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SASKATCHEWAN

CORPORATION

ANNUAL
REPORT
1976

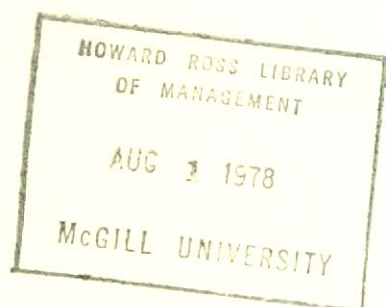


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Board of Directors

Hon.	J. R. Messer, Chairman, Regina, Minister of Mineral Resources
Hon.	G. T. Snyder, Vice-Chairman, Regina, Minister of Labour
Mrs.	M. L. Heavin, Melfort, Homemaker
Mr.	F. M. Hodgkinson, Saskatoon Chairman, North-Sask Electric Ltd.; Assistant Cabinet Secretary
Mrs.	A. N. Hynd, Regina, Deputy Minister, Consumer Affairs
Mr.	A. J. Kuechle, North Battleford, Principal, Notre Dame School
Mr.	R. E. Lloyd, Regina, Acting Chief Planning Officer, Executive Council
Mr.	D. F. McArthur, Regina, Planning Consultant
Mr.	C. S. Mitchell, Sturgis, President, S.A.R.M.; Reeve, R.M. of Preeceville; Farmer
Mr.	T. B. Morgan, Shaunavon, Barrister and Solicitor. Retired Sept., 1976
Mr.	G. A. Simons, Regina, National Representative, Communications Workers of Canada
Mr.	L. H. Stevenson, Muscow, Director, North-Sask Electric Ltd.; Chairman, Advisory Committee on Indian Education; Farmer

Corporate Management

Mr.	F. G. Ursel, General Manager
Mr.	E. B. Campbell, Deputy General Manager
Mr.	D. E. Cuddington, Comptroller
Mr.	W. R. Wiggins, Manager, Electric System
Mr.	B. A. Steuart, Acting Manager, Gas System
Mr.	A. J. Bast, Director of Personnel

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



Regina, March, 1977

To His Honour,
The Honourable George Porteous, M.B.E., C.M., 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 December 31, 1976, 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,

A handwritten signature in black ink, appearing to read "John A. Nesser". The signature is stylized with a large initial "J" and a long, sweeping underline.

Minister in Charge of the
Saskatchewan Power Corporation



Foreword

The activities of the Corporation during 1976 reflect the ills which beset the national economy. Although some moderation in the rate of inflation was evident in the Consumer Price Index, prices for natural gas, coal, labor and machinery all critical to the Corporation, continued to escalate sharply.

System growth has fully loaded most of the Corporation's present system. This has necessitated large new projects and new system capacity at a time when provincial capital demands are large and interest costs are high.

A particularly severe cost setback occurred in May as a result of a National Energy Board (NEB) ruling concerning a contract between TransCanada PipeLines Limited (TCPL) and the Corporation. Under this contract, the Corporation delivered 82.6 billion cubic feet (Bcf) of natural gas to TCPL from 1969 to 1975 at an average price of 23.5¢ per thousand cubic feet (Mcf). The contract requires TCPL to return the gas by October 31, 1981, at the same average price; redelivery started November 1, 1976. The ruling by NEB requires the Corporation to pay for gas redelivered at the defined Alberta border price which at year-end was 97¢ per Mcf. The higher price is being paid under protest while the Corporation appeals the ruling in a Federal Court action. The effect of the ruling will be to add more than \$100 million to the Corporation's costs over the next five years.

After a year of no growth in 1975, the demand for both electric and gas service advanced modestly in 1976. Increases were less than they might have been due to the exceptionally mild weather experienced during most of the year; however, the demand from all types of service except large industrial accounts was up.

It was necessary to increase both electric and gas rates to cope with the cost increases being experienced. The rate increases affected all customers and unfortunately added significantly to the cost of

running a home and operating a business.

While the gas rate increases were sufficient to enable the Corporation to recover costs and realize an acceptable level of net income from the Gas System, the electric rate increases proved to be inadequate. For the second consecutive year, the Electric System revenues were insufficient to recover costs and, as a result, a loss amounting to \$0.6 million was recorded.

On its total operation for the year, the Corporation realized a net income of \$20.5 million. This compares favorably with the \$7.3 million realized in 1975 but is still less than the 1970 level, even without recognizing the reduction in the purchasing power of the dollar that has taken place over the period.

A further advance in the Electric System growth rate is expected. This will have a positive effect on electric revenues but it will take further rate increases to meet the additional costs that are already apparent.

In the gas operation, the need for additional rate increases will be very greatly influenced by increases in the cost of gas. If the case before the Federal Court is decided in favor of TCPL, an immediate increase in rates will be unavoidable. A further large increase in the Alberta border price for gas will have the same effect. If the Corporation obtains a favorable court ruling and the increase to Alberta gas prices is moderate, the prospects of delaying a gas rate increase are more promising.

It must also be recognized that environmental constraints are resulting in significant cost increases. These increases will affect future energy costs. As an example, the electrostatic precipitators being installed at the Boundary Dam and Poplar River stations will cost \$7.6 million. The necessity of installing them is recognized and accepted; however, the costs are substantial and will have to be recovered through higher rates.

Good progress was made on the projects to extend the Boundary Dam Power Station and to construct the new Poplar River Station. Power from the extension to the Boundary Dam Station will be available in the fall of 1977 and will add 300 megawatts of capacity to the Corporation's most economical power source.

An additional 300 megawatts will be available in the fall of 1979 when the first unit of the Poplar River Station begins to deliver power to an expanded provincial grid.

Planning to meet electric power requirements beyond 1980 was continued. Environmental and economic studies were initiated on the Nipawin hydro site on the Saskatchewan River in addition to the continuation of studies for a second unit at the Poplar River Station and preparation for public hearings on the Wintego hydro site on the Churchill River.

Over the short term, the Corporation has an adequate supply of natural gas; however, over the longer term, additional supplies and production capacity are essential. The reserves acquired as a result of the Corporation's exploration and development program in Saskatchewan and Alberta over the past five years are necessary to meet future needs and to supplement increased contracted production.

A high priority objective for the Cor-

poration is to obtain permits to remove additional gas from Alberta to supplement provincial supplies. The Corporation submitted an application to the Alberta Energy Resources Conservation Board in 1975 for a permit to remove gas from the Saddle Lake area in northeastern Alberta and public hearings were held in 1976. The Board decision was still pending at year-end but a ruling is anticipated early in 1977. An application to remove gas from the Esther area of Alberta was submitted in December, 1976. As an interim measure, the Alberta Gas Trunk Line Company Limited is delivering gas to the Corporation at two border locations under permits of other companies.

Late in December, the Corporation purchased the reserves and production facilities owned by Aquitaine of Canada Ltd. in the Beacon Hill area of northwestern Saskatchewan. In addition to the 197 Bcf of gas acquired, the purchase will permit orderly long-term development of properties which the Corporation has acquired in the area in conjunction with the acquired Aquitaine properties.

The Corporation is fortunate in having a good selection of provincial resources available for development to meet increasing provincial energy requirements. It is apparent, however, that the cost of providing power and gas will continue to rise for some time.

Highlights

			% Increase (Decrease)
	1976	1975	
	(\$ millions)		
Revenue from sales	224.5	171.3	31.1
Net income	20.5	7.3	180.8
Funds from operations	48.2	36.7	31.3
Capital expenditures	145.7	98.0	48.7
Energy Sold			
—electricity (billions of kW·h)	6.3	6.1	3.6
—gas (billions of cubic feet)	103.8	102.7	1.1

Operations

Load and Customer Growth — Electric

Consumption of electrical energy in Saskatchewan reached 6.3 billion kilowatt-hours (kW·h) in 1976. The 3.6 per cent increase compares with the 1.1 per cent decline experienced in 1975. Moderated demand by large industrial and oil pipeline customers reflected conditions in those industries and together with the unusually mild weather in 1976 contributed to a year of modest growth.

At year-end, Saskatchewan Power had 315 635 electric customers, an increase of 13 024 over the previous year. About 78 per cent of the increase was in the residential category. This reflects another good year for construction of houses in the province.

The Electric System recorded a peak of 1 346 000 kilowatts (kW) on December 20, 1976, or just over four per cent higher than the 1975 peak. Through the exercise of interruptible provisions in contracts with certain industrial customers, the peak was 84 000 kW less than it otherwise would have been.

