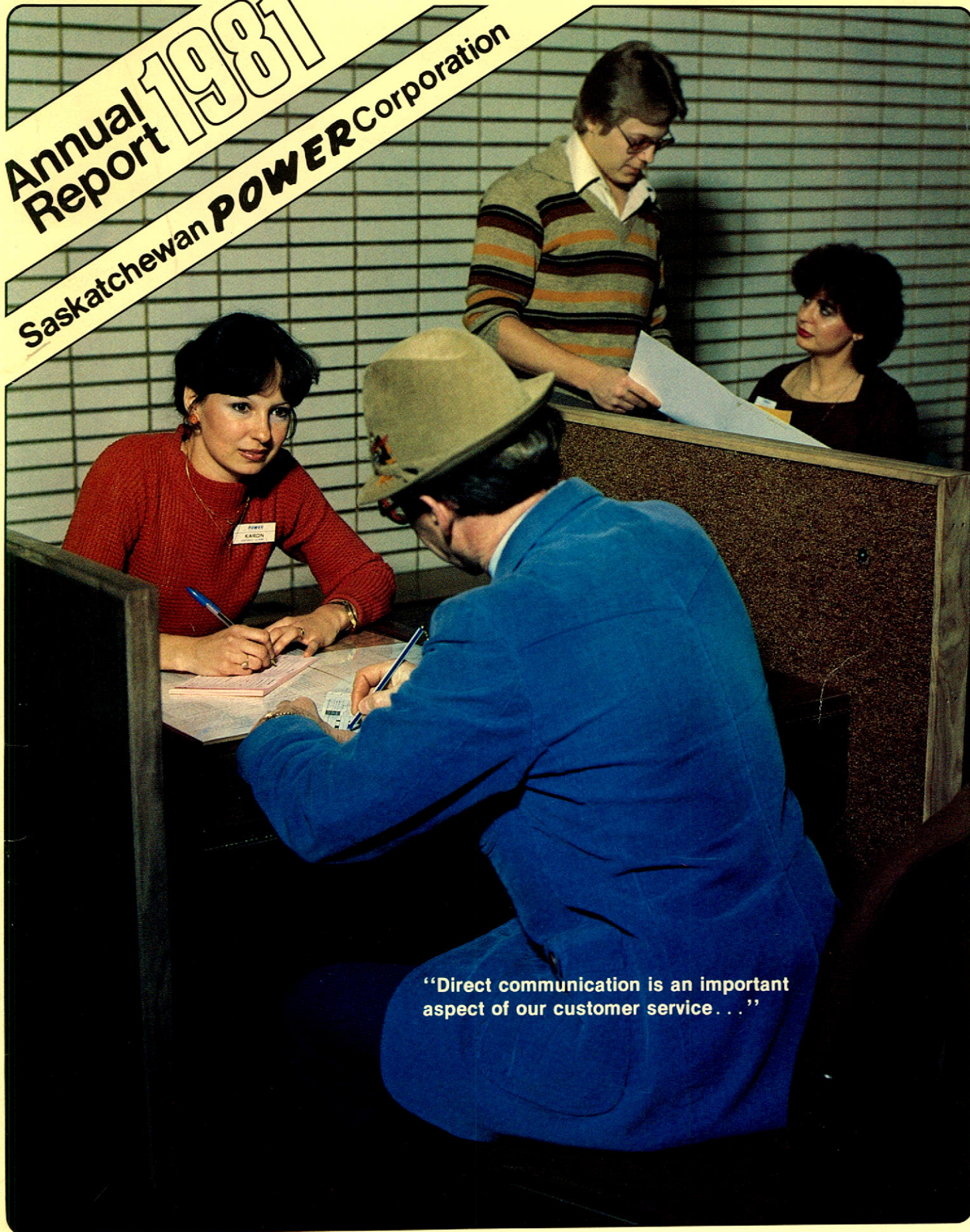


# Annual Report 1981

Saskatchewan **POWER** Corporation



"Direct communication is an important aspect of our customer service..."

OF MANAGEMENT

APR 8 1982



# Highlights

	<u>1981</u>	<u>1980</u>
	(\$ million)	
Revenue from sales . . . . .	509.9	430.5
Net Earnings . . . . .	(2.3)	20.5
Funds from operations . . . .	49.8	64.7
Capital expenditures . . . . .	<u>248.1</u>	<u>160.0</u>

## Energy sales

### —electricity

(billions of kilowatt hours)	8.5	8.2
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### —natural gas

(millions of cubic metres)	2 814	3 029
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## Head Office:

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

# Letter of Transmittal



Regina  
1982 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 1981 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

Poplar River Power Station with town of Coronach in foreground.



# Board of Directors

Hon. D. McArthur, Chairman, Regina  
Minister of Education

Hon. G.T. Snyder, Vice-Chairman, Regina  
Minister of Labour

Mrs. E.C. Clunie, Tisdale  
Office Manager, Tisdale Agencies

Mr. F.M. Hodgkinson, Saskatoon  
Chairman, North-Sask Electric Ltd.  
Assistant Cabinet Secretary

Mr. P.M. Kilburn, Montreal  
Vice-President, Lavalin International Inc.

Mr. J.L. McPhee, Regina  
Deputy Secretary, Cabinet Planning Committee

Mr. L.E. Minogue, Lacadena  
Farmer

Mr. J.R.S. Sadler, Regina  
President, Saskatchewan Oil and Gas Corporation

Mr. L.H. Stevenson, Fort Qu'Appelle  
Director, North-Sask Electric Ltd.  
Farmer

Mr. P.M. Waters, Regina  
President, Hotel Saskatchewan/Consultant

## Board Secretary

Mrs. C.Y. Bryant  
Corporate Secretary, Crown Investments Corporation



Waters Kilburn



Clunie McPhee McArthur



Stevenson



Snyder



Hodgkinson



Sadler Bryant Minogue



# Corporate Executive

Mr. R.H. Moncur  
President

Mr. E.B. Campbell  
Executive Vice-President

Mr. T. Adamcewicz  
Director  
Coal Supply

Mr. D.J. Anderson  
Vice-President  
Public Affairs

Mr. M.F. Barabas  
Director  
Research and Development

Mr. O.W. Hanson  
Vice-President  
Customer Services  
and  
Acting Director  
Corporate Services

Mrs. A.N. Hynd  
Vice-President  
Finance

Mr. R.G. Lawrence  
Chief Engineer

Mr. V.H. Nelson  
Vice-President  
Energy Supply Planning

Mr. F.D. Roberts  
Acting Vice-President  
Human Resources

Mr. B.A. Steuart  
Vice-President  
Gas Operations

Mrs. K.D. Wellman  
Corporate Legal Counsel

Mr. W.R. Wiggins  
Vice-President  
Electric Operations



Anderson Adamcewicz Barabas Lawrence



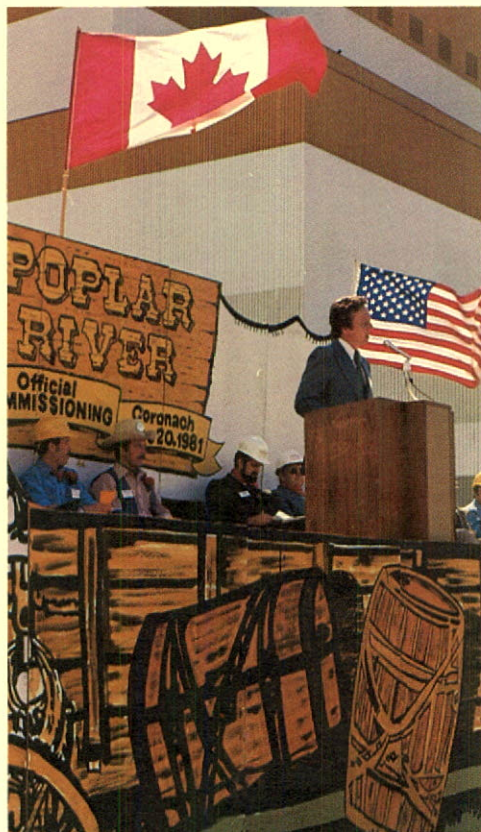
Wiggins Roberts Hynd Campbell



Hanson Nelson Steuart Wellman



# Chairman's Letter



Hon. Doug McArthur speaking at the commissioning of Poplar River Power Station.

