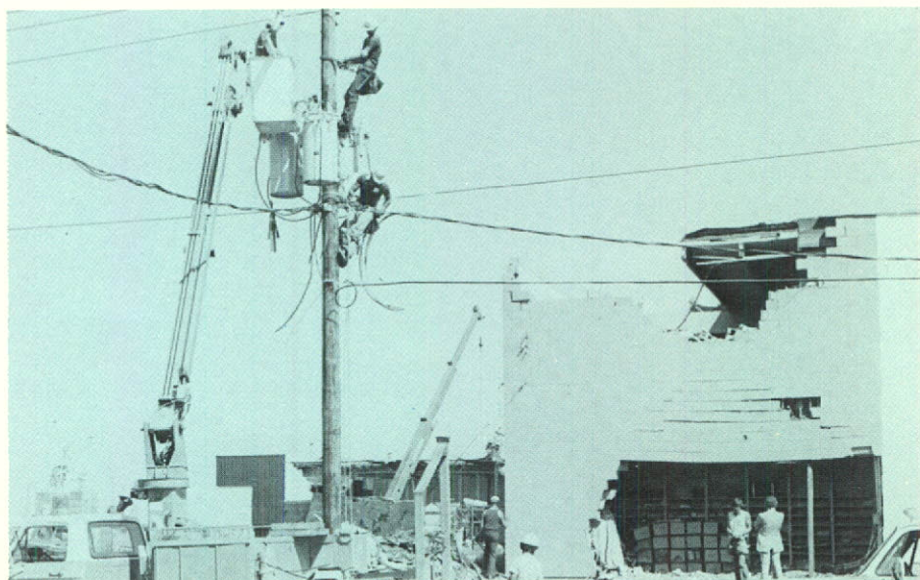
With the Corporation's continued emphasis on energy conservation, serious attention is being given to adopting standards that are conducive to energy saving in SPC buildings.

The Corporation is using the opportunity to apply new insulation standards when renovating old buildings or constructing new buildings.

During the year, new buildings were constructed or existing buildings renovated at North Battleford, Unity, Oxbow, Gravelbourg, Moose Jaw, Swift Current, Tisdale, Porcupine Plain, Melville, Lumsden, Wynyard, Saskatoon, Yorkton, Grenfell, Moosomin, Meadow Lake, Kindersley, Estevan, Aneroid and Perdue.



Reception area in renovated Moose Jaw district office.



SPC crews repair damage to poles, lines and transformers following August 8 tornado in Regina.

Repairs to System

A tornado struck Regina August 08 and left behind it wide-spread destruction. There was damage to power lines and services in the northern section of the city and for a few kilometres east of the city.

Wind and fallen trees broke power lines and snapped off poles. Other damage included broken conductors, crossarms and insulators, and services ripped from buildings.

The storm did not significantly affect the provincial grid. There were, however, three major outages to the grid at other times in the year affecting most electric customers.

Two outages occurred in June, both as a result of difficulties with a protective relay at Condie Switching Station near Regina. A third outage in August was caused by difficulties with the direct current transmission system in Manitoba.

Preventive Maintenance

The Corporation's efforts in terms of preventive maintenance and energy conservation were aided by the use of an infra-red

camera. With systematic checking of equipment with the camera, heating of electrical connections can be detected before it causes a "burn" or failure of the equipment.

Other uses are being made of the infra-red camera, such as detecting heat loss from buildings. The Corporation has checked switching stations for heat loss, and where possible, insulation has been installed to save energy.

Communications Centre

To further facilitate communication between customers and the Corporation, a Communication Centre was established during the year.

Through this centre, customer calls regarding service after normal working hours are received in one central location. The centre in turn contacts an SPC representative in the district who then responds to the call.

By the end of the year, seven of the Corporation's 10 superintendencies were being served by the communication centre.

In-House Conservation

Energy Conservation continues to have a high priority in all areas

of the Corporation. Many plans and projects are being approached with energy conservation in mind.

The first phase of an in-house program concluded in 1979 June, with a target of 10 per cent energy reduction having been set for this first phase. Results showed an 11.5-per-cent reduction in electrical consumption and 13.4-per-cent reduction in natural gas use compared to the previous 12 months' figures. A goal of a further 10-per-cent reduction has been set for the next 12-month period.

The Corporation's internal programs to save energy continue to show encouraging results. Measures being adopted in the head office building include shutting down air circulation fans and the air conditioning system after normal working hours, reducing the level of lighting without adverse effects on working conditions, controlling of temperatures under air conditioning and heating conditions and controlling of supply of power to the parking lot in the winter.

The installation of more efficient air conditioning systems in both the Saskatoon and Prince Albert offices have resulted in savings of 25 per cent and 20 per cent respectively in the amount of energy used for that purpose.

Research and Development

The past year saw significant achievements in the Corporation's research and development activities in the fields of generation, transmission, distribution and use of electricity and natural gas, conservation techniques and unconventional energy sources.

Storm Tracking

The Corporation, in conjunction with the Canadian Electrical Association, is evaluating a storm tracking device for use by electric utilities. The device, known as the Ryan Stormscope, displays the location of lightning activity superimposed on a map of the Corporation's electrical transmission system.

The stormscope is installed in the Corporation's Grid Management Centre in Regina. It provides information on when and where electrical storms may strike the system. The power system operator can then rearrange the generation and transmission pattern to reduce the risk of an outage.