Supply and Service — Electric

Water power generated only 25 per cent of the electricity requirements in 1976. Water flows on the South Saskatchewan River were near the long-term average, while on the North Saskatchewan flows were only 80 per cent of the long-term average. Combined water flows from the two river systems were six per cent below normal in 1976.

Generation of electricity by the Corporation's thermal plants provided 70 per cent of the energy requirements. The remaining five per cent was imported from Manitoba.

The Corporation's two lignite coal burning plants — Boundary Dam Power Station and Estevan Generating Station — used 3.3 million tons of coal in 1976, a slight increase from the consumption in 1975. The Queen Elizabeth Power Station burned 550 000 tons of sub-bituminous coal from Alberta, an increase of 17 per cent over 1975.

It was necessary to use 11.4 billion cubic feet (Bcf) of natural gas for thermal generation in 1976. This was substantially more than the 6.5 Bcf required in 1975 and more than had been anticipated. Increased operation of gas-fired plants was necessary to make up for decreased hydro generation and lost generation at Boundary Dam while maintenance work was being carried out.

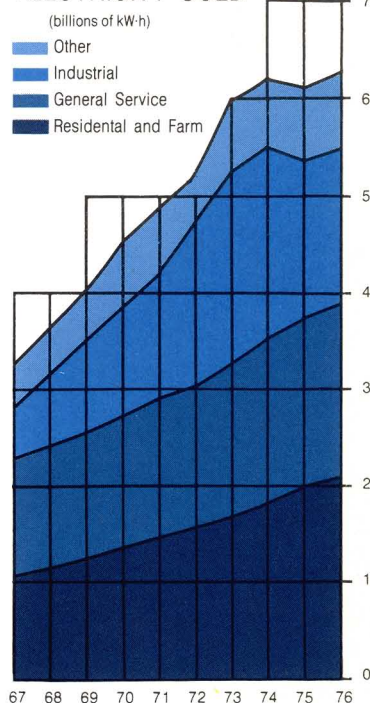
Maintenance requirements at Boundary Dam were higher than normal during 1976. Replacement of the superheater on the boiler on Unit No. 1 and repairs to induced draft fans on Unit No. 5 reduced generation capability at different times throughout the year.

In June, one of the worst wind storms in the Corporation's history caused widespread damage to a large part of the provincial grid, distribution lines and other electrical facilities, causing outages to numerous communities lasting up to 48 hours. Most seriously affected were Davidson, Watrous, Swift Current and Maple Creek areas.

Generation statistics

	1976 Rated Generating Capacity (kW)	1976 Gross Generation kW·h x 10 ⁶	1976 Generation % Increase or (Decrease) Over 1975
HYDRO			
Squaw Rapids	280 000	935 380	(13.2)
Coteau Creek	187 000	836 593	(14.5)
Total	467 000	1 771 973	(13.8)
STEAM			
Boundary Dam	582 000	3 282 300	4.8
Estevan	70 000	419 498	13.3
A. L. Cole	108 000	118 416	112.7
Queen Elizabeth	232 000	1 206 075	26.6
Regina "A"	65 000	23 603	60.1
Total	1 057 000	5 049 892	11.6
INTERNAL COMBUSTION			
Kindersley	29 000	17 440	4.3
Swift Current	—	227	(88.7)
Success	45 000	7 772	—
Regina "B"	23 000	829	11.7
Landis	70 000	186 210	—
Total	167 000	212 478	—
Total Generation		7 034 343	6.4
Less Station Service		365 673	5.9
NET GENERATED		6 668 670	6.5
NET PURCHASED		380 461	(24.8)
NET SYSTEM kW·h		7 049 131	4.1
Northern Diesel Plants	5 975	4 082	(19.9)
Northern Purchases		13 803	70.5
SYSTEM TOTAL	1 696 975	7 067 016	4.2
Annual Peak Load (Net)		1 346 000	
(1745 Hours, Dec. 20, 1976)			
Minimum Load (Net)		478 000	
(0700 Hours, Aug. 1, 1976)			

ELECTRICITY SOLD



Load and Customer Growth — Gas

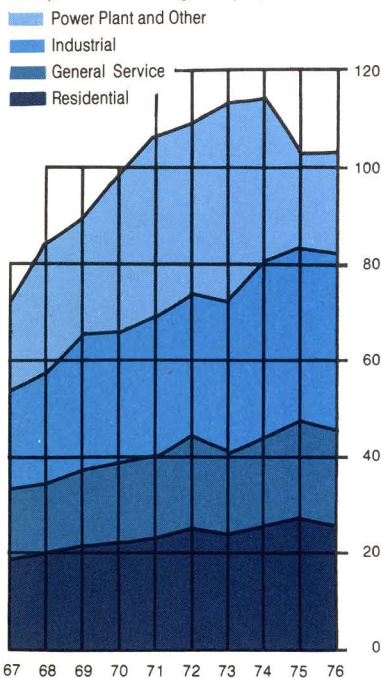
In the Corporation's Gas System, the number of customers increased by 9 924 to 193 229; however, there was little change in the total volume of gas sold because of the milder weather and lower sales to TransCanada PipeLines Limited. (TCPL). Gas volumes used and sold in 1976 totalled 103.8 Bcf exceeding 1975 by 1.1 Bcf.

Like the Electric System, the Gas System experienced a large increase in customers in the residential category. The addition of 8 873 residential customers was the second largest increase in the past decade.

The maximum daily consumption of natural gas in the province reached a record 588.4 million cubic feet (MMcf) on December 9. This was 9.8 per cent higher than the peak day in 1975.

GAS SOLD

(billions of cubic feet @ 14.65 psia)



Gas supply sources

(Billions of cubic feet @ 14.65 psia)

SOURCES	1976	1975	% Increase (Decrease)
ALBERTA			
TransCanada PipeLines ..	36.8	33.4	10.2
Field Suppliers	10.7	8.7	23.0
SPC Production	17.3	18.1	(4.4)
Total (Alberta)	64.8	60.2	7.6
SASKATCHEWAN			
Field Suppliers	42.3	47.9	(11.7)
SPC Production	7.2	3.1	132.3
Total (Saskatchewan) ..	49.5	51.0	(2.9)
Total Volume Delivered	114.3	111.2	2.8
Storage, Fuel and Other Uses	10.5	8.5	23.5
Total Sold	103.8	102.7	1.1

Supply and Service — Gas

During the year the Corporation's gas supplies were adequate and are expected to be so for the next few years. Over the longer term additional supplies will be required.

On November 1, TCPL started returning gas to the Corporation under the terms of an agreement entered into in 1969. During the period November, 1969 to March, 1975, the Corporation delivered 82.6 Bcf of gas to TCPL which will be returned during the five-year period which started in November, 1976.

Applications for gas removal permits for the Saddle Lake and Esther areas were before the Energy Resources Conservation Board in Alberta at year-end. In the meantime, short-term arrangements were made to permit production and delivery of gas from the Saddle Lake area via The Alberta Gas Trunk Line Company Limited to the Saskatchewan Power system at the Alberta border, west of Unity. Delivery of gas from the Antelope area by Gulf Oil Canada Ltd. to Saskatchewan Power facilities at the border was also started.

Wise Use of Energy

The Corporation continued to promote and advise the public on the wise and efficient use of energy. Talks, slide presentations, seminars and radio and television interviews were utilized to convey the message of saving energy in the home, business, farm and in new buildings.

Among the topics presented were adequate insulation, electric heating, safety in standby power systems, the use of timers and microwave ovens. These topics were also emphasized in the Corporation's displays at the annual Mexabition and Agribition shows in Saskatoon and Regina.

Construction and Resource Development

Poplar River Station — First Unit

Substantial progress was made on construction of the new Poplar River Power Station during 1976. Commissioning of the first 300 megawatt (MW) unit is scheduled for 1979. Cost of this first phase of the plant is an estimated \$150 million.

The earth dam on East Poplar River was ready to impound the 1976 spring runoff. The unusually heavy runoff required construction of a temporary diversion to release excess water from the reservoir.

Construction of the dam resumed in the spring and by the end of the year the earthwork and spillway were completed.

Work on the powerhouse and related facilities was started early in the year. By the end of 1976, the main building foundations were complete and about one-third of the structural steel was erected.

The number of workers employed on the project reached 215. Most of them live in construction camps operated by the Corporation and contractors at the plant site.

Boundary Dam Station — Sixth Unit

Construction of the sixth and final unit at the Boundary Dam station progressed on schedule. The \$78 million extension is to be placed in service in the fall of 1977 and will add 300 MW to the present station capacity of 582 MW.