The lives of Saskatchewan people have been directly influenced by the Saskatchewan Power Corporation for several decades. In those years, there were many hard times and many good times.

We faced numerous challenges in the past, including rapid expansion to meet the energy needs of customers. In the early years, we responded to the needs of the time by bringing electricity to farms and rural areas of Saskatchewan. We expanded our role to include natural gas service to the people. We harnessed the Saskatchewan River. We embarked on lignite coal mining to make optimum use of this fuel for power generation.

Our successes were not without their difficult moments. But the untiring efforts for which our people are well-known brought exciting results and considerable improvements to the lifestyles of the people. Today, our corporation stands tall among all utilities in doing its job of supplying reliable and efficient service at economical prices.

The Saskatchewan government is proud of, and I am sure customers are pleased with, the quality of service delivered by the corporation. It is especially gratifying to note that our achievements were reached in spite of major challenges this past year and the years before.

A service area such as Saskatchewan provides a challenge unmatched by any other utility. The unique geographical, climatic and demographic nature of Saskatchewan makes this task demanding, to say the least. Few utilities anywhere serve so few customers spread over such distances. In many cases, the cost of supplying service far exceeds the rates paid by the customer.

Ensuring the environment is adequately protected from adverse effects of our existing operations and new projects requires expenditures that were not thought necessary 10 or 20 years ago. Likewise, the process of involving the public in our planning is bringing the utility closer to the community, but it is also at some expense.

The challenges continue. In the next 10 years, we will need as much as \$6 billion to meet forecast energy needs and to encourage effective conservation. In order to maintain a secure and reliable supply of energy in the future, we must be prepared to undertake the necessary capital expenditures today and tomorrow.

We will be required to borrow a large part of our financial requirements at high interest rates. We must also prepare ourselves to face the challenge of skyrocketing cost increases in other sectors.

Many of the cost increases we face are caused by outside factors, such as the cost of gas from Alberta, payments to the federal government, runaway inflation and high interest rates on borrowed funds.

Because of the age of the utility, and hence the age of our facilities, many upgrading and rebuilding projects are required. This, plus the new facilities which must be built to handle the growth as the economy of the province continues to expand and prosper, adds extra economic pressures on us.



The oil crisis of 1973 precipitated a change in attitudes and approaches to energy supplies the world over. We, too, were reminded that low-cost energy supplies are not guaranteed and neither are energy prices. The wise use of energy resources has taken on a new meaning—conservation of energy.

This is a challenge as well as a responsibility for each one of us. If we are to succeed as a utility and if our customers are to continue to enjoy an assured supply of energy, then both the supplier and user of energy must accept conservation as a necessity for future success.

We are undertaking programs to save energy and we are continuing conservation programs for the benefit of all groups of customers. Some of the programs in which we are involved are outlined in this report. In the coming year, we will announce further programs to help customers.

While conservation was a part of our thinking and planning in the past, it will become an integral part of our lives and activities in the future, if we are to survive in the energy business. A major component of our success will, therefore, be our ability to convince our customers to conserve, if not for themselves, then for future generations.

Without conservation, lights and heat when they're needed will not be as easy to come by as they are today. Our customers receive a reliable supply of energy. Our corporation also continues to provide service at prices that are among the lowest in Canada, if not in the world. As economic pressures force us to increase our rates, there is some comfort that those pressures are affecting all other utilities.

The support and understanding of the public have greatly helped the corporation overcome many of the hurdles of the past. We look forward to continued support and understanding of the challenges of the future, foremost among them the need for serious conservation efforts and the ability to deal with the economic pressures of continued cost increases and their effects on energy rates.

I have found my first full year as chairman of the board of directors one of rewarding and challenging experiences. I am especially pleased with the hard work and dedication of all employees. It was that spirit of co-operation and support that helped us succeed in the past and that I know will help us succeed in the future. To all employees, my sincere thanks.

The challenges of the future await us.



Hon. Doug McArthur

A handwritten signature in black ink that reads "Doug McArthur".

Doug McArthur  
Minister-in-charge of the  
Saskatchewan Power Corporation



# President's Letter



**Bob Moncur discussing corporate issues on television.**

The year 1981 has been an eventful one for the corporation and for me, personally. It marked the start of my role as president of an organization that is vital and dynamic. I believe I joined the corporation at a time of change—a crossroad perhaps—in our history.

We are on the verge of some major challenges and changes. In fact, we are already experiencing some of these tests of our strength. Can we succeed? Will we succeed?

The answer lies in all of us—management, staff and directors, as well as the public as shareholders. It is our collective and individual determination and will to succeed that will provide the strength and wisdom to meet the challenges and adjust to new directions in the years ahead.

Our task might be difficult, but not insurmountable. This past year alone, we have confronted some significant events in our history. These touch upon virtually every aspect of our lives.

One of the most important and far-reaching events of 1981 has been in the financial area. We have experienced a net loss of \$2.3 million. This is a new situation for us after experiencing average net incomes of close to \$20 million in the past few years. However, it is a reminder to each of us that we are in a new era. We are faced with even more difficult financial times, and we must prepare ourselves for the future.

Challenges are not new to us. We have faced them in the past and with the right preparation and approach we dealt with them successfully.

The energy demand of the future calls on us to prepare once again. We have to build new facilities and rebuild worn-out assets at a time of rampant inflation. This requires major financial commitments that are necessary for progress and to enable us to fulfill our mandate now and in the future.

This past year, there were several external events that affected our finances and which were beyond our control. In 1981 alone, we were bombarded with new and higher federal taxes and transportation costs for natural gas that drained us of millions of dollars, influenced further by changes in oil prices at the world level.

What does this mean for us? It means tighter controls on our own spending, still more borrowing at high interest rates, and continued rate increases.

We are undertaking initiatives in our public behavior. We are giving a higher priority to how we meet our responsibilities in the eyes of the public, how we communicate with our customers, how we involve them in what we do and how we serve them beyond meeting their energy needs.

In addition to our ongoing meetings in the community on various topics, we are now ensuring the public is involved in the planning process associated with our major projects. We firmly believe this is the direction that is needed in these times and we will continue to invite the public to share in it with us.



We are also undertaking major initiatives in the area of energy conservation. This past year has reminded us that this topic has made a definite shift from the "conservation is good" era to the time when we realize "conservation is necessary."

For many years, we have been a consumer society. Now we are moving toward a conserver society. We realize we don't have that much to go around after all. Through energy management, we must use our resources judiciously and save as much as we can for the future.