The system was successfully used during the year. The most crucial test was on August 08 when a tornado struck parts of Regina and area. The electrical disturbance accompanying the storm was monitored from beginning to end by Grid Management Centre. The storm caused no major outage problems on transmission lines.

Remote Industrial Metering

A microcomputer-based system is being developed to allow monitoring of gas and electrical consumption of large industrial customers from a central location through the telephone network. Initial work on this system was carried out at the University of Saskatchewan under contract with SPC.

Lignite Reactivity Studies

The Corporation is studying the reactivity of lignites from various deposits with air, oxygen and steam under varying pressures.

It is hoped these gasification experiments will lead to a better understanding of coal conversions, help in designing and installing future full-scale gasifiers, and indicate which coal fields lend themselves better to gasification.

Energy Conservation

The growing concern about energy conservation has been followed by an increase in the promotion of energy conservation techniques. The Corporation continued in 1979 to monitor the effectiveness of existing methods of conserving energy in homes, businesses and industries.

The Corporation also studied the water heater, one of the larger energy users in homes.

Small Hydro

The Corporation has conducted preliminary engineering studies and an environmental overview assessment for a 1000 kW plant that has been proposed for the Rapid River, near Stanley Mission.

The Corporation has been searching for better and more economical alternatives to diesel generators that now provide electricity to remote northern communities. A small hydro plant has been identified as one possibility wherever local conditions of water flow and head are suitable.

Wood Gasification

Commissioning of a wood gasification plant took place early in 1979 at a plywood plant at Hudson Bay, Saskatchewan. The project is jointly sponsored by Saskatchewan Power Corporation, Saskatchewan Forest Products Corporation and the Federal Government.

The pilot project involves an investigation of the technical and economic feasibility, environmental implications and practicality of wood gasification for power generation in isolated northern communities. It will also examine the use of wood waste from forest product industries to produce fuel gas for use by these industries. If the project is successful, it could eventually lead to development of a related Canadian technology.

Public Affairs

Hearings

The Water Quality Board of the International Joint Commission submitted its interim report on the Poplar River water quality in July. A final report based on the commission's public hearings in September and October is not expected until mid-1980.

Litigation

The Corporation still has pending before the Federal Court of Appeal an appeal questioning the manner in which the National Energy Board in 1976 December ruled on a contract between SPC and TransCanada PipeLines Ltd. for gas returned to SPC under the purchase agreement.

Plant Closure

The Regina Power Plant was officially closed in the latter part of 1979. The Corporation found it was no longer economical to keep the plant in active operation because of its reliance on natural gas and because of the availability of power from the more economical lignite coal and hydro generation.

The Corporation is participating in a task force to study the future of the geese in Wascana Centre where the plant is located.

Energy Conservation

While endeavoring to meet the energy needs of Saskatchewan people, the Corporation also regards it as highly important to advise and assist consumers of electricity and natural gas on how to use them wisely and safely.

Although there is no immediate danger that Saskatchewan energy sources will be in short supply, much emphasis is being placed on advising customers on how to save energy and money by adopting conservation practices.

In 1979 March, the Corporation established an Energy Conservation Division to encourage wise and efficient use of energy in the home, farm, business and industry.

The energy conservation message has been conveyed through talks, slide presentations, publications, interviews and advertising.

An educational program was started in 1979 for selected target groups such as schools, hospitals, hotels and recreational centres. The programs include seminars and individual energy audits.

In November, the Corporation launched a three-part campaign directed to residential customers. The three-month program includes a contest in which customers suggest ways to save energy and reduce power bills. There is also a rebate program in which customers can receive a \$5 rebate for buying a timed switch. Also, the Corporation plans to sell insulation blankets for home hot water heaters starting in the new year.

Conservation efforts are also continuing to help commercial and industrial customers save energy.

Equalized Payment

The Corporation continued to encourage customers to make use of the Equalized Payment Plan (EPP) in order to reduce the impact of high winter utility bills. At the end of 1979, there were 41 442 customers on the EPP compared to 33 584 the year before. The EPP allows customers to make equal monthly payments on their energy bills to reduce the impact of seasonal fluctuations.

Employee Relations

Labor Relations

During 1979, employees of the Saskatchewan Power Corporation were operating under the terms of two-year collective bargaining agreements that were signed in 1978. Late in the year negotiations were in progress for renewed agreements.

Electrical employees are represented by the International Brotherhood of Electrical Workers Local 2067 and gas and clerical employees are members of the Oil, Chemical and Atomic Workers Union Local 9-649.

Development and Training

The Corporation's development and training program consisted of courses for management staff and electric and gas trades personnel, seminars and workshops for non-management staff and safety training for all staff.

Some 606 employees attended management and supervisory development programs. Courses emphasized human relations and communication. They included topics such as interviewing, leadership effectiveness, oral communication, writing, job evaluation, labor relations, time management, management by objectives and principles of supervision.

Electric and gas technical trades courses involved 297 employees for a total of 3378 man days.

More than 960 employees attended seminars and workshops involving 3280 man days. Topics included electronics, vehicle operation, tree trimming, corrosion prevention, grounding and bonding, district office administration and metric awareness.

Safety training covered topics such as first aid, defensive driving, pole top rescue, fire fighting and cardio pulmonary resuscitation. Courses were attended by 911 employees and in total involved 1092 man days.

Safety

The Corporation's 1979 safety action plan was successful in terms of progress in developing positive safety attitudes. It has resulted in greater co-operation among all employees to identify, report and remove potential safety hazards.

The safety program continues to benefit from the work of the joint union-management committees as well as the Occupational Health and Safety committees.