Several aspects of the project have been virtually completed such as the building extension to house the new unit, the structural steel and the 300-foot high stack.

Construction of the steam turbo generator and boiler is progressing well and at year-end was 75 per cent completed.

Transmission Lines and Switching Stations

To move the additional power from the Poplar River and Boundary Dam stations, major additions to the provincial transmission grid are required. The cost of these additions will be over \$24 million. Some of the transmission line and switching station projects were started in 1976 and construction on the others is scheduled through to 1979.

Work began on a 112-mile, 230-kilovolt (kV) line running from Kennedy in the southeast part of the province to Condie near Regina. Construction of additions to the switching stations at Boundary Dam, Condie and Regina South is in progress.

A 230-kV line from Condie north to Wolverine near Watrous and new switching stations at Kennedy and Fleet Street in Regina are planned for 1977.

Coal Mines

The Corporation commenced operation of the Souris Valley Coal Mine just east of the Boundary Dam Power Station in 1976. Stripping of overburden started in June with the rebuilt Bucyrus-Erie 9W dragline purchased in 1975 and coal loading and delivery to the station began in November. By the end of the year, some 21 000 tons had been delivered. The mine will produce about 350 000 tons annually to supplement deliveries from existing mines.

The Corporation continued planning for a coal mine near the Poplar River station. An active and successful dewatering program was started to dry up the coal to permit mining. Mine planning and reclamation studies and tests continued throughout the year.

Future Electricity Supply — Studies

The Corporation continued to examine power supply alternatives for future years. Environmental and economic studies were begun on the effects of a possible hydro-electric development at Nipawin.

The studies were organized by the Saskatchewan Research Council with overall project co-ordination by the Saskatchewan Power Corporation. Completion of the studies is scheduled for mid-1977.

The Nipawin site was selected over three other possibilities as the best available on the Saskatchewan River. The site would utilize the combined flows from the North and South Saskatchewan Rivers. The available water would permit the installation of three units of 84 MW each.

The report prepared by the Churchill River Study (Missinipe Probe) on the Wintego hydro site was made available to the public early in the year. The Department of Environment will hold public hearings in 1977.

Gas Acquisition Exploration and Development

The Corporation continued the gas acquisition, exploration and development program which was started in 1972 to ensure an adequate natural gas supply to the Province over the long term.

The program has added approximately 781 Bcf to the reserves owned outright by the Corporation and 417 Bcf to the reserves which the Corporation has rights to purchase. Of the total additional reserves 50 per cent are in Alberta and the remainder are in Saskatchewan.

Accumulated expenditures on this exploration and development program totalled \$66.6 million to the end of the year.

The Corporation's subsidiary, Many Islands Pipe Lines Ltd., continued joint exploration activities in Gas Initiatives

Joint Venture with Societe Quebecois d'Initiatives Petrolieres and Algas Mineral Enterprises Ltd.

Long Term Gas Supply

The purchase of the Beacon Hill gas field in northwestern Saskatchewan from Aquitaine Company of Canada Ltd. in December added 197 Bcf of gas reserves owned by the Corporation. The ownership of these additional reserves is important in meeting long term gas requirements at a favorable cost.

At year-end, the Corporation's gas supply position included owned, proven reserves totalling 987 Bcf of which 406 Bcf are located in Alberta and 581 Bcf are in Saskatchewan. In addition, it has rights to purchase an additional 1 043 Bcf of proven Alberta reserves and 516 Bcf of proven Saskatchewan reserves. Reserves owned and available for purchase combined with reserves under contract from other supplies will meet Corporation requirements for 24 years at 1976 rates of consumption.

Storage Facilities — Gas

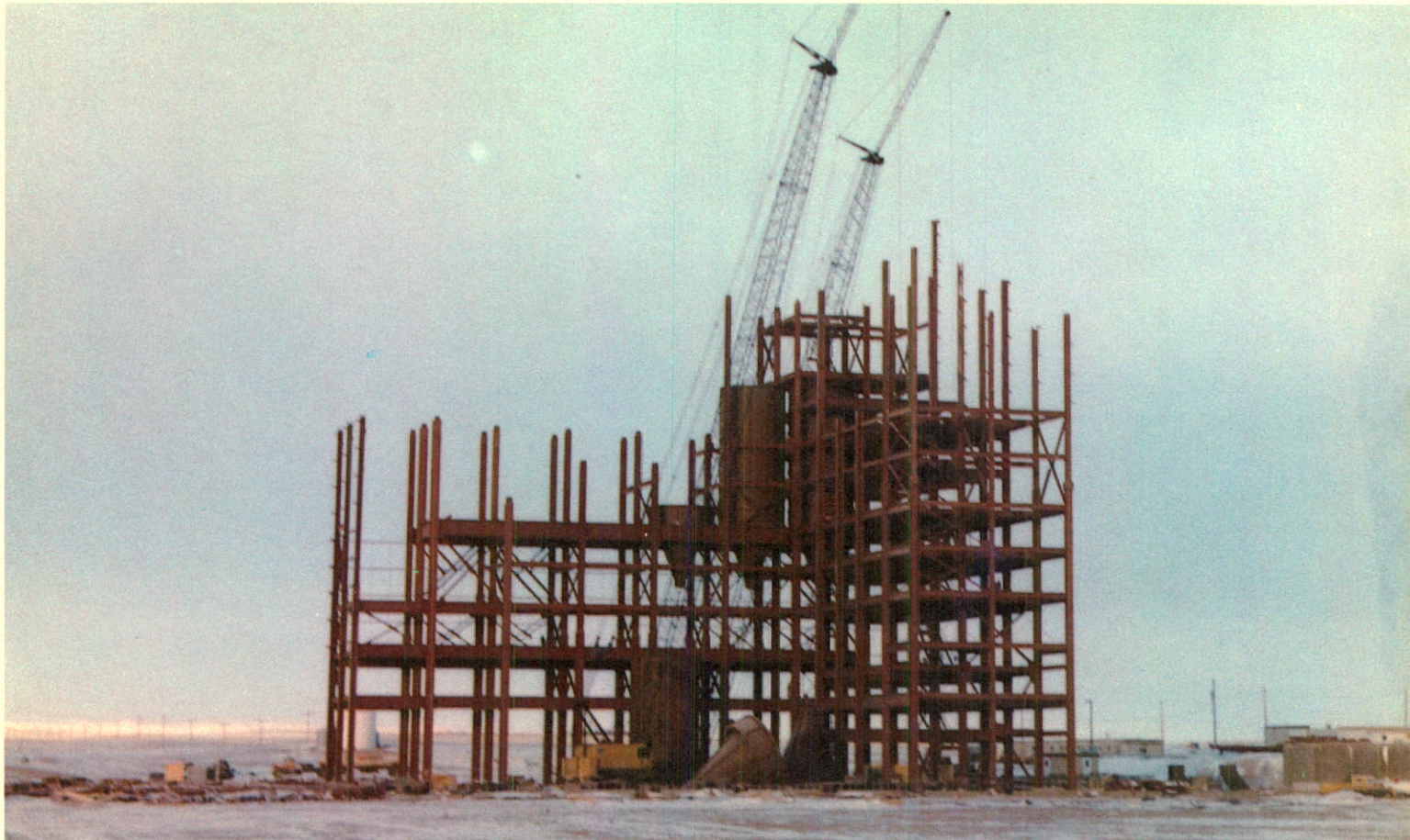
To provide for the increasing peak loads of the winter season, the Corporation added further to its gas storage facilities during 1976.

Development of the East Cantuar storage reservoir was continued. An additional 5.2 Bcf of gas was injected during the year bringing the accumulated total of gas injected to 7.9 Bcf.

The solution mining continued on two additional storage caverns at the Regina cavern site. The caverns will increase the total useable storage at Regina to more than 2.6 Bcf. Completion is scheduled for 1977.

At Landis, the Corporation completed solution mining of two natural gas storage caverns bringing useable capacity at that location to 1.7 Bcf.