We will continue to provide advice to the public and to administer government conservation programs throughout the province.

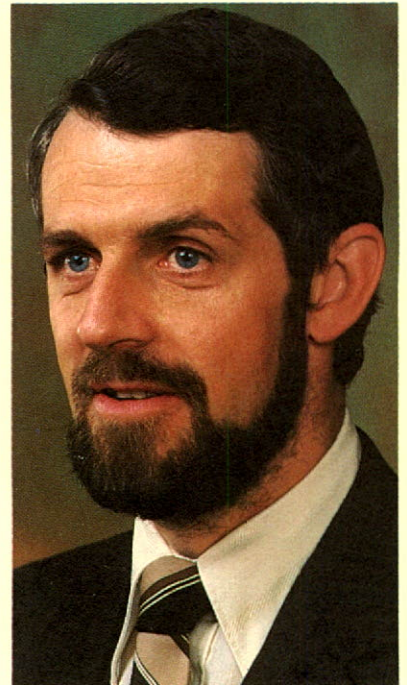
Energy conservation has definite financial advantages to us and the consumer. It is also an important energy source—perhaps the easiest, most economical and handiest for the corporation and the public. It can help us postpone building generating facilities if it is practised conscientiously by everyone.

Although conservation contributed to lower energy use in 1981, part of this pattern was because of milder weather. The latter factor, however, is not a cause for complacency since colder weather is inevitable. Instead, it highlights the need for continued alertness and efficiency in keeping the system in shape. Weather patterns after the end of the year reinforced that fact with record coincident seasonal peaks in use of electricity and natural gas occurring in 1982 January.

While we are responding to the needs of customers and improving our material resources, we have also undertaken initiatives in programs among our employees. We are proud that in 1981 we were the first crown corporation to receive interim approval from the Saskatchewan Human Rights Commission for our Affirmative Action program. We have already made considerable progress in providing employment opportunities for the program's target groups; namely, native people, women in non-traditional jobs and the physically disabled.

In the coming years, we shall continue to provide leadership, strength and foresight in our programs and plans. We intend to keep our public better informed about our business in order to overcome some of the financial and energy supply difficulties that are ahead. It is our responsibility to ensure customers fully understand the situation and that our employees are equipped to better help in the task of explaining the issues to the public.

The management and staff of SPC have done a commendable job this past year in meeting their responsibilities of serving the public in a reliable and efficient manner. I thank all employees for their efforts, the two unions for their co-operation and I express my gratitude to the chairman and the board of directors for their guidance and support.



Robert H. Moncur

A handwritten signature in dark ink, reading "R. H. (Bob) Moncur". The signature is written in a cursive, flowing style.

Robert H. Moncur  
President



# Service Is Our Business

Service is indeed our business at Saskatchewan Power Corporation. It is in fact the central theme of our mandate—to serve the people of Saskatchewan with electricity and natural gas in a reliable, economic, safe and efficient manner.

As times change, we have made adjustments to suit the new demands on our systems and to meet the needs and desires of the customers we serve. For instance, we embarked on coal mining in order to be assured of an economical and reliable supply of Saskatchewan coal for power generation. We have undertaken intensive energy conservation programs because of rising prices and the uncertainty of future energy supplies. And, our research and development efforts have taken on new importance.

However, we continue to strive to provide the best possible service at the lowest price. That is not an easy task considering the turbulence of the energy scene today, the difficult economic times combined with the capital intensive nature of our business, and the unique geography of Saskatchewan.

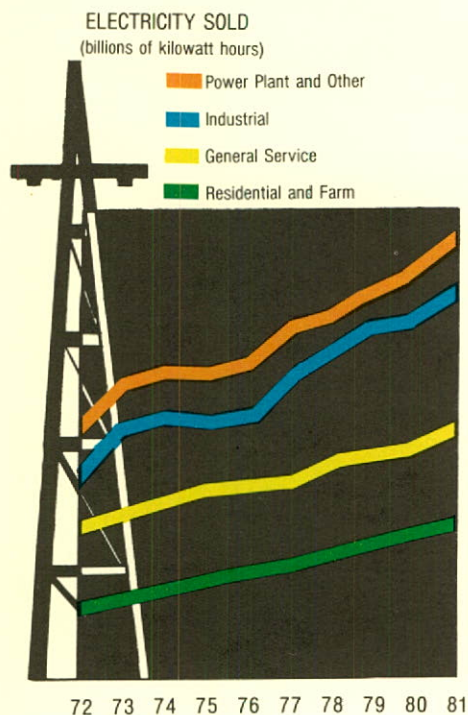
Because our business is to serve the people of Saskatchewan with two essential commodities, we play an important role in the lives of all residents of the province. An examination of the total energy picture of Saskatchewan in 1981, however, shows electricity amounts to eight per cent of energy used, whereas natural gas is 31 per cent. As such, we are a foremost energy supplier and hence must do our utmost to handle this critical responsibility.

Amidst these pressures, we have been able to provide a service that is one of the most reliable in Canada. We have met the energy needs of the people of Saskatchewan with a minimum of disruption and inconvenience and at relatively low prices.

We also maintain a flow of information with the public on various aspects of our service, operations and plans.

Our customer numbers have grown steadily over the years. At the end of 1981, we served 365 350 electricity customers, 8 101 more than the previous year. The increase included 6 160 new residential customers.

Customers receiving natural gas totalled 227 127 in 1981. This was 5 749 more than 1980 and included 4 979 new residential customers.





In 1981, electricity sales totalled 8 486 GW·h (gigawatt hours) compared to 8 164 GW·h in 1980, an increase of 3.9 per cent. Increased sales to Manitoba accounted for 1.9 per cent of this increase. Industrial electrical consumption declined marginally, largely because of the effect of the National Energy Program on decreased oil production and pipeline pumping activities. Other sales categories recorded only marginal increases which reflect mild weather conditions and consumers' conservation efforts.

The consumption of natural gas declined 7.1 per cent from 3 029 million cubic metres in 1980 to 2 814 million cubic metres in 1981. The reduced consumption resulted from much milder weather, which was the warmest in 50 years, and efforts by customers to conserve energy. The average yearly residential consumption of natural gas in 1981 was 3 707 m<sup>3</sup> (cubic metres) compared to 4 032 m<sup>3</sup> in 1980.

### Peak System Requirements

	1981	1980	% Increase (Decrease)
<b>Electric</b>			
System peak demand	1 684 000 kW (1981-12-15)	1 773 000 kW (1980-12-19)	(5.0)
Maximum single day use	34 748 517 kW·h (1981-02-10)	35 504 414 kW·h (1980-12-19)	(2.1)
<b>Natural Gas</b>			
Maximum single day use	17 046 000 m <sup>3</sup> (1981-12-30)	17 515 000 m <sup>3</sup> (1980-01-08)	(2.7)

### Electrical Energy Supply

Of the total supply of electricity, 67 per cent was generated by our thermal stations, 30 per cent by our hydro stations and the remaining three per cent was imported from Manitoba Hydro.