The program used proven and successful methods and new ideas to help reduce or eliminate accidents.

In 1979, there were 65 lost time injuries, compared with 73 the year before. Vehicle accidents increased from 170 in 1978 to 195 in 1979.

The Corporation won a safety award from the Canadian Electrical Association and one from the Canadian Gas Association for reducing lost time injuries in 1978.

In order to reduce the number of public accidents involving natural gas and electrical facilities, the Corporation intensified its safety advertising as part of the public safety awareness program.

The Corporation continued to conduct its public safety information campaign in rural areas with the help of field staff. Farm safety programs were also directed to elementary schools and 4-H clubs.

There were three public fatalities involving rural power lines in 1979, the same number as in 1978. Public injuries dropped significantly from 25 in 1978 to 15 in 1979.



Electronics training class at training centre in Weyburn.



SPC robot helped carry conservation message at Mexabition in Regina.

Employment

During the year, more than 700 temporary and 100 permanent employees were hired from more than 5000 applications for positions in SPC. The number of employees averaged 3112 monthly.

The year marked the termination of service for 65 employees who retired.

The Corporation also honored 162 employees who reached various milestones in their service in 1979. Of these employees, one was honored for 40 years of service, six for 35, 24 for 30, 42 for 25 and 89 for 20.

Information Programs

The Corporation disseminated information to employees on topics such as customer relations and employee benefits.

During the year, nine retirement planning meetings were held in various parts of the province for employees and spouses.

The Corporation introduced an improved shared cost long-term disability income protection program for all employees. So far, management staff and employees in the OCAW union have entered this voluntary program.

Mining and Environment

The mining of coal for use as a fuel in power generation is becoming significant in the operations of Saskatchewan Power Corporation. Mining activities for lignite coal started at Poplar River coal mine in the latter part of the year and mining for lignite continued during the year at the Corporation's Souris Valley Mine, near Estevan.

The Souris Valley Mine produced 331 701 Mg of coal for delivery to the Boundary Dam station.

At Poplar River, while no coal was mined because of construction delays, the new 69 m³ dragline stripped 3 052 490 m³ of overburden to uncover 416 420 Mg of coal.

The dragline at Poplar River was officially commissioned into service and named "Great Gus" in October in honor of Gus Sorsdahl, a pioneer homesteader of the area. Construction of the machine had started in 1977 March and was completed in 1978 August.

Expansion of the Corporation's coal mining activities included completion of a coal mining and loading facility at the Poplar River mine.

The railroad from the loading facility to the power plant was almost complete at the end of the year and a mine service building was built.

The Corporation places much emphasis on the importance of continuous land reclamation as part of its strip mining operations.

Reclamation activities in the Estevan area in 1979 included levelling of spoil piles covering an area of about 40 ha (hectares). About 4 ha were seeded on a manure-mulch test plot at Souris Valley Mine.

At the Poplar River mine, reclamation, has started with removal of top soil on about 52 ha. Some levelling and seeding was also done.

In the Poplar River station area, weed control continued on about 485 ha of land owned by the Corporation.

In September, the Corporation added another giant dragline for coal mining for power generation in Estevan. Erection of the machine had started in 1977 July and was completed in 1979 April.

A ceremony was held in September to commission the dragline and name it "Big Lou" after Lignite Louie, the symbol of the City of Estevan.

In order to improve information on the coal reserves available in southern Saskatchewan, the Corporation continued its program of drilling, logging and peizometer installation.

Studies

In addition to reclamation programs, the Corporation is involved in various activities concerned with minimizing or eliminating adverse effects to the environment by electric and gas operations.

Following environmental studies, the Corporation received approval to build two major electrical transmission lines. These are the Boundary Dam to Tioga, N.D. and the Squaw Rapids to The Pas, Man. tie-lines.

Environmental approvals were also given to the Corporation for other transmission lines from Boundary Dam to Bienfait, Poplar River to Condie and a 138 kV tap off a transmission line near Eyehill.

As part of its continued investigations for future hydro generation, the Corporation started environmental and engineering studies on two sites on the Saskatchewan River.



FINANCIAL RESULTS 1979

SASKATCHEWAN POWER CORPORATION

and wholly-owned subsidiaries

North-Sask. Electric Ltd. — operates electric generating plants and distribution systems at various locations in the northern part of the province.

Many Islands Pipe Lines Limited

Many Islands Pipe Lines (Canada) Limited — gathers, produces and purchases gas in Alberta for the use of the Corporation and transports gas through its interprovincial transmission lines from the Alberta-Saskatchewan border to Saskatchewan Power Corporation facilities.

Consumers Oil Limited — engages in gas development and production in western Canada.

Consolidated Statement of Earnings and Earnings Retained in the Corporation

For the years ended December 31

	Note <u>Reference</u>	<u>1979</u>	<u>1978</u>
		(in thousands)	
REVENUE			
Electricity sales.....		\$216 161	\$186 875
Gas sales		169 629	144 720
Other		<u>12 256</u>	<u>10 725</u>
		<u>398 046</u>	<u>342 320</u>
EXPENSES			
Fuel, water and purchased electricity.....		40 001	34 548
Cost of gas sold.....	1	100 037	92 993
Operating, maintenance and administration	2	117 188	100 974
Depreciation and depletion	3	<u>37 812</u>	<u>34 765</u>
		<u>295 038</u>	<u>263 280</u>
EARNINGS BEFORE INTEREST		<u>103 008</u>	<u>79 040</u>
INTEREST EXPENSE			
Long-term debt	4	72 455	68 609
Other		6 841	5 586
Capitalized.....	4	<u>(17 033)</u>	<u>(15 842)</u>
		<u>62 263</u>	<u>58 353</u>
NET EARNINGS		40 745	20 687
EARNINGS RETAINED IN THE CORPORATION			
At beginning of year.....		193 107	182 720
Earnings appropriated to Rate Stabilization Reserve.....		(7 700)	—
Dividends to Crown Investments Corporation		<u>(16 500)</u>	<u>(10 300)</u>
At end of year.....		\$209 652	\$193 107

See major accounting policies and notes.