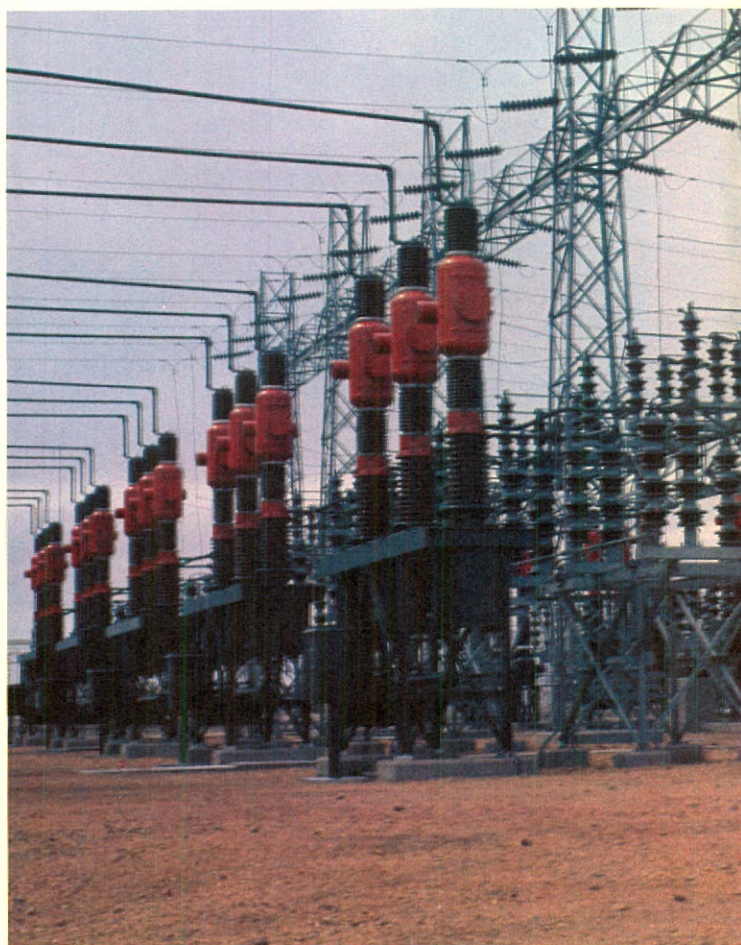
At December 31, the Corporation had storage facilities capable of producing up to 212 MMcf per day.



Structural steel goes up for first phase of new Poplar River Power Station.



West Saddle Lake compressor station.



Switching station at Boundary Dam Power Station.

Research and Development

Off-Peak Heat Storage Furnaces

During the winter of 1975-76, the Corporation tested two of its off-peak heat storage furnaces in Saskatchewan homes. After refitting and maintenance, these furnaces will go through a second test cycle during the winter of 1976-77.

Development of a new heat storage material, consisting of sodium sulphate and clay, has been completed. Both materials are available from Saskatchewan sources. The research and development phase of the heat storage furnace project is nearing an end and discussions with potential manufacturers have started.

Computer Control of Switching Stations

Field testing of a new digital computer control system for switching stations started in June, 1976. Testing to date has verified the laboratory results and has indicated the need for only minor design modifications. Several power system disturbances have been recorded and studied with a precision previously unattainable. Permanent installations based on the experience of this test will be more accurate and more comprehensive than existing control systems.

Waste Heat Experiment

A new greenhouse, heated by the exhaust gases of a coal-fired boiler, has been installed at the Queen Elizabeth Power Station, Saskatoon. The experiment is to determine the feasibility of growing vegetable crops in a greenhouse using power plant waste heat. The project is being conducted jointly by the University of Saskatchewan and the Corporation.

Research Grants and Contracts

The Corporation has been awarded research grants and contracts by the

National Research Council, the Canadian Electrical Association and the Federal Government (Energy, Mines and Resources) to help finance some of its work. Monies received for 1976-77 total \$234 650.

Finance and Administration

Net Income

Consolidated net income for 1976 amounted to \$20.5 million and was higher than the preceding year. However, while the consolidated position improved, the financial results for the Electric System were again unsatisfactory. Electric System operations, including its northern subsidiary, were conducted at a loss for the second consecutive year.

Rate increases designed to bring the Electric System into a profit position were introduced at mid-year, but were inadequate as expenses continued their upward climb at a rate not contemplated and load growth was again quite modest. An Electric System loss amounting to \$0.6 million resulted for the year.

Gas System net income at \$21.0 million reached a record high. A substantial portion of the \$10.5 million increase over 1975 resulted from 'sales' to the Electric System, which were much higher than planned.

Revenue and Rates

Rate increases for both electric and gas customers were implemented in July. These increases were primarily responsible for electric revenue rising by 25.2 per cent and gas revenue by 39.5 per cent over 1975.

The electric rate increase was 13 per cent overall. For the typical residential customer using 500 kW·h per month, the increase varied from \$15 to \$21 per year. All residential increases were in the 5 to 14 per cent range.

Rate increases to farm customers ranged between 12 and 16 per cent, to general service customers 15 to 25 per cent and to oilfield and industrial customers, 30 to 35 per cent.

In the Gas System, standard Btu rate schedules were increased by 26 cents per Mcf, while those for high Btu gas increased by 29 cents per Mcf. The effect of the increase on the average residential gas bill was about 20 per cent or \$48 per year. Large industrial increases averaged about 36 per cent.

Expenses

The rate increases were necessary to meet cost increases that are huge and unrelenting. The prospects for 1977 continue to be a cause for much concern.

The cost of fuel for producing electricity rose sharply as natural gas and coal prices were increased. Aggravating the situation were operating problems at Boundary Dam and below median river flows which made it necessary to operate higher cost power plants. The total increase in the cost of fuel and purchased electricity in 1976 over 1975 was \$6.9 million.

The cost of gas sold increased by \$14.1 million or 44.2 per cent. The price of Alberta gas at the border increased a further 14.5 cents per Mcf and the prices paid to Saskatchewan producers at the fieldgate were increased October 1 from a range of 20 - 26 cents per Mcf to a range of 26 - 45 cents per Mcf depending upon the source of the gas.

Other operating and maintenance costs rose by \$16.2 million. Of this amount, salaries, wages and benefits were higher by \$10.6 million and for the year totalled \$57.0 million. Benefits include provision for employee pensions which was increased from six per cent of regular payroll in 1975 to approximately 12.5 per cent in 1976 to provide for superannuation allowances payable to employees when they retire.

Grants in lieu of taxes rose by \$1.2 million reflecting the fact that they are still being paid as a percentage of revenue and accordingly rise automatically with each rate increase.

Interest expense rose by a relatively moderate \$2.0 million. During the period of construction, interest is capitalized on most of the projects for which new monies are borrowed. The impact of the additional interest is reflected in the income statement when the projects are placed in service. A large increase in interest expense will be experienced commencing in 1977.

Capital Program

The Corporation's capital expenditures on new plant and equipment totalled \$145.7 million in 1976, considerably above any previous year. Expenditures are summarized as follows:

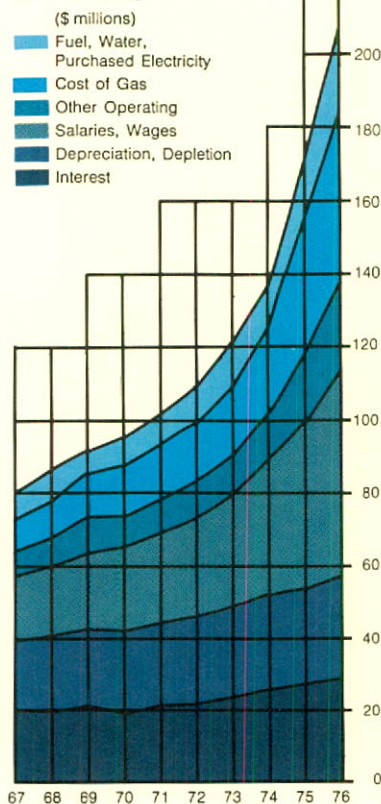
	1976	1975
	(\$ millions)	
Electric Capital Expenditures:		
Generation	76.8	42.3
Transmission	12.3	8.7
Distribution	17.1	16.3
	<u>106.2</u>	<u>67.3</u>
Gas Capital Expenditures:		
Exploration and		
Production	26.1	17.2
Gathering, Treatment and		
Compression	1.7	2.8
Transmission and Storage	3.0	2.1
Distribution	6.9	6.2
	<u>37.7</u>	<u>28.3</u>
General Plant	1.8	2.4
	<u>145.7</u>	<u>98.0</u>

Continuation of work on the addition to the Boundary Dam power plant required \$28.4 million in capital funds. The new plant at Coronach required \$29.5 million. Progress payments on draglines amounted to \$13.6 million. Producing and undeveloped gas properties including related gathering facilities in the Beacon Hill area were acquired from Aquitaine Company of Canada for \$18 million.