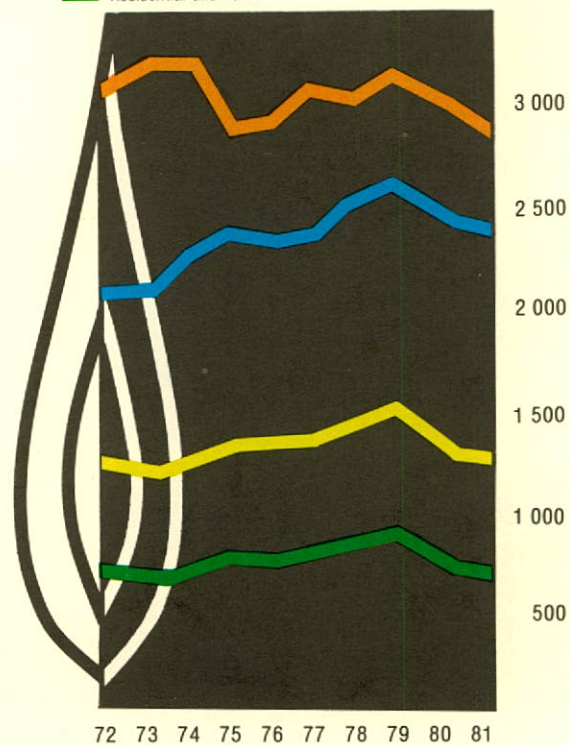
Our imports from Manitoba were down from 13 per cent of total system needs in 1980, when conditions for hydro generation in Manitoba were exceptionally favorable. We import available energy from Manitoba whenever it is more economical than producing it in Saskatchewan.

### GAS SOLD


(10<sup>6</sup> m<sup>3</sup> @ 101.325 kPa)

(millions of cubic metres)

Power Plant and Other  
Industrial  
General Service  
Residential and Farm





A full-page photograph of a utility worker in a white bucket on a red truck, working on a power line. The worker is wearing a yellow hard hat and a dark jacket. The truck is a red Chevrolet with a large hydraulic boom. The background is a clear blue sky and some bare trees.

Flows in the North and South Saskatchewan Rivers were 23 per cent and 36 per cent higher than the long-term averages, respectively. This increase in hydro potential in 1981 reduced production from the more expensive thermal generation. Both the Coteau Creek and Squaw Rapids Hydroelectric Power Stations produced 11 per cent more energy than normal.

An addition to our hydro facilities on 1981 April 01, Island Falls Generating Station supplied about five per cent less than normal because of lowest recorded water levels in Reindeer Lake and Churchill River since 1938.

Our two coal-fired generating stations near Estevan produced 55 per cent of system electrical energy requirements compared to 62 per cent in 1980. Together they burned 4 230 000 Mg (megagrams) of lignite coal, 13 per cent less than 1980's consumption.

The Poplar River Power Station provided eight per cent of system energy requirements and burned 614 000 Mg of lignite coal supplied from the Poplar River Mine.

The use of Alberta sub-bituminous coal at the Queen Elizabeth Station in Saskatoon was 94 000 Mg compared to 107 000 Mg in 1980.

The use of natural gas for electricity generation declined in 1981. Total consumption was 148.0 million cubic metres compared to 214.2 million cubic metres in 1980.

Continuous maintenance keeps the system in top condition.



## Natural Gas Supply

Alberta gas comes from supplies owned wholly or partially in that province by our subsidiary, Many Islands Pipe Lines (Canada) Limited, and other suppliers such as Trans-Canada PipeLines Ltd.

These imports are necessary to maintain security of supply to meet normal as well as peak customer demand.

The Alberta gas is mixed with less expensive Saskatchewan gas, resulting in lower cost to our customers.

Our underground storage facilities are used as needed to meet peak customer demands in the coldest weather. Total usable storage in Saskatchewan is now about 394.5 million cubic metres, and can be delivered to the system at the rate of up to 7.9 million cubic metres daily or 46.3 per cent of the 1981 peak day needs.

## Outage

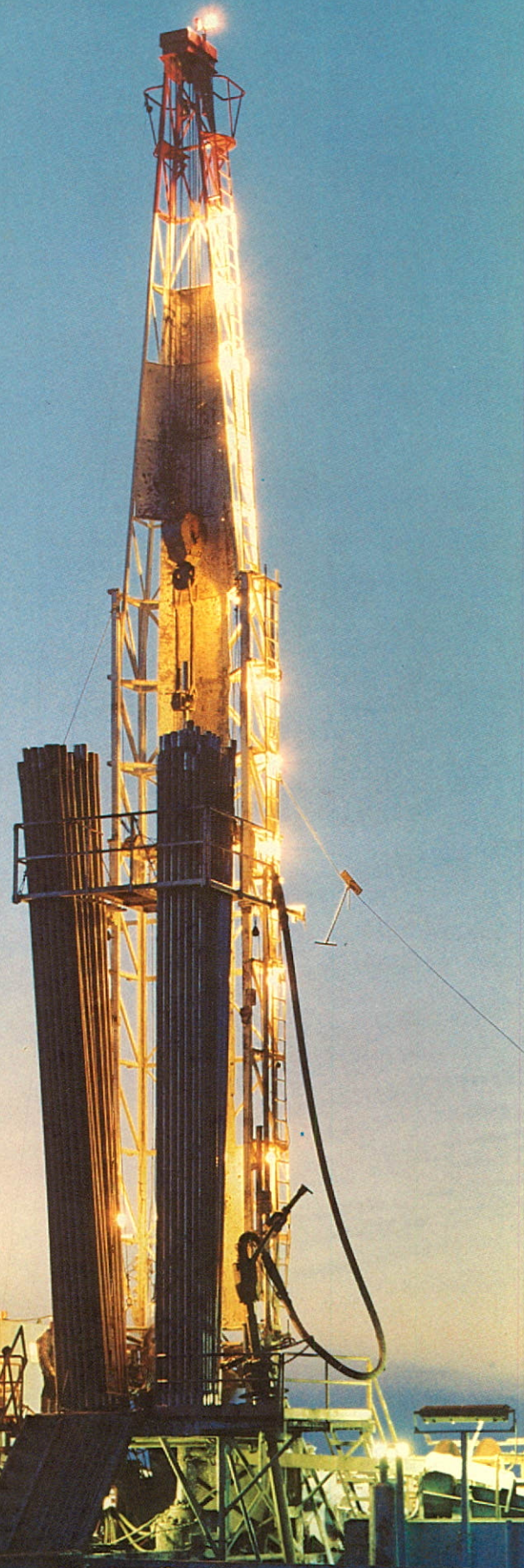
A major electrical outage originated at Boundary Dam Power Station on November 19, affecting most of the province. It occurred because of a switch failure during protection tests at the station. There was no injury to staff or damage to equipment as a result of the disturbance.

## Fly Ash

Our fly ash sales totalled 28 103 Mg (megagrams) with revenue reaching a record \$842 956.

We are continuing to expand our markets for fly ash in Western Canada and bordering states in the U.S. Our marketable fly ash is produced at Boundary Dam Power Station. Previously regarded as a nuisance by-product from the burning of lignite coal, fly ash is now a useful additive in concrete.

Drilling to develop Saskatchewan's natural gas resource





# To Serve and Conserve



The Fahlman family of Kronau were the first rural homeowners to qualify for a Home Energy Loan of \$3 000.

Part of our service as an energy utility is to help our customers conserve energy and to convey the conservation message to all energy users in the province.

We are involved in several conservation programs that are second to none in Canada. Other programs offering even greater promise for energy savings are to be announced in the future.

The course of our history has taken a dramatic turn. We once promoted the use of electricity and natural gas in order to help create an improved lifestyle for Saskatchewan people.