Consolidated Statement of Changes in Financial Position

For the years ended December 31

	<u>1979</u>	<u>1978</u>
	(in thousands)	
SOURCE OF FUNDS		
Net earnings	\$ 40 745	\$ 20 687
Transactions not requiring cash:		
Depreciation and depletion	37 812	34 765
Other	<u>1 307</u>	<u>1 680</u>
	79 864	57 132
Long-term debt — Province of Saskatchewan	58 950	129 223
Contributions in aid of construction	7 309	6 620
Capital lease proceeds	32 085	—
Gain on cancelled securities	3 333	—
Other	<u>3 568</u>	<u>6 117</u>
	185 109	199 092
APPLICATION OF FUNDS		
Capital expenditures	140 774	139 290
Reduction in long-term debt	35 413	82 776
Dividends	16 500	10 300
Other	<u>11 837</u>	<u>4 469</u>
	204 524	236 835
DECREASE IN WORKING CAPITAL	<u><u>\$ 19 415</u></u>	<u><u>\$ 37 743</u></u>

See major accounting policies and notes.

Consolidated Statement

As at

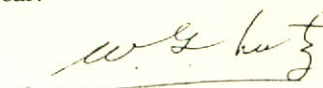
	<u>Note Reference</u>	<u>1979</u> (in thousands)	<u>1978</u>
UTILITY PLANT			
Utility plant in service, at cost	11	\$1 349 609	\$1 246 954
Less accumulated depreciation & depletion		<u>410 839</u>	<u>378 021</u>
		938 770	868 933
Construction in progress		<u>230 483</u>	<u>198 298</u>
		<u>1 169 253</u>	<u>1 067 231</u>
CURRENT ASSETS			
Temporary investments		28 948	39 242
Accounts receivable and unbilled revenue		73 563	67 247
Inventories, at cost		33 636	27 593
Prepaid expenses		<u>1 725</u>	<u>1 585</u>
		<u>137 872</u>	<u>135 667</u>
DEFERRED CHARGES AND OTHER ASSETS . .			
	6	<u>57 670</u>	<u>61 037</u>
		<u>\$1 364 795</u>	<u>\$1 263 935</u>

Auditor's Report

To the Members of the Legislative Assembly
Province of Saskatchewan

I have examined the consolidated statement of financial position of Saskatchewan Power Corporation as at 1979, December 31, and the consolidated statements of earnings and earnings retained and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these consolidated financial statements present fairly the financial position of Saskatchewan Power Corporation as at 1979, December 31, and the results of its operations and 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.



W. G. Lutz, C.A.,
Provincial Auditor.

Regina, Saskatchewan
1980, February 29

of Financial Position

December 31

	<u>Note Reference</u>	<u>1979</u> (in thousands)	<u>1978</u>
CAPITALIZATION			
Equity			
Earnings retained in the corporation		\$ 209 652	\$ 193 107
Rate stabilization reserve		13 700	6 000
		<u>223 352</u>	<u>199 107</u>
Contributions in aid of construction		66 706	63 087
		<u>290 058</u>	<u>262 194</u>
Long-term debt net of sinking funds	8	839 964	822 963
Obligation under capital lease	7	31 612	—
		<u>1 161 634</u>	<u>1 085 157</u>
CURRENT LIABILITIES			
Bank indebtedness		7 990	6 153
Dividend Payable		16 500	10 300
Accounts payable and accrued liabilities		77 918	65 499
Long-term debt due within one year	7, 8	75 436	74 272
		<u>177 844</u>	<u>156 224</u>
CUSTOMER DEPOSITS		6 245	5 776
DEFERRED REVENUE		19 072	16 778
		<u>\$1 364 795</u>	<u>\$1 263 935</u>
COMMITMENTS AND CONTINGENT LIABILITIES	9		

See major accounting policies and notes.

Major Accounting Policies

Consolidation — The consolidated financial statements include the financial position and operating results of the four wholly-owned subsidiaries of the Saskatchewan Power Corporation.

Customer Capital Contributions — Capital contributions are required from customers when the cost of providing service is expected to exceed estimated revenue to be earned over a period of time. Where the deficiency is expected to continue beyond the estimated life of the facilities required to serve such customers, the contribution is classified as contributions in aid of construction. Where the deficiency is expected for only a portion of the life of the facilities, the contribution is classified as deferred revenue and amortized into income over an appropriate period.

Fixed Assets — Fixed assets include electricity and gas supply facilities (generation, production, transmission and distribution) and general plant (buildings, office and service equipment). Cost includes direct material and labor and overhead costs such as engineering and administration that are considered applicable to the capital construction program. Interest on funds used during construction is capitalized at the weighted average interest rate on current year long-term and short-term borrowings.

The cost of additions to and replacement of fixed assets is capitalized when service life is extended. The cost of fixed assets retired, less the proceeds of sale, is charged to accumulated depreciation. When the complete asset unit is retired a gain or loss is recognized.