External Financing

The Province advanced \$195.7 million to finance the Corporation's largest ever expansion program. An advance of \$49.5 million was received from the proceeds of a 25-year Canadian issue in April, \$72.5

EXPENSES



million was received from a 10-year United States dollar issue in September and a further \$73.7 million from a 30-year issue in December. These advances were sufficient to finance the year's capital expenditures and repay the substantial short-term debt outstanding at the beginning of the year. The average cost of new long-term advances received from the Province in 1976 was 9.27 per cent.

Capital expenditures planned for 1977 will again require a high level of external financing, emphasizing the need for profitable operation to keep borrowing to an acceptable level.

Union Negotiations

Negotiations with both the International Brotherhood of Electrical Workers (IBEW), Local 2067 and the Oil, Chemical and Atomic Workers (OCAW) Local 9-649 were in progress at the end of 1975 and continued well into 1976 before agreements for 1976 were concluded.

Following lengthy negotiations and a strike from July 12 to August 11, an agreement with the IBEW, acceptable to the Public Sector Price and Compensation Board, was signed August 20.

The agreement provided for wage increases costing 11.45 per cent of payroll, plus an additional .25 per cent for benefits. There were also improvements granted in provisions covering safety apparel and meal allowances and a new provision for severance pay upon retirement was included.

The signing of an agreement with OCAW on April 19 was also preceded by lengthy negotiations.

An offer made to the OCAW before the introduction of the anti-inflation program was approved by the Public Sector Price and Compensation Board. The terms provided for wage increases which raised end rates by 20.8 per cent plus benefit improvements of a further 1.4 per cent in the first 12 months of a 16-month agreement. The final four months of the agreement provided for a wage increase of three per cent plus adjustments to the trades categories.

Negotiations for 1977 collective bargaining agreements with both the IBEW and the OCAW Unions were in progress at the end of 1976 but no settlements had been reached.

Training

During 1976, 555 employees attended 62 formal training courses involving 5 329 man days.

Training was held mainly at four locations: The Corporation's Trades Training Centre in Weyburn, the Saskatchewan Technical Institute in Moose Jaw, Kelsey Institute of Applied Arts and Sciences in Saskatoon and Swift Current Comprehensive High School.

In addition to the in-house training 130 employees enrolled in courses at universities, technical institutes and other schools in the province.

At the end of 1976, the Weyburn Trades Training Centre was moved to new facilities in a wing of the Souris Valley Extended Care Hospital in Weyburn.

Safety

During 1976, there were 171 vehicle accidents, 194 medical-aid accidents and 98 lost-time accidents among Corporation employees. One employee died as a result of an accident.

The number of accidents involving public contact with Corporation facilities increased from 50 in 1975 to 81 in 1976. Fatal accidents increased from one to four.

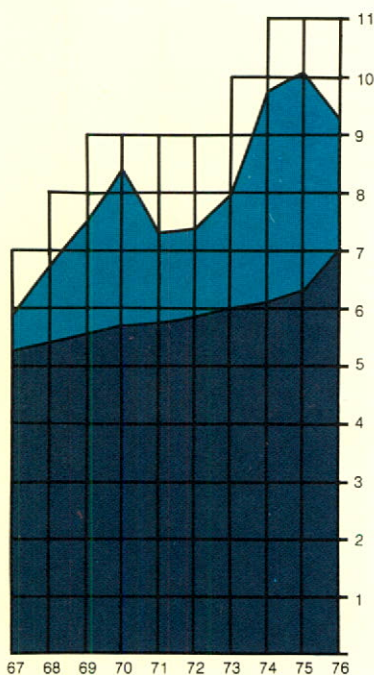
Personnel

Long service awards were presented to 273 employees for 35, 30, 25 and 20 years of service. This was the largest number of employees receiving long service awards in the history of the utility.

There were 34 employees who retired from the Corporation in 1976.

EFFECTIVE RATES OF INTEREST

(percentage)
 ■ New Debt
 ■ Total Debt





Reclaimed land which was surface-mined for lignite coal.

FINANCIAL RESULTS 1976

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 — gathers, produces and purchases gas in Alberta for the use of the Corporation.

Many Islands Pipe Lines (Canada) Limited — transports gas through its interprovincial transmission line from an Alberta Gas Trunk Line Ltd. metering station west of the Alberta-Saskatchewan border to the Saskatchewan Power Corporation facilities at Unity, Saskatchewan.

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

Consolidated statement of income and retained income

YEAR ENDED DECEMBER 31

	1976 (000's)	1975 (000's) (Restated Note 1)
INCOME		
Electricity sales	\$126 192	\$100 832
Gas sales	98 318	70 490
Other	3 962	2 982
	<u>228 472</u>	<u>174 304</u>
 OPERATING EXPENSES		
Fuel, water, and purchased electricity	23 405	16 540
Produced and purchased cost of gas sold	46 117	31 975
Other operating, maintenance and administration (Note 2)	80 624	64 460
Depreciation and depletion (Note 3)	29 397	27 656
	<u>179 543</u>	<u>140 631</u>
Net income before interest expense	<u>48 929</u>	<u>33 673</u>
 INTEREST EXPENSE		
Long-term debt (Note 4)	32 478	27 254
Other	4 439	3 588
Capitalized (Note 4)	(8 449)	(4 421)
	<u>28 468</u>	<u>26 421</u>
NET INCOME	20 461	7 252
 Retained income at beginning of year	164 321	160 669
Income transferred to Province of Saskatchewan	(10 200)	(3 600)
RETAINED INCOME at end of year	<u>\$174 582</u>	<u>\$164 321</u>

See major accounting policies and notes

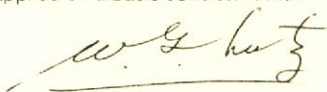
Auditor's Report

To the Members of the Legislative Assembly,
Province of Saskatchewan

I have examined the consolidated balance sheet of Saskatchewan Power Corporation and its wholly-owned subsidiaries as at December 31, 1976, and the consolidated statements of income and retained income and changes in financial position for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion, these consolidated financial statements present fairly the financial position of Saskatchewan Power Corporation and its wholly-owned subsidiaries as at December 31, 1976, and the results of their operations and changes in 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.

Regina, Saskatchewan,
February 28, 1977


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

Consolidated statement of changes in financial position

YEAR ENDED DECEMBER 31

	1976 (000's)	1975 (000's)
SOURCE OF FUNDS		
Net Income	\$ 20 461	\$ 7 252
Add Transactions not requiring cash:		
Depreciation and depletion	29 397	27 656
Other	<u>(1 701)</u>	<u>1 800</u>
	48 157	36 708
Contributed surplus and revenue prepayments	6 391	6 311
Advances from Province of Saskatchewan	195 715	39 550
Net changes in other items	2 283	(1 415)
	<u>252 546</u>	<u>81 154</u>
 APPLICATION OF FUNDS		
Expenditures on plant and equipment	145 697	98 010
Repayment of long-term debt	33 295	29 371
Income transferred to Province of Saskatchewan	10 200	3 600
	<u>189 192</u>	<u>130 981</u>
INCREASE (DECREASE) IN WORKING CAPITAL	<u>63 354</u>	<u>(49 827)</u>
 CHANGES IN COMPONENTS OF WORKING CAPITAL		
Increase (decrease) in current assets		
Short-term investments	4 637	(3 650)
Accounts receivable	8 817	15 678
Inventories and prepaid expenses	3 805	8 683
	<u>17 259</u>	<u>20 711</u>
Increase (decrease) in current liabilities		
Bank loan and short-term financing	(66 834)	63 219
Accounts payable and accrued liabilities	20 739	7 319
	<u>(46 095)</u>	<u>70 538</u>
INCREASE (DECREASE) IN WORKING CAPITAL	<u>\$ 63 354</u>	<u>\$ (49 827)</u>