Then came the 1973 oil crisis which marked a new worldwide awareness that energy supplies and costs were not to be taken for granted.

Since then, energy conservation has increased in importance to the point that today it is our cheapest new energy source. Also, it is beneficial to all energy users because of the financial savings it brings. We are, therefore, committed to explore this untapped resource both internally and externally.

We help make federal and provincial conservation programs available to the public from our district offices which are located throughout the province and where we have capable staff to help customers. We administer the Warm Up Saskatchewan Loan Program and the Home Energy Loan Program on behalf of the provincial government as well as the Canada Oil Substitution Program for the federal government.

Through the Warm Up Saskatchewan program, the provincial government provides three-year, interest-free loans of up to \$1 000 to assist homeowners in improving the energy efficiency of their homes. The program provided more than \$2 million to more than 2 950 customers in 1981, and achieved an average energy saving per participant of 22 per cent. Because of the Warm Up program, an average 1 047 m<sup>3</sup> of gas and 132 kW·h of electricity have been saved per year by each participant.

While the Warm Up program is directed to owners of existing homes, the Home Energy Loan Program provides interest-free loans for new homes built to high standards of energy efficiency. The loans are up to \$3 000 for a 10-year term. Although the program started in 1981 July, by the end of the year, more than 330 homes were built or were under construction to the program's standards. This



program is a Canadian first and the building standards are the highest in Canada.

The Canada Oil Substitution Program provides grants to homeowners to convert their heating system from oil to natural gas where gas is available. In 1981, 208 grants for conversions were processed for an estimated total displacement of more than 900 000 L (5 600 barrels) of oil per year.

Our programs to inform the public on the wise use and conservation of energy were directed to virtually all customer classes. We also presented workshops and seminars to various groups, including school boards, nursing homes, municipal officials and electrical contractors.

We consider managing our own energy use a prerequisite if we are to provide leadership to our customers.

In the three years of our internal energy conservation program, up to mid-1981, over \$2 million was saved because of reductions in the use of electricity and natural gas in our facilities.

To reduce electrical system requirements over the daily peak periods, we do not operate some of our equipment such as the large electrically-powered draglines.

Other energy saving measures in transportation include using smaller vehicles with lower fuel consumption. Also, car pooling and the use of public transportation are being encouraged among all employees.

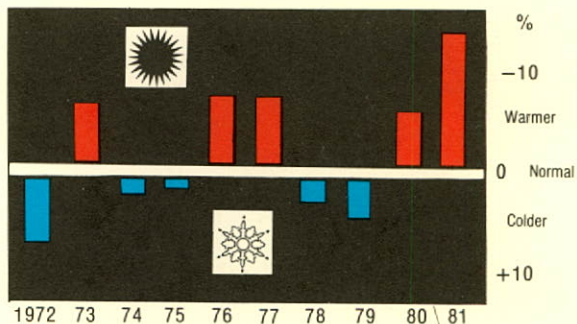
Our energy conservation efforts in the coming years will be giving greater emphasis to the use of waste heat in the form of warm water and exhaust gases from power stations and gas compressor stations. For several years, waste heat projects have been conducted for the cultivation of tomatoes at Saskatoon Compressor Station and Queen Elizabeth Power Station, Saskatoon. We are working with other interested parties on new projects in agriculture and aquaculture using waste heat from power stations near Estevan.

An experimental waste heat recovery project continued in Saskatoon. The project is testing the use of a heat pump for the transfer of waste heat from a large transformer to a nearby control building. If successful, there is potential to heat 30 additional control buildings in our switching stations from the waste heat of our larger transformers.



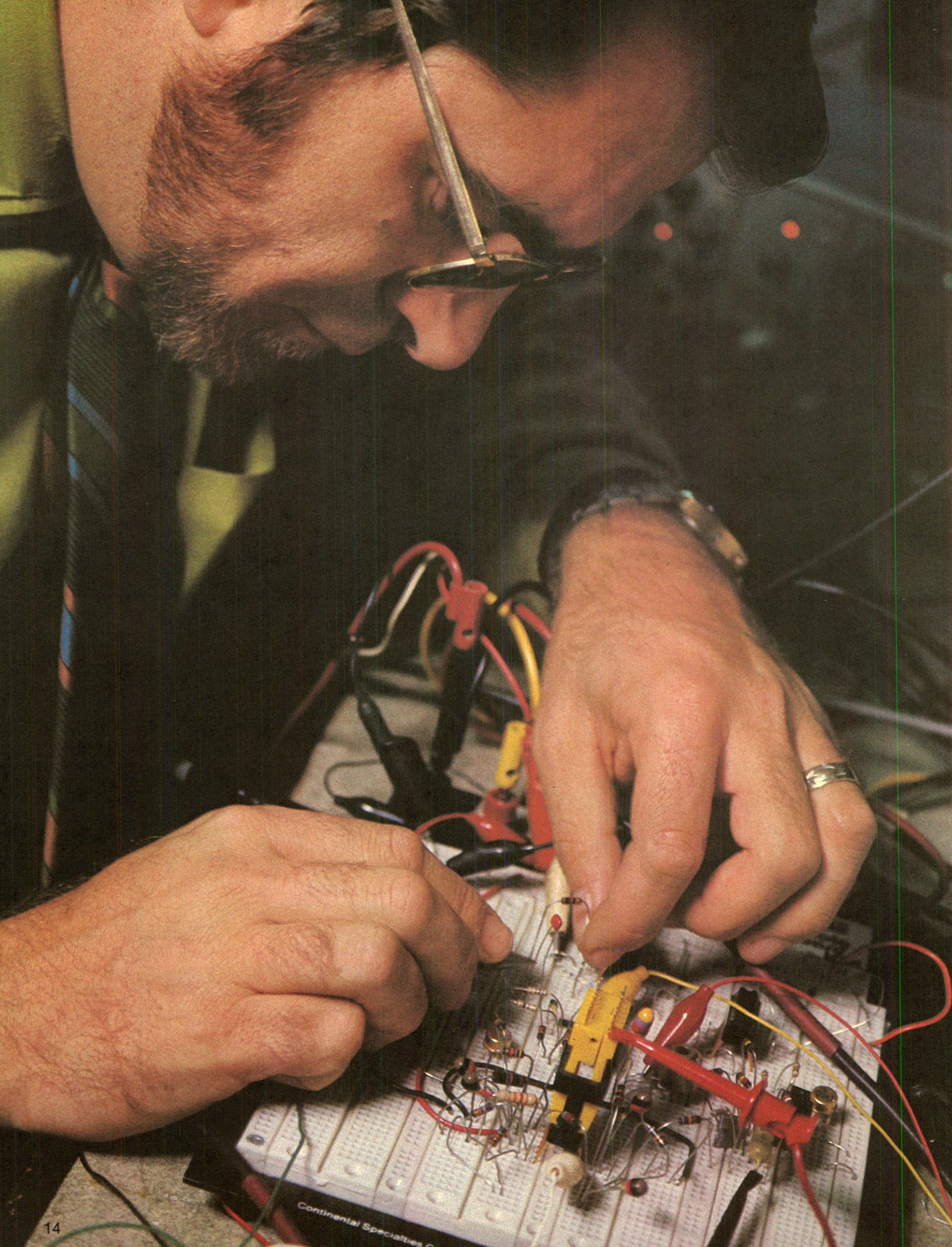
**Processing applications for assistance under the Canada Oil Substitution Program.**

TEMPERATURES  
Percentage change from  
Normal (Based on 30  
year average Regina  
Temperatures) Normal  
Average Degree days\*  
5902 Celcius



\*A degree day is the number of degrees by which daily mean temperature falls below 18°C.  
One degree day is counted for each degree of deficiency for each day on which such a deficiency occurs.