Depreciation — Depreciation is calculated on a straight-line estimated service life basis for the various classes of property except for gas production and gathering systems for which the unit-of-production method is used. Estimated service lives of the major assets are as follows:

Electric System

Generation

Hydroelectric	50 years
Thermal	30 years
Capital lease	35 years

Transmission

Lines	40 years
Switching stations	30 years

Distribution

Oilfields	20 years
Rural and urban overhead	30 years

Gas System

Transmission lines	28 years
Distribution systems	25-40 years

Depletion of Gas and Coal Properties — Depletion of gas and coal properties is calculated using the composite unit-of-production method based on estimated remaining recoverable gas and coal reserves and the unamortized costs of these reserves.

Gas and Coal Exploration Costs — The Corporation follows the full cost method of accounting for the acquisition cost of gas and coal in place and exploration and development costs. All costs of land acquisition, geological and geophysical expenditures, rentals on undeveloped properties, costs of drilling productive and non-productive wells, overhead related to exploration activities and interest are capitalized and form part of plant in service.

Foreign Exchange on Long-Term Debt — All long-term debt payable in foreign currencies is recorded in Canadian dollar equivalents using exchange rates prevailing at year end. Unrealized gains and losses related to these foreign exchange translations, net of accumulated charges to income, are amortized to income over the remaining term of each obligation.

Accrued interest on the foreign long-term debt is recorded at exchange rates prevailing at year end. Interest paid during the year on foreign currency is translated at rates prevailing at the time of the transaction. Foreign currency gains and losses relative to these items are charged to income in the current period.

Amortization of Debt Costs and Gains — Unamortized debt discounts and expenses applicable to advances received from the Province of Saskatchewan are charged to income in equal annual amounts over the period to the maturity or early maturity option, where applicable, of the debt.

From time to time, the Province of Saskatchewan cancels, before the maturity thereof, Province of Saskatchewan debentures held as investments in

sinking funds for the repayment of such debentures. Advances from the Province to the Corporation which were initially financed by the cancelled securities are repaid and the difference between the book value and par value of the cancelled debentures is amortized into income on a yield basis over the remaining term of the debentures cancelled.

Superannuation — The Corporation's financial obligations for the superannuation of its employees are legislated in Sections 35 and 36 of the Power Corporation Superannuation Act and Section 42 of the Superannuation (Supplementary Provisions) Act, 1977.

The Corporation meets its obligation under the Power Corporation Superannuation Act for employee superannuation allowances payable in the

future by making regular payments into the Power Corporation Superannuation Fund equal to the annual charges against income for such allowances. The charges against income are calculated at the actuarially determined rate necessary to provide for future superannuation benefits over the remaining working lives of the employees. Actuarial valuations are carried out approximately every three years.

The Corporation meets its obligations under the Superannuation (Supplementary Provisions) Act by making regular payments to the Public Employees (Government Contributory) Superannuation Plan and charges against income amounts equal to the employer contribution required under the provisions of the Act.

Notes to the Financial Statements

1. In 1969, the Corporation entered into an agreement for the purchase of gas by TransCanada PipeLines over a 5½ year period. The agreement provides for the return to the Corporation of a like amount at the same price. On application by TransCanada PipeLines, the National Energy Board ruled that effective 1976, November 1, the price to be paid by the Corporation for gas returned by TransCanada under this agreement would be the price established by agreement between the Alberta and Federal Governments plus transportation. This ruling by the National Energy Board is currently under appeal by the Corporation to the Federal Court of Canada. Delivery of gas to the Corporation started in 1976, November. The Corporation is paying the higher price under protest. The additional payments recorded as cost of gas were \$17.1 million in 1979, \$18.4 million in 1978, \$14.6 million in 1977 and \$2.7 million in 1976.

2. The charge against income and payments to the Power Corporation Superannuation Fund and the Public Employees (Government Contributory) Superannuation Plan for employees' future superannuation benefits was \$6 834 000 in 1979 (\$6 602 000 in 1978).

3. Depreciation and Depletion (000's)

	<u>1979</u>	<u>1978</u>
Depreciation.....	\$36 117	\$33 815
Depletion	2 314	1 573
Capitalized	(619)	(623)
	<u>\$37 812</u>	<u>\$34 765</u>

4. Interest on Long-Term Debt (000's)

	<u>1979</u>	<u>1978</u>
Interest paid and accrued..	\$82 939	\$73 677
Amortization of debt costs and gains:		
Debt discount and expense	741	719
Gain on early repayment of debt ..	(1 284)	(1 066)
Foreign exchange provision	3 754	6 628
Sinking fund earnings.....	(13 695)	(11 349)
	<u>\$72 455</u>	<u>\$68 609</u>

Interest was capitalized on construction projects at a rate of 10.0% in 1979 and 9.5% in 1978.

5. The Corporation's eleven directors (13 in 1978) received \$5 800 (\$6 850 in 1978) from Saskatchewan Power Corporation as directors. The nine senior officers (8 in 1978) received, in aggregate, \$437 414 in salaries for 1979 (\$369 372 in 1978).