See major accounting policies and notes

Consolidated balance sheet

AT DECEMBER 31

ASSETS

	1976 (000's)	1975 (000's)
CURRENT ASSETS		
Short-term investments	\$ 4 987	\$ 350
Accounts receivable — Customers	18 747	18 336
— Unbilled sales	19 986	16 635
— Other	9 095	4 040
Inventories at cost	16 741	16 429
Gas in storage at cost	3 030	2 008
Prepaid expenses	4 222	1 751
	<u>76 808</u>	<u>59 549</u>
OTHER ASSETS	<u>2 214</u>	<u>3 402</u>
UTILITY PLANT		
Plant in service at cost (Note 5)	994 915	933 685
Less: Accumulated depreciation and depletion	<u>322 310</u>	<u>295 912</u>
	672 605	637 773
Construction work in progress	<u>153 785</u>	<u>72 906</u>
	<u>826 390</u>	<u>710 679</u>
	<u>905 412</u>	<u>773 630</u>
LIABILITIES		
CURRENT LIABILITIES		
Bank loan	3 360	21 194
Short-term advances from the Province	—	49 000
Income payable to the Province	10 200	3 600
Accounts payable	31 144	25 759
Interest accrued	14 030	10 400
Long-term debt due within one year	<u>24 570</u>	<u>19 446</u>
	<u>83 304</u>	<u>129 399</u>
CUSTOMER DEPOSITS	<u>4 961</u>	<u>4 617</u>
DEFERRED INCOME ITEMS		
Unamortized debt costs and gains (Note 6)	1 389	4 125
Unamortized revenue prepayments	<u>13 281</u>	<u>11 437</u>
	<u>14 670</u>	<u>15 562</u>
COMMITMENTS AND CONTINGENT LIABILITIES (Note 7)		
LONG-TERM DEBT NET OF SINKING FUNDS (Note 8)	<u>572 683</u>	<u>408 325</u>
PROVINCE'S EQUITY		
Contributed surplus	55 212	51 406
Retained income	<u>174 582</u>	<u>164 321</u>
	<u>229 794</u>	<u>215 727</u>
	<u>\$905 412</u>	<u>\$773 630</u>

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 Contribution and Revenue Prepayments — Capital contributions are required from those customers from whom estimated revenue will indefinitely and beyond the estimated life of the facilities required to serve such customers, be no greater than the estimated cost, taking into consideration the capital contribution received, of providing such service. Capital contributions are classified as Contributed Surplus on the Corporation's Balance Sheet.

Non refundable revenue prepayments are required from customers in those instances where estimated revenues to be received from such customers will be deficient for a part of the estimated life of the facilities required to serve such customers. Revenue prepayments are amortized into income over an appropriate period.

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

Hydro-electric	50 years
Thermal	30 years

Transmission

Lines	40 years
Switching stations	30 years

Distribution

Oil fields	20 years
Rural and urban overhead	30 years

Gas System

Transmission lines	40 years
Distribution systems	25-40 years

Depletion of Gas and Coal Properties — Depletion of gas and coal properties is calculated using the 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 are capitalized and form part of plant in service. The annually determined depletion rates reflect additions to accumulated costs and estimated remaining recoverable reserves.

Foreign Exchange on Long-Term Debt — All long-term liabilities payable in foreign currencies are recorded in Canadian dollar equivalents at time of issue. Subsequent translation losses or gains are amortized to income over the remaining term of each obligation.

Interest Capitalized During Construction — Interest on funds used during construction is capitalized at the weighted average interest rate of current year long-term and short-term borrowings.

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. The Corporation meets its obligations 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 provisions for superannuation allowances 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.

Notes to the financial statements

1. For 1976 financial statement consolidation, natural gas used in generation of electricity and classified as fuel expense, has been costed at the weighted average cost of produced and purchased gas. In 1975 the stated cost of fuel, after consolidation, included an inter-system mark up on the gas used in power plants and the reported cost of gas sold was decreased by a like amount. This change in costing and restatement of figures did not affect the previously reported net income.

1975 figures have been restated, where necessary, to be consistent with 1976 financial statement presentations.

2. The charge against income and payments to the Power Corporation Superannuation Fund for employees future superannuation benefits was \$4 973 000 in 1976. (\$1 824 000 in 1975)

3. Depreciation and Depletion (000's)

	1976	1975
Depreciation	\$28 178	\$26 745
Depletion	1 446	1 111
Capitalized	(227)	(200)
	<u>\$29 397</u>	<u>\$27 656</u>

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

	1976	1975
Interest paid and accrued	\$42 077	\$33 661
Amortization of debt costs and gains:		
Debt discount and expense ..	666	671
Gain on early repayment of debt	(1 307)	(1 434)
Foreign exchange provision	(155)	2 164
Sinking fund earnings	(8 803)	(7 808)
	<u>\$32 478</u>	<u>\$27 254</u>

Interest was capitalized on construction projects at a rate of 9.5% in 1976 and 1975.

6. Unamortized Debt Costs and Gains (000's)

	1976	1975
Unamortized gains arising from the early repayment of long-term debt	\$7 718	\$9 026
Less unamortized debt discounts and expenses applicable to advances received from the Province of Saskatchewan	<u>6 329</u>	<u>4 901</u>
	<u>\$1 389</u>	<u>\$4 125</u>

7.. Commitments and Contingencies

At December 31, 1976, the Corporation was committed in the amount of approximately \$86.0 million (\$77.7 million in 1975) for materials, equipment and services on contracts not completed at year-end.

In 1969, the Corporation entered into an agreement with TransCanada PipeLines Limited (TCPL) for the exchange of gas over a 5½ year period. The agreement provides for the sale back to Sask Power of a like amount at the same price. Delivery of gas to Sask Power started in November, 1976, however the price is in dispute. The National Energy Board (NEB), on application by TCPL, has ruled that the agreement is subject to the provisions of the Petroleum Administration Act and the price will be the Alberta border price prevailing at time of delivery to Sask Power. The Corporation is contesting the NEB decision in a Federal Court action but in the meantime is paying the higher price under protest. The additional payment recorded as cost of gas in 1976 amounted to \$2.8 million.

5.. Utility Plant in Service (000's)

	Cost	Accumulated Depreciation and Depletion	1976 Net	1975 Net
Electric				
Generation	\$295 000	\$ 86 176	\$208 824	\$214 805
Transmission	118 777	37 435	81 342	80 195
Distribution	243 644	84 028	159 616	148 430
	<u>657 421</u>	<u>207 639</u>	<u>449 782</u>	<u>443 430</u>
Gas				
Production	71 105	20 571	50 534	31 588
Gathering, Treatment & Compression	38 489	18 847	19 642	17 310
Transmission & Storage	98 059	28 753	69 306	68 208
Distribution	90 437	28 331	62 106	57 670
	<u>298 090</u>	<u>96 502</u>	<u>201 588</u>	<u>174 776</u>
General Plant	39 404	18 169	21 235	19 567
	<u>\$994 915</u>	<u>\$322 310</u>	<u>\$672 605</u>	<u>\$637 773</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
1947	1976-77	2 $\frac{5}{8}$		\$ 40	\$ —
1957	1977	4 $\frac{3}{4}$ -5 $\frac{1}{4}$	21 690	27 766	20 939
1961	1977	4 $\frac{3}{4}$	4 355	4 354	2 784
1967	1977	5 -6		2 010(2)	593
1968	1978	5 $\frac{1}{2}$ -6 $\frac{1}{2}$		3 665(2)	956
1959	1979	5 -5 $\frac{3}{4}$		9 650	5 808
1961	1979	5 $\frac{3}{4}$		4 978	2 537
1960	1980	5 -6		14 634	6 690
1961	1981	5 -5 $\frac{1}{2}$		8 534	3 590
1962	1982	5 $\frac{1}{8}$ -5 $\frac{1}{2}$		24 690	6 935
1963	1982	5 $\frac{1}{4}$		9 703	2 475
1958	1983	4 $\frac{1}{8}$	11 820	11 983	8 436
1963	1983	5 -5 $\frac{1}{4}$	18 355	21 245	6 997
1959	1984	4 $\frac{3}{4}$ -5	19 591	19 820	11 808
1964	1984	5 $\frac{1}{4}$ -5 $\frac{1}{2}$		3 429	462
1964	1985	5 $\frac{1}{2}$		7 516	1 751
1965	1985	5 $\frac{1}{2}$		2 140	—
1966	1986	5 $\frac{7}{8}$ -6 $\frac{1}{4}$		13 820	2 127
1976	1986	8 $\frac{3}{4}$	75 000	73 515	—
1966-67	1986-87	5 $\frac{1}{4}$ -5 $\frac{1}{2}$		13 033(3)	4 620
1967	1987	6		7 895	1 385
1967-68	1987-88	5 $\frac{1}{4}$ -6 $\frac{1}{2}$		9 752(3)	2 954
1968	1988	7 $\frac{1}{4}$		12 979	2 214
1968-69	1988-89	6 $\frac{1}{2}$ -7 $\frac{1}{4}$		27 908(3)	6 794
1969	1989	7 $\frac{5}{8}$	13 050	13 790	1 687
1969-70	1989-90	7 $\frac{1}{4}$ -8 $\frac{1}{2}$		32 907(3)	6 372
1965	1990	4 $\frac{7}{8}$	3 625	3 877	963
1970	1990	8 $\frac{3}{4}$		15 000	2 338
1970-71	1990-91	6 $\frac{3}{4}$ -8 $\frac{1}{4}$		33 062(3)	4 950
1961	1991	5 $\frac{3}{4}$		3 000	1 904
1971-72	1991-92	6 $\frac{3}{4}$ -7 $\frac{1}{2}$		27 613(3)	3 046
1972-73	1992-93	7 -7 $\frac{1}{2}$		23 189(3)	1 623
1973-74	1993-94	7 $\frac{1}{2}$		6 297(3)	312
1964	1994	5 $\frac{1}{2}$		4 151	684
1973	1998	7 $\frac{3}{4}$ -8 $\frac{1}{4}$		40 000	2 046
1974	1999	10		20 000	518
1975	2000	9 $\frac{7}{8}$		40 000(4)	—
1976	2001	10 $\frac{1}{4}$		50 000	—
1976	2006	8 7/10	75 000	74 373	—
				<u>\$722 318</u>	<u>\$129 298</u>