# New and Better Ways

Our Research and Development activities continue to increase in importance. We are attempting to improve the efficiency of our present systems and operations and also to find the most economical ways of providing energy in the future.

We are keeping in the forefront of new technologies in resource development, conservation and operational improvements. Our research programs are co-ordinated with trade associations, government laboratories and international agencies. The Research and Development Centre also serves as a resource for technical information for our use as well as for provincial and federal agencies. The results of these efforts are vital to our strategies in energy supply planning and conservation programs.

## **High Efficiency Furnace**

We conducted laboratory tests in 1981 on a new high efficiency natural gas furnace now coming on the market. The furnace requires no chimney. Our tests show it operated at a seasonal efficiency of about 90 per cent, compared to about 50 per cent for a conventional unit.

This system holds great potential for the future as one of the leaders in energy-saving appliances in Saskatchewan households. We may become more involved in its use in Saskatchewan and its possible inclusion in our energy conservation program.

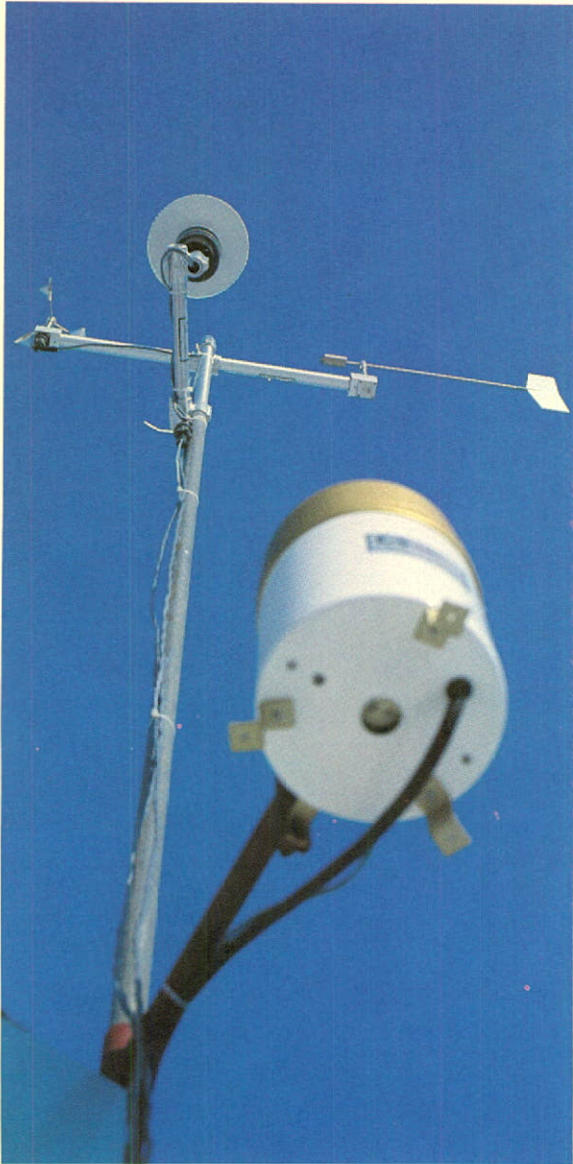
## **Load Diversity Study**

We are developing a test system to measure and record demand loads of household appliances, under a contract with Canadian Electrical Association.

As part of this study, a computer model has been developed which can assist in residential load forecasting by predicting load anywhere in the distribution system and predicting how appliances affect load. The model can tell us where energy conservation is possible and where energy is needed.

In 1982, we will install three recording systems for field test, data gathering and verification of our computer model.





**Radio noise test station to measure effects of high voltage transmission.**

### **Radio Noise Test Station**

We are developing a method of measuring the effects of high voltage transmission lines on radio and television reception through a mobile field station under construction in Regina.

The test station would help ensure our new transmission lines meet required standards regarding environmental effects of radio noise.

### **Lignite Beneficiation**

One of our pioneer efforts is a process to improve the usefulness of lignite coal, found in abundance in Saskatchewan.

Lignite is difficult to use in electricity production because of its high moisture content of about 35 per cent and the resulting high transportation costs and poor burning efficiency. In addition, the sodium content of some Saskatchewan lignite causes fouling problems in power plant boilers.

Our new process would remove a large portion of both the water and sodium as well as some of the sulphur. If successful, the process would result in a more desirable, "beneficiated" product.

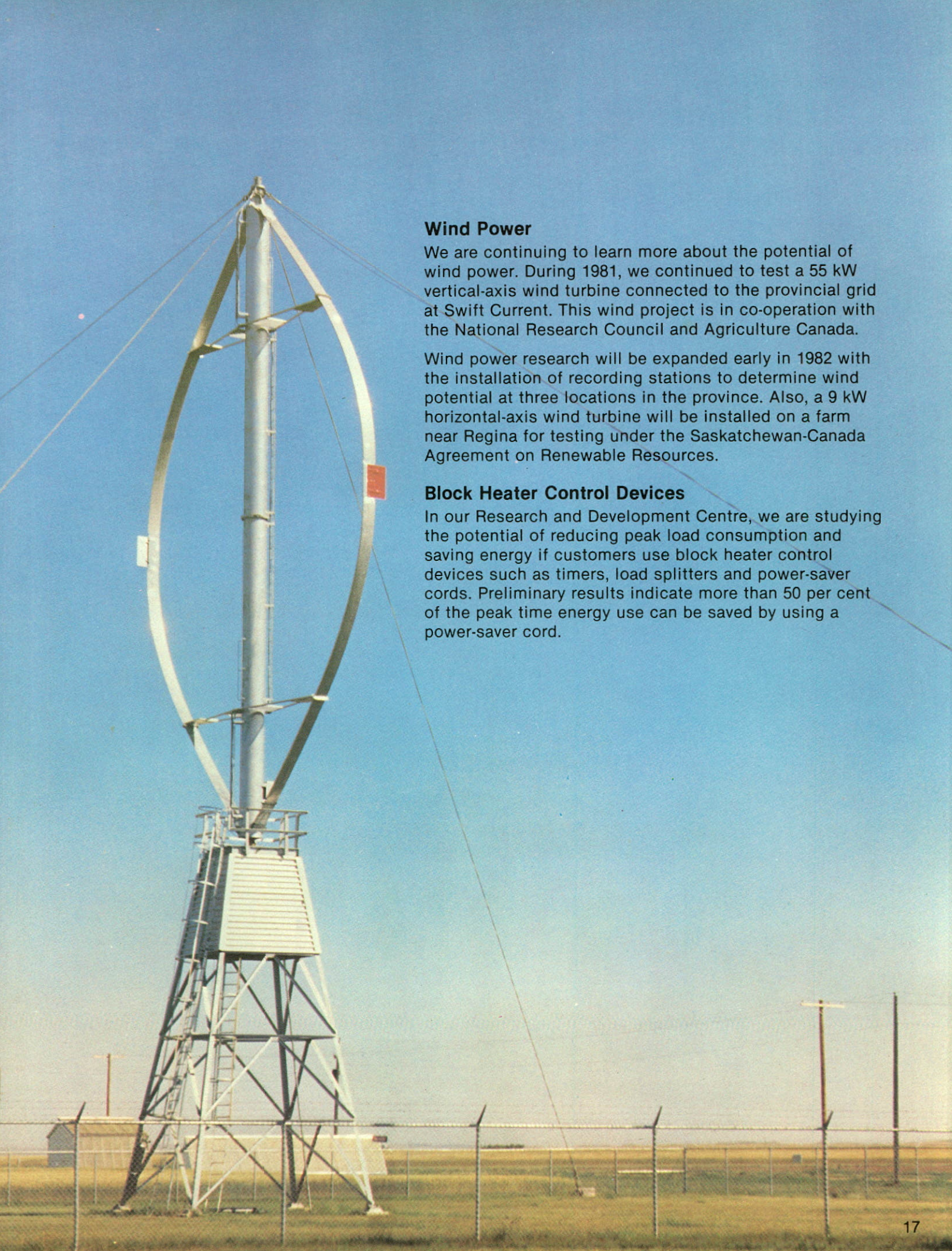
### **Combustion and Coal Ash Utilization**