6. Deferred Charges and Other Assets (000's)

	<u>1979</u>	<u>1978</u>
Unrealized Foreign Exchange Loss	\$35 139	\$48 131
Unamortized Debt Costs and Gains	1 318	3 058
Prepaid Gas Purchases....	3 245	4 049
Deferred Mining Costs	5 098	2 387
Deferred Gas in Storage	8 554	1 294
Construction Contribution ..	2 195	—
Farm Loans	455	478
Other.....	1 666	1 640
	<u>\$57 670</u>	<u>\$61 037</u>

7. Obligation Under Capital Lease (000's)

	<u>1979</u>	<u>1978</u>
Lease obligation.....	\$31 994	\$ —
Amount due within one year	382	—
	<u>\$31 612</u>	<u>\$ —</u>

The obligation under Capital Lease, for the dragline at Coronach, is with the Continental Bank of Canada. The lease, which extends until 2014, has an implicit interest rate of 7.8%.

Future minimum lease payments are as follows:

Period Ended	
1980, December 31.....	\$ 2 873
1981, December 31.....	2 873
1982, December 31.....	2 873
1983, December 31.....	2 873
1984, December 31.....	2 873
Thereafter.....	62 508
	<u>76 873</u>
Less: Amount representing interest	44 879
	<u>\$31 994</u>

8. Long-Term Debt (\$000's)

Advances from Province of Saskatchewan

Year Received	Year Repayable	Interest Rate	Face Amount In Foreign Currency (1)	Debt Recorded	Equity in Sinking Fund
1960	1980	5 -6		\$ 8 822	\$ 5 693
1961	1981	5 -5½		6 541	3 648
1962	1982	5½-5½		17 416	5 786
1963	1982	5¼		7 880	3 001
1958	1983	4½	10 505	12 255	12 739
1963	1983	5 -5¼	15 855	20 520	9 334
1959	1984	4¾-5	16 318	19 036	17 210
1964	1984	5¼-5½		3 035	439
1964	1985	5½		6 064	2 085
1965	1985	5½		2 140	—
1966	1986	5½-6¼		11 326	2 042
1976	1986	8¾	75 000	87 495	—
1966-67	1986-87	5¼-5½		13 033 (2)	6 521
1967	1987	6		5 855	1 100
1967-68	1987-88	5¼-6½		9 752 (2)	4 267
1968	1988	7¼		11 025	2 639
1968-69	1988-89	6½-7¼		27 908 (2)	10 163
1969	1989	7½	11 300	13 183	2 167
1969-70	1989-90	7¼-8½		32 907 (2)	9 966
1965	1990	4½	2 950	3 441	1 213
1970	1990	8¾		15 000	5 152
1970-71	1990-91	6¾-8¼		33 062 (2)	8 105
1961	1991	5¾		2 450	2 428
1971-72	1991-92	6¾-7½		27 613 (2)	5 392
1972-73	1992-93	7 -7½		23 189 (2)	3 296
1973-74	1993-94	7½		6 297 (2)	723
1964	1994	5½		3 769	887
1973	1998	7¾-8¼		40 000	3 471
1974	1999	10		20 000	1 530
1975	2000	9½		40 000 (3)	1 615
1976	2001	10¼		50 000	1 537
1977	2002	9		50 000	1 135
1978	2003	9½		45 000	470
1979	2004	10		60 000	—
1976	2006	8½	75 000	87 495	2 214
1977	2007	8½	75 000	87 495	1 660
1978	2008	9¼	75 000	87 495	800
				<u>\$ 998 499</u>	<u>\$140 428</u>

Other Long-Term Debt

Chemical Bank of New York — Term Loan 48 500 56 580 (4)

City of Regina — This is the present value, on the basis of 5½% interest rate, of estimated payments yet to be made to the City for its electrical system. Final payments are expected to be made in 1983

367
\$1 055 446 \$ 140 428

Long-Term Debt — net of sinking fund \$ 915 018
Amounts due within one year 75 054
\$ 839 964

- (1) United States dollars.
- (2) Advances totalling \$173 761 000 with an original term of 20 years are subject to redemption on six months notice.
- (3) Retractable at holder's option to 1983.
- (4) This loan agreement, which terminates 1982, September, provides for 3, 6, 9 or 12 month interest periods. The loan may be repaid in whole or in part 30 days after any interest period.
- (5) Debt repayments and sinking fund installments on outstanding debt for the next five years are as follows:
1980 — \$75 054; 1981 — \$17 488; 1982 — \$27 126; 1983 — \$13 590; 1984 — \$7 933

9. Commitments and Contingencies

At 1979, December 31, the Corporation was committed in the amount of approximately \$66.3 million for construction materials, equipment and services on contracts not completed at year end and approximately \$527 million for natural gas contracted for future delivery valued at current prices.

10. Approximately 1.062 million acres net of unexplored properties were transferred to Saskatchewan Oil and Gas Corporation. Saskatchewan Power Corporation and its subsidiary Many Islands Pipe Lines (Canada) Limited have an overriding royalty interest and certain repurchase rights in these properties.

11. Utility Plant in Service (000's)

	<u>Cost</u>	<u>Accumulated Depreciation and Depletion</u>	<u>1979 Net</u>	<u>1978 Net</u>
Electric				
Generation.....	\$ 428 817	\$114 265	\$314 552	\$312 251
Generation — Capitalized Lease.....	31 395	597	30 798	—
Transmission.....	167 523	49 158	118 365	105 586
Distribution.....	293 350	104 697	188 653	175 316
	<u>921 085</u>	<u>268 717</u>	<u>652 368</u>	<u>593 153</u>
Gas				
Production.....	121 146	25 869	95 277	87 467
Gathering, Treatment & Compression....	45 203	23 013	22 190	23 622
Transmission & Storage.....	104 201	37 361	66 840	69 110
Distribution.....	109 934	35 395	74 539	70 824
	<u>380 484</u>	<u>121 638</u>	<u>258 846</u>	<u>251 023</u>
General Plant	48 040	20 484	27 556	24 757
	<u>\$1 349 609</u>	<u>\$410 839</u>	<u>\$938 770</u>	<u>\$868 933</u>