Other Long-Term Debt

City of Regina — This is the present value, on the basis of 5 $\frac{1}{2}$ % 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 3 763

City of Weyburn — This is the outstanding portion of the \$2 million purchase price for the City's electrical system. Semi-annual payments with interest at

5 $\frac{1}{2}$ % will retire the liability in 1979 454

Royal Bank of Canada Mortgages — 6% first mortgages on houses in Estevan 16

\$726 551

\$129 298

Long-Term Debt — net of sinking fund

\$597 253

Amounts due within one year

24 570

\$572 683

(1) United States dollars.

(2) Advances totalling \$5 675 300 are subject to redemption on demand.

(3) Advances totalling \$173 761 000 with an original term of 20 years are subject to redemption on six months notice.

(4) Retractable at holder's option to 1983.

(5) If long-term debt in foreign exchange currency were translated at exchange rates prevailing at December 31, 1976, the liability would be increased by \$1 650 669.

(6) Debt repayments and sinking fund installments on outstanding debt for the next five years are as follows: (000's)

1977 - \$24 570; 1978 - \$17 369; 1979 - \$19 031; 1980 - \$17 970; 1981 - \$15 500

9. While the Corporation does not come under the federal government's anti-inflation program, it does operate under terms similar to those contained in the legislation

as administered by the Saskatchewan Public Sector Prices and Compensation Board.

Financial statistics (000's)

CONSOLIDATED INCOME	1976
ELECTRIC SYSTEM	
Sales (1)	\$126 379
Other	1 951
	<u>128 330</u>
Fuel, water, and purchased electricity	30 308
Other operating, maintenance and administration	56 671
Depreciation and depletion	20 865
Interest and other debt costs — net	21 054
	<u>128 898</u>
Net Income	(568)
GAS SYSTEM	
Sales (1)	110 550
Other	2 011
	<u>112 561</u>
Produced and purchased cost of gas sold	51 633
Other operating, maintenance and administration	23 953
Depreciation and depletion	8 532
Interest and other debt costs — net	7 414
	<u>91 532</u>
Net income	21 029
Consolidated Net Income	<u>20 461</u>
CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION	
SOURCE OF FUNDS	
Funds from operations	48 157
Contributed surplus and revenue prepayments	6 391
Long-term debt	195 715
Other	2 283
	<u>252 546</u>
APPLICATION OF FUNDS	
Expenditures on plant and equipment	145 697
Repayment of long-term debt	33 295
Income transferred to the Province of Saskatchewan	10 200
	<u>189, 192</u>
Increase (decrease) in working capital	<u>63 354</u>
CONSOLIDATED BALANCE SHEET	
ASSETS	
Current and other assets	79 022
Plant in service — cost	994 915
Accumulated depreciation and depletion	(322 310)
Work in progress	153 785
	<u>905 412</u>
LIABILITIES	
Current and other	102 935
Long-term debt — net	572 683
Contributed surplus	55 212
Retained income	174 582
	<u>\$905 412</u>
PERCENTAGE EQUITY	27.8

1975	1974	1973	1972	1971	1970	1969	1968	1967
\$100 943	\$ 90 127	\$ 86 329	\$ 79 246	\$ 76 169	\$ 72 387	\$ 67 020	\$ 62 538	\$ 57 336
1 488	1 714	1 559	1 242	1 177	1 136	1 069	1 035	1 282
<u>102 431</u>	<u>91 841</u>	<u>87 888</u>	<u>80 488</u>	<u>77 346</u>	<u>73 523</u>	<u>68 089</u>	<u>63 573</u>	<u>58 618</u>
19 347	12 427	13 161	8 963	7 905	7 577	6 004	8 214	7 260
46 088	34 650	28 370	26 186	23 522	21 696	20 546	17 742	16 479
19 971	19 350	18 334	17 123	16 537	15 970	15 590	15 252	13 897
20 294	19 857	18 065	16 700	16 103	14 614	15 493	13 549	14 050
<u>105 700</u>	<u>86 284</u>	<u>77 930</u>	<u>68 972</u>	<u>64 067</u>	<u>59 857</u>	<u>57 633</u>	<u>54 757</u>	<u>51 686</u>
(3 269)	5 557	9 958	11 516	13 279	13 666	10 456	8 816	6 932
75 353	55 352	49 345	47 972	45 223	42 306	36 760	36 140	32 077
1 494	1 821	1 275	1 022	999	809	894	731	1 076
<u>76 847</u>	<u>57 173</u>	<u>50 620</u>	<u>48 994</u>	<u>46 222</u>	<u>43 115</u>	<u>39 654</u>	<u>36 871</u>	<u>33 153</u>
34 142	22 696	18 459	16 579	15 524	13 152	11 613	10 319	8 600
18 372	14 612	11 927	10 549	9 922	9 773	9 352	8 322	7 771
7 685	7 607	7 149	7 275	6 844	6 933	6 347	6 246	5 866
6 127	6 079	5 714	5 203	5 117	4 796	5 767	5 883	5 941
<u>66 326</u>	<u>50 994</u>	<u>43 249</u>	<u>39 606</u>	<u>37 407</u>	<u>34 654</u>	<u>33 079</u>	<u>30 770</u>	<u>28 178</u>
10 521	6 179	7 371	9 388	8 815	8 461	6 575	6 101	4 975
<u>7 252</u>	<u>11 736</u>	<u>17 329</u>	<u>20 904</u>	<u>22 094</u>	<u>22 127</u>	<u>17 031</u>	<u>14 917</u>	<u>11 907</u>
36 708	39 613	42 191	44 496	44 610	44 645	40 247	37 415	32 669
6 311	3 237	3 065	1 877	1 732	1 307	1 488	1 712	2 496
39 550	23 517	44 490	27 714	28 624	47 870	45 016	50 603	32 938
(1 415)	707	297	(16)	(194)	(2 795)	8 216	911	9 923
<u>81 154</u>	<u>67 074</u>	<u>90 043</u>	<u>74 071</u>	<u>74 772</u>	<u>91 027</u>	<u>94 967</u>	<u>90 641</u>	<u>78 026</u>
98 010	56 675	38 779	40 534	34 392	36 812	28 487	38 639	43 480
29 371	31 362	21 249	27 168	25 336	32 730	48 494	59 573	42 904
3 600	—	—	20 900	—	10 400	8 100	3 500	3 000
<u>130 981</u>	<u>88 037</u>	<u>60 028</u>	<u>88 602</u>	<u>59 728</u>	<u>79 942</u>	<u>85 081</u>	<u>101 712</u>	<u>89 384</u>
(49 827)	(20 963)	30 015	(14 531)	15 044	11 085	9 886	(11 071)	(11 358)
62 951	41 229	47 591	31 088	28 554	27 943	25 002	34 202	34 126
933 685	871 560	844 927	789 094	765 367	733 869	695 260	662 392	600 571
(295 912)	(269 661)	(245 511)	(220 620)	(197 467)	(175 891)	(159 942)	(140 570)	(118 650)
<u>72 906</u>	<u>38 859</u>	<u>12 702</u>	<u>30 411</u>	<u>14 979</u>	<u>14 040</u>	<u>22 844</u>	<u>30 225</u>	<u>53 839</u>
<u>773 630</u>	<u>681 987</u>	<u>659 709</u>	<u>629 973</u>	<u>611 433</u>	<u>599 961</u>	<u>583 164</u>	<u>586 249</u>	<u>569 886</u>
149 578	76 734	62 927	73 986	51 653	65 861	68 985	84 711	73 441
408 325	395 532	400 507	378 421	383 034	380 239	372 670	370 056	377 761
51 406	49 052	47 342	45 997	45 181	44 390	43 755	42 659	41 278
164 321	160 669	148 933	131 569	131 565	109 471	97 754	88 823	77 406
<u>\$773 630</u>	<u>\$681 987</u>	<u>\$659 709</u>	<u>\$629 973</u>	<u>\$611 433</u>	<u>\$599 961</u>	<u>\$583 164</u>	<u>\$586 249</u>	<u>\$569 886</u>
33.5	33.3	31.9	30.8	30.4	27.7	26.3	24.8	22.6

(1) Intersystem usage of gas and electricity is included in system sales. This usage is eliminated on the statement of Consolidated Income and Retained Income.