We are also developing a method to predict and help overcome problems caused by the high ash content of Saskatchewan lignite. The project, we hope, will reduce combustion problems and make the burning of lignite for power production more reliable, economical and efficient.

We are also studying the recovery of potentially valuable minerals from ash and exploring new ways of using this by-product from our operations.

**Learning more about the potential of wind power for electrical generation.**





### **Wind Power**

We are continuing to learn more about the potential of wind power. During 1981, we continued to test a 55 kW vertical-axis wind turbine connected to the provincial grid at Swift Current. This wind project is in co-operation with the National Research Council and Agriculture Canada.

Wind power research will be expanded early in 1982 with the installation of recording stations to determine wind potential at three locations in the province. Also, a 9 kW horizontal-axis wind turbine will be installed on a farm near Regina for testing under the Saskatchewan-Canada Agreement on Renewable Resources.

### **Block Heater Control Devices**

In our Research and Development Centre, we are studying the potential of reducing peak load consumption and saving energy if customers use block heater control devices such as timers, load splitters and power-saver cords. Preliminary results indicate more than 50 per cent of the peak time energy use can be saved by using a power-saver cord.



# Informing and Listening



Face-to-face contact bridges the communication gap.

We strengthened our commitment in 1981 to the process of involving the public and interested citizen groups in our future planning of large projects or other activities that directly affect the public. Feedback on their expectations and local concerns has reassured us that the public wants to participate.

We are endeavoring to supply the public with as much information as possible about our future plans, projects, operations and services. The process enables us to respond to public concerns about future energy developments as a vital part of our planning.

Extensive public involvement programs are being carried out on several major projects that are in the planning stage. These include proposed thermal generating stations on the Wood River and Lake Diefenbaker, coal mining and transportation proposals to serve the stations, prospective hydro sites on the Saskatchewan River at The Forks and near Choiceland, the northern grid proposal and construction activities associated with the Nipawin hydro project. Similar activities have also been started in connection with the planning of new electrical transmission lines such as Coteau Creek to North Battleford and Glaslyn to Meadow Lake.

Public involvement is also in progress for a 230 kV line from Codette to Beatty, required to connect the Nipawin Hydroelectric Power Station to the provincial transmission grid. An environmental impact assessment will also be required and, if approved, the line will be built in 1985.

In order to facilitate customer contact and to improve our internal communications, we have installed an advanced telephone system and improved our 24-hour communications centre.



Students at Stanley Mission learn the merits of energy conservation and safety.



Public involvement in the planning of proposed power project.



# Our No. 1 Resource

Although vast sums of money are invested in facilities to produce and supply energy to our customers, our most valuable resource is still the approximately 3 400 full-time and the many other part-time employees working with us.

Some 1 200 of our gas and clerical employees are represented by the Energy and Chemical Workers Union (ECW) Local 649, while approximately 1 440 electrical workers are represented by the International Brotherhood of Electrical Workers Union (IBEW) Local 2067.

## Employee Relations

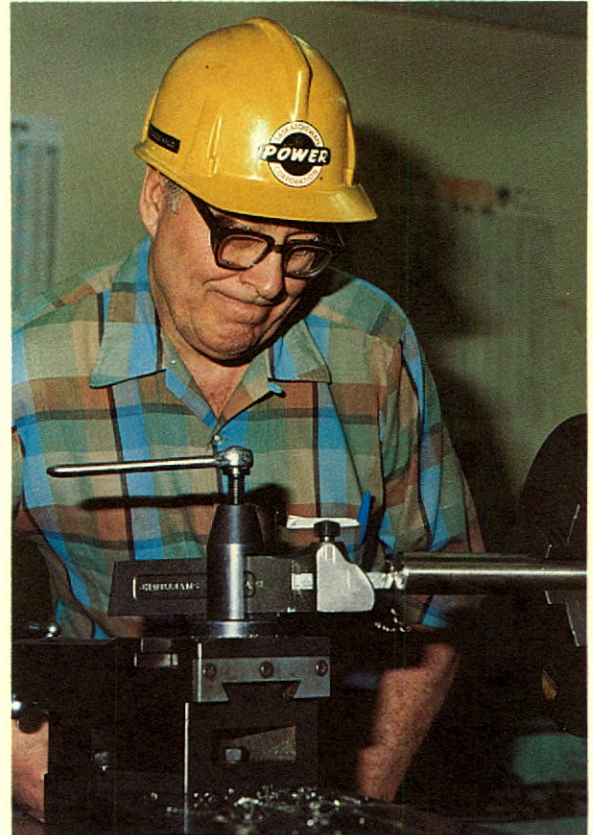
We continued in 1981 to experience a period in our growth where many pioneers of the utility are retiring or reaching milestones of long service. Among these were 51 employees who were honored at retirement functions.

In the next five years, a further 250 employees will reach retirement age or will have completed 35 years of service and be eligible for retirement.

Functions were held in Saskatoon for 132 employees and in Regina for 154 employees who attained long service milestones in 1981.

## Development and Training

Emphasis continued in 1981 on preparing our employees for advancement and improving their capabilities in existing functions. This was done through training courses and seminars conducted within the corporation and in schools and universities. We also continue to support other professional, technical and management development opportunities for our staff.



Our people are still our most valuable asset.



Staff community involvement is recognized by the Canadian Red Cross Society.





Approximately 3 400 people, in many types of jobs, provide service to our customers.

In 1981, employee attendance at classes totalled 9 394 employee days of training. The most intensive training was in employee safety, which was attended by close to 1 400 employees and included first aid, defensive driving, professional driver improvement and cardiopulmonary resuscitation.

We conducted 50 management development courses which were attended by 557 management staff and 111 union employees.

### **Affirmative Action**

We made significant progress in 1981 in our Affirmative Action program, which has the support of management and the two unions. The program moved from the planning to the implementation stage where employment, training and promotional opportunities were provided for employees in the program's three target groups—persons of native ancestry, women in non-traditional occupations and physically-disabled persons. The Saskatchewan Human Rights Commission granted interim approval in late December for our initiatives in Affirmative Action. We are proud to be the first crown corporation to obtain such support.

For the past four years, we have been providing training and assistance to persons with special needs for employment and education through Headstart Employment Corporation. This program is a valuable supplement to our Affirmative Action program because of the opportunities it creates for disadvantaged people to work with us.