Financial Statistics (000's)

CONSOLIDATED STATEMENT OF EARNINGS

	1979	1978	1977	1976	1975
REVENUE					
Electricity sales	\$ 216 161	\$ 186 875	\$ 156 728	\$ 126 192	\$ 100 832
Gas sales	169 629	144 720	125 192	98 318	70 490
Other	12 256	10 725	8 395	3 962	2 982
	<u>398 046</u>	<u>342 320</u>	<u>290 315</u>	<u>228 472</u>	<u>174 304</u>
EXPENSES					
Fuel, water and purchased electricity	40 001	34 548	37 218	23 405	16 540
Cost of gas sold	100 037	92 993	69 452	46 117	31 975
Operating, maintenance and administration	117 188	100 974	88 553	80 624	64 460
Depreciation and depletion	37 812	34 765	30 501	29 397	27 656
Interest and other debt costs — net	62 263	58 353	42 253	28 468	26 421
	<u>357 301</u>	<u>321 633</u>	<u>267 977</u>	<u>208 011</u>	<u>167 052</u>
NET EARNINGS	<u>\$ 40 745</u>	<u>\$ 20 687</u>	<u>\$ 22 338</u>	<u>\$ 20 461</u>	<u>\$ 7 252</u>

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

SOURCE OF FUNDS					
Funds from operations	\$ 79 864	\$ 57 132	\$ 55 245	\$ 48 908	\$ 36 708
Long-term debt	58 950	129 223	126 317	195 715	39 550
Contributions in aid of construction	7 309	6 620	7 100	6 391	6 311
Capital lease proceeds	32 085	—	—	—	—
Other	6 901	6 117	45 342	344	334
	<u>185 109</u>	<u>199 092</u>	<u>234 004</u>	<u>251 358</u>	<u>82 903</u>
APPLICATION OF FUNDS					
Capital expenditures	140 774	139 290	167 607	145 634	98 010
Reduction in long-term debt	35 413	82 776	30 313	33 295	29 371
Dividends	16 500	10 300	8 200	10 200	3 600
Other	11 837	4 469	1 240	1 837	1 749
	<u>204 524</u>	<u>236 835</u>	<u>207 360</u>	<u>190 966</u>	<u>132 730</u>
INCREASE (DECREASE) IN WORKING CAPITAL	<u>\$ (19 415)</u>	<u>\$ 37 743)</u>	<u>\$ 26 644</u>	<u>\$ 60 392</u>	<u>\$ (49 827)</u>

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

ASSETS					
Utility plant in service, at cost	\$1 349 609	\$1 246 954	\$1 156 868	\$995 952	\$933 685
Accumulated depreciation and depletion	(410 839)	(378 021)	(350 012)	(322 310)	(295 912)
Construction in progress	230 483	198 298	157 341	153 785	72 906
Current and other assets	195 542	196 704	135 428	79 636	62 951
	<u>\$1 364 795</u>	<u>\$1 263 935</u>	<u>\$1 099 625</u>	<u>\$907 063</u>	<u>\$773 630</u>
LIABILITIES AND PROVINCE'S EQUITY					
Retained earnings	\$ 209 652	\$ 193 107	\$ 182 720	\$174 582	\$164 321
Rate stabilization reserve	13 700	6 000	6 000	—	—
Contributions in aid of construction	66 706	63 087	59 169	55 212	51 406
Long-term debt net of sinking funds	871 576	822 963	741 034	574 362	406 879
Current and other	203 161	178 778	110 702	102 907	151 024
	<u>\$1 364 795</u>	<u>\$1 263 935</u>	<u>\$1 099 625</u>	<u>\$907 063</u>	<u>\$773 630</u>
PERCENTAGE EQUITY	21.3	20.7	22.5	25.3	27.9

1974	1973	1972	1971	1970
\$ 90 003	\$ 86 206	\$ 79 136	\$ 76 073	\$ 72 276
51 626	44 724	44 528	41 832	39 416
3 535	2 834	2 264	2 176	1 945
<u>145 164</u>	<u>133 764</u>	<u>125 928</u>	<u>120 081</u>	<u>113 637</u>

10 473	11 128	6 733	6 355	6 276
20 800	15 748	15 255	13 588	11 452
49 262	40 297	36 735	33 443	31 469
26 957	25 483	24 398	23 381	22 903
25 936	23 779	21 903	21 220	19 410
<u>133 428</u>	<u>116 435</u>	<u>105 024</u>	<u>97 987</u>	<u>91 510</u>
<u>\$ 11 736</u>	<u>\$ 17 329</u>	<u>\$ 20 904</u>	<u>\$ 22 094</u>	<u>\$ 22 127</u>

\$ 39 668	\$ 42 191	\$ 44 496	\$ 44 610	\$ 44 645
23 517	44 490	27 714	28 624	47 870
3 237	3 065	1 877	1 732	1 307
—	—	—	—	—
652	297	186	91	76
<u>67 074</u>	<u>90 043</u>	<u>74 273</u>	<u>75 057</u>	<u>93 898</u>