(2) Statistics retroactively adjusted in accordance with an accounting policy change in 1973 for Customer Capital Contributions and Revenue Prepayments.

Record of progress

	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
OPERATIONS—ELECTRIC SYSTEM										
Customers at December 31	315 635	302 611	291 966	283 282	277 508	274 400	271 000	269 200	267 500	263 900
Electricity sold (millions of kW·h)	6 347	6 125	6 192	5 990	5 289	4 913	4 618	4 159	3 704	3 255
Average yearly residential consumption (kW·h)	6 098	5 973	5 749	5 387	5 315	5 010	4 861	4 750	4 420	4 258
Average yearly farm consumption (kW·h) .	13 670	12 803	11 969	11 019	10 421	9 950	8 845	8 250	7 124	6 813
Rated generating capacity (kW)										
Hydro	467 000	467 000	467 000	467 000	467 000	467 000	467 000	467 000	467 000	280 000
Steam	1 057 000	1 057 000	1 057 000	1 057 000	907 000	807 000	807 000	682 000	532 000	537 000
Internal combustion	172 975	171 137	113 050	111 885	111 500	111 500	111 500	111 500	113 000	96 100
Total	1 696 975	1 695 137	1 637 050	1 635 885	1 485 500	1 385 500	1 385 500	1 260 500	1 112 000	913 100
Seasonal gross system peak load (kW) . . .	1 432 000	1 330 000	1 289 600	1 290 900	1 175 000	1 089 000	1 066 000	956 000	918 000	862 000
Pole miles of line excluding urban distribution system										
72 kV and higher	5 207	5 163	5 113	5 068	4 920	4 864	4 634	4 488	4 488	4 395
Under 72 kV	74 632	74 129	73 606	72 802	72 271	71 965	71 632	71 353	70 948	70 327
OPERATIONS—GAS SYSTEM (Gas volumes at 14.65 psia)										
Customers at December 31	193 229	183 305	173 240	164 902	157 416	150 658	145 498	142 364	137 534	129 932
Gas sold (Thousands of Mcf)	103 808	102 660	114 837	113 998	109 356	107 187	99 309	88 697	84 485	71 562
Average yearly residential consumption (Mcf)	167	184	183	179	197	185	188	188	180	183
* Degree days deficiency (Regina)	5 475	5 941	6 043	5 500	6 355	6 010	6 325	6 142	5 627	5 979
Maximum daily consumption (Mcf)	588 420	535 700	522 930	543 410	539 240	522 440	487 240	447 030	421 980	370 670
Miles of pipeline in service										
Gathering	539	510	507	480	480	458	455	444	443	412
Transmission and laterals	4 921	4 896	4 892	4 691	4 420	4 052	3 811	3 417	3 354	3 101
Distribution	3 062	2 953	2 847	2 691	2 527	2 336	2 217	2 107	2 012	1 896
AVERAGE MONTHLY EMPLOYEES	2 887	2 837	2 625	2 519	2 453	2 420	2 464	2 461	2 597	2 701

*Celsius using 18°C as base temperature



Erection of structural steel at extension to Boundary Dam Power Station.



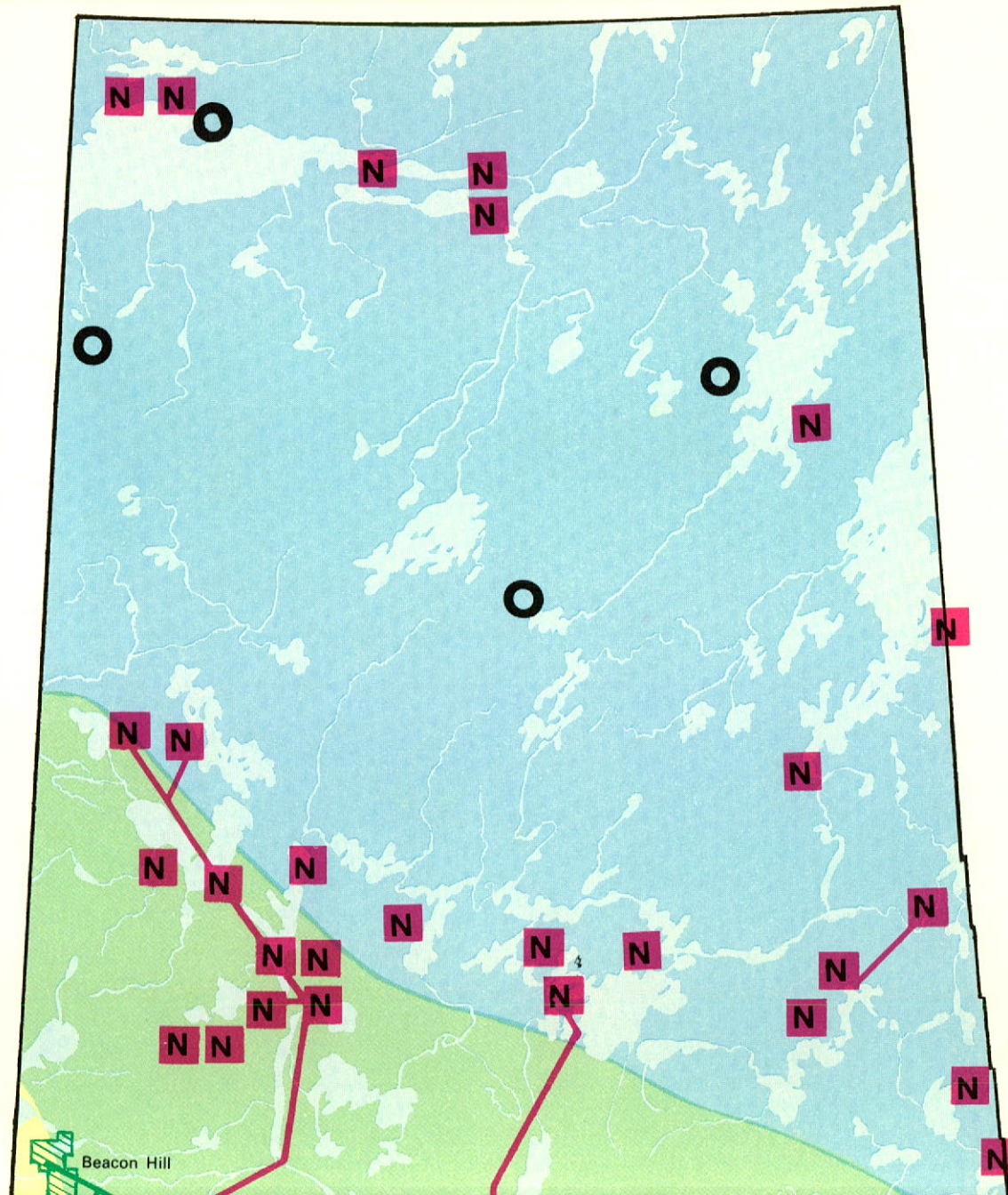
Workmen place chute slab and training walls in spillway during construction at Poplar River project.

SASKATCHEWAN

ELECTRIC AND GAS SYSTEMS

LEGEND

- Electric System
- T Thermal Power
- I Internal Combustion/Power
- H Hydro Power
- N North-Sask. Electric
- Under Construction
- Gas System
- G Gas Compressor Stations
- G Gas Storage and Compressor
- Gas Fields
- Coal Deposits
- Uranium Deposits



ALBERTA

MANITOBA