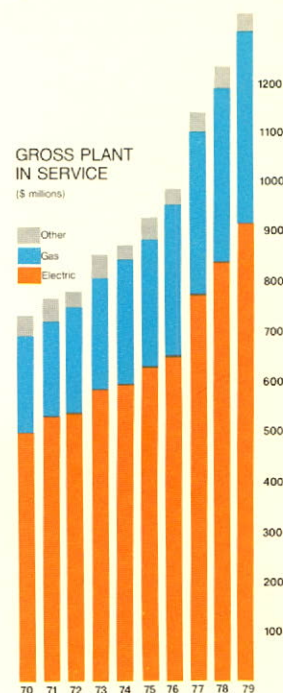
56 675	38 779	40 534	34 392	36 812
31 362	21 249	27 168	25 336	32 730
—	—	20 900	—	10 400
—	—	202	285	2 871
<u>88 037</u>	<u>60 028</u>	<u>88 804</u>	<u>60 013</u>	<u>82 813</u>

<u>\$ (20 963)</u>	<u>\$ 30 015</u>	<u>\$ (14 531)</u>	<u>\$ 15 044</u>	<u>\$ 11 085</u>
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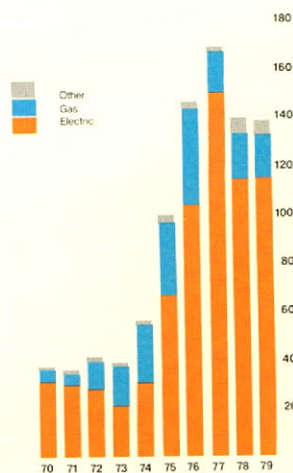
\$871 560	\$844 927	\$789 094	\$765 367	\$733 869
(269 661)	(245 511)	(220 620)	(197 467)	(175 891)
38 859	12 702	30 411	14 979	14 040
41 229	47 591	31 088	28 554	27 943
<u>\$681 987</u>	<u>\$659 709</u>	<u>\$629 973</u>	<u>\$611 433</u>	<u>\$599 961</u>

\$160 669	\$148 933	\$131 569	\$131 565	\$109 471
—	—	—	—	—
49 052	47 342	45 997	45 181	44 390
391 336	398 660	375 254	378 404	375 851
80 930	64 774	77 153	56 283	70 249
<u>\$681 987</u>	<u>\$659 709</u>	<u>\$629 973</u>	<u>\$611 433</u>	<u>\$599 961</u>

30.8	29.8	28.2	28.9	25.6
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PLANT ADDITIONS AND IMPROVEMENTS
(\$ millions)



Record of progress (Unaudited)

	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1976</u>	<u>1975</u>
OPERATION — ELECTRIC SYSTEM					
Customers at December 31	347 997	337 872	327 323	315 635	302 611
Electricity sold (millions of kW·h)	7 881	7 329	6 961	6 347	6 125
Average yearly residential consumption (kW·h)	6 902	6 753	6 335	6 074	6 003
Average yearly farm consumption (kW·h)	16 440	15 487	14 333	13 616	12 873
Rated generating capacity (kW)					
Hydro	467 000	467 000	467 000	467 000	467 000
Steam	1 349 500	1 349 500	1 349 500	1 057 000	1 057 000
Internal combustion	115 500	115 000	164 400	172 975	171 137
Total	1 931 500	1 931 500	1 980 900	1 696 975	1 695 137
Season gross system peak load (kW).	1 724 000	1 680 000	1 585 000	1 432 000	1 330 000
Pole kilometres of line excluding urban distribution system					
72 kV and higher.	9 153	8 990	8 752	8 380	8 309
Under 72 kV	122 567	121 747	121 045	120 109	119 299
OPERATIONS — GAS SYSTEM					
(Gas volumes at 14.65 psia)					
Customers at December 31	215 684	208 761	201 892	193 229	183 305
Gas sold (Thousands of Mcf) . . .	110 995	107 901	108 501	103 808	102 660
Average yearly residential consumption (Mcf).	174	172	159	167	184
*Degree days deficiency (Regina)	6 168	6 037	5 486	5 475	5 941
Maximum daily consumption (Mcf)	624 250	596 320	636 440	588 420	535 700
Kilometres of pipeline in service					
Gathering.	985	985	985	867	821
Transmission and laterals . . .	8 013	8 010	7 955	7 920	7 879
Distribution.	5 411	5 249	5 129	4 928	4 752
AVERAGE MONTHLY					
EMPLOYEES	3 112	3 016	2 949	2 887	2 837

*Celsius using 18°C as base temperature.

<u>1974</u>	<u>1973</u>	<u>1972</u>	<u>1971</u>	<u>1970</u>
291 966	283 282	277 508	274 400	271 000
6 192	5 990	5 289	4 913	4 618
5 713	5 390	5 343	5 037	4 910
11 969	11 025	10 481	10 180	8 954
467 000	467 000	467 000	467 000	467 000
1 057 000	1 057 000	907 000	807 000	807 000
113 050	111 885	111 500	111 500	111 500
1 637 050	1 635 885	1 485 500	1 385 500	1 385 500
1 289 600	1 290 900	1 175 000	1 089 000	1 066 000
8 229	8 156	7 918	7 828	7 458
118 457	117 163	116 309	115 816	115 280
173 240	164 902	157 416	150 658	145 498
114 837	113 998	109 356	107 187	99 309
183	179	197	185	188
6 043	5 500	6 355	6 010	6 325
522 930	543 410	539 240	522 440	487 240
816	772	772	737	732
7 873	7 549	7 113	6 521	6 133
4 582	4 331	4 067	3 759	3 565
2 625	2 519	2 453	2 420	2 464