### **Safety**

Safety of the public and our employees remains a major concern and a priority in all of our work. We continue to encourage positive safety attitudes to reduce accidents and injuries and to provide a safe working environment.

Lost-time injuries increased from 44 in 1980 to 49 in 1981. There were 161 vehicle accidents compared to 204 in 1980.

Symbolic gold hard hats were presented to two employees who would have sustained serious head injuries if they had not been wearing safety hard hats.

During the year, there were four public fatalities associated with our facilities compared with one in 1980 and 12 injuries compared with seven in 1980.

This high level of public fatalities is of serious concern to us and has prompted us to further intensify our safety programs in all areas including farms, industries, schools and the general public.

We continued to involve our field staff in conveying the safety message to the public. Our public information efforts included a program on electrical safety aimed at



New computer equipment speeds up the processing of accounts.





Visual display units provide instant information on customer billing.

school children and adults located on Indian reserves in the province. The program is co-ordinated by a native person whose responsibilities include liaison between Indian chiefs, band administrators, reserve residents and our own field staff.

For the fourth consecutive year, we won national recognition for our safety performance from both the Canadian Electrical Association (CEA) and the Canadian Gas Association (CGA). We received a gold award from CGA for reducing lost-time injuries in 1981 by more than 20 per cent over the previous year. Our performance was the best among Canadian gas utilities. The CEA award was for reducing lost-time injuries by 25 per cent in 1981 over the previous three-year average in electric operations.

### **Reorganization**

A Customer Services Group was created late in the year and a vice-president to head the group was appointed. This will help the corporation meet the changing needs of customers. It will result in one field operating group rather than separate gas and electrical organizations and will enable us to strengthen our engineering and customer relations capabilities.

Senior executive positions announced in 1980 were all filled in 1981, including the appointment of President Robert H. Moncur, who succeeds Fred G. Ursel, who retired at the end of 1980.



Training people of native ancestry through Headstart Corporation.



# Keeping Pace With Progress

As growth occurs with our customers, we too must grow to meet the energy needs that result from this growth.

While some individual customers are using energy with greater care, increased standards of living are resulting in the use of more energy-consuming appliances and devices. The province's buoyant economy is bringing expansion in the industrial and business sectors and with it an increased population and more residential customers.

To meet customers' energy needs now and in the future, our physical growth in 1981 was mainly in the areas of new or expanded facilities and equipment to produce and deliver energy supplies. There were additions also in buildings to serve customers and in equipment to assist in administrative and operational activities.

Our major addition to the electric operations was the Poplar River Power Station at Coronach. The first unit was officially commissioned and construction continued on the second 300 MW unit, which is scheduled for completion in late 1982.

We received the necessary approvals early in the year and started work on the Nipawin Hydroelectric Project. The station, located on the Saskatchewan River, is needed to meet forecast electricity requirements in 1985-1986. The station will have three 84 MW generating units. Two of the units are scheduled to be completed in late 1985, with the third in early 1986.

In 1981, the 97.6 MW Island Falls Hydroelectric Power Station was acquired from the Churchill River Power Company, a subsidiary of Hudson Bay Mining and Smelting Company. A compensation agreement has not been reached and the matter is scheduled to go to court for determination.

The station supplies energy primarily to Manitoba Hydro, who return equivalent energy to Saskatchewan customers through the tie-lines further south.

In addition to adding generating capacity to our system, we took a major step in 1981 toward interchange of electricity with other systems.

Construction of a tie-line was completed between Estevan, Saskatchewan, and Logan, North Dakota, to permit the economic seasonal exchange of power between our system and Basin Electric Co-operative.

As part of a 20-year agreement, effective 1982 May, Basin will supply us with 100 MW of surplus generation during the winter period to meet our heavy peak load caused by space heating and other cold weather demands. During the summer, an equivalent amount of energy from Saskatchewan will be returned to meet Basin's peak load caused by their customers' air conditioning and irrigation requirements. The tie-line includes 232 km in North Dakota and 15.5 km in Saskatchewan.



Improvement to the natural gas system is an on-going program.



A transmission line from Assiniboia to Swift Current received approval from Saskatchewan Environment. Construction of the 166 km line is scheduled to begin in 1982 May. The line is needed to supply power from the Poplar River Power Station to meet the growing needs in the southwestern part of the province.

The northern community of Stanley Mission was connected to the provincial transmission system. The project included upgrading 25 km of 14.4 kV line to 25 kV from La Ronge to Sucker River and building 47 km of new line from Sucker River to Stanley Mission. The line was needed to meet increased needs of the community and to replace the small generating plant run by diesel fuel.

The project involved the joint efforts of North-Sask Electric Ltd., Saskatchewan Power Corporation and Headstart Employment Corporation.

Electrical distribution lines added in 1981 included 45 km of 72 kV line, 140 km of 25 kV line and 570 km of 14.4 kV line.

We built new substations at Colonsay, Balgonie, Broderick and Spruce Home.

Conversion was necessary on 25 km of a 72 kV line to 138 kV from Sutherland to the Saskatoon Chemicals plant because of that customer's increased load requirements and growing needs of other consumers in the area.

### **Natural Gas Growth**

During 1981, we participated in the drilling of 66 gas wells in Alberta and Saskatchewan with an average success rate of 82 per cent. In Alberta, 51 wells were drilled and in Saskatchewan 15 wells were drilled.

We were involved in the installation of 38 tap-off points on a small section of the Alaska highway pipeline project under construction in southwestern Saskatchewan. The tap-off points are to serve prospective customers in the area.

A 25 km pipeline was built to serve a heavy oil treatment plant near Cactus Lake. The 25 km line is 144 mm in diameter. The plant is a pilot project for the production of Saskatchewan heavy oil and requires natural gas for process and space heating.

We continued to develop and improve our underground storage facilities to enable us to meet winter demands for natural gas. Preparatory work started near Regina for development of a fifth cavern.

In Saskatoon, we rebuilt and relocated a border station to accommodate development plans for an industrial park.



A tie-line for seasonal exchange of power with North Dakota requires use of advanced facilities including this massive phase-shifting transformer near Estevan.



Construction of Nipawin Hydroelectric project started in 1981.



## Service Facilities

The first contract was awarded for a new provincial energy control centre to replace the existing facilities used by the gas and electric systems. The four-year project will include computer-based control equipment.

The system will be one of the best in Canada and will result in greater economy, efficiency and system security. It will help in providing a high level of customer service based on the most up-to-date technology available.

Preparation for expansion of the provincial service centre in Regina took place in 1981. Land and buildings were purchased and some renovation work was done.

To better serve our customers, new district offices were built in 1981 at Wakaw, Colonsay, Kerrobert, Wadena and Biggar, and a number of others were renovated.

Work progressed on the new Research and Development Centre at the old Regina Power Plant site in Wascana Centre. The building will be ready for occupancy in early 1982. Plans also include establishing an energy science centre in the former boiler room of the old power station building.

**A new provincial control centre will result in greater economy, efficiency and security for electric and natural gas operations.**





# Environmental Protection

We are undertaking active measures to protect the environment as much as possible from adverse effects from our new construction projects and ongoing operations.

Environmental protection to us includes protecting land, air and water as well as guarding against the effects of our operation on people. As well, it includes preservation of resources such as geological, archeological, recreational, aquatic life, wildlife and natural history.

Because of the importance we have attached to protection of heritage and archeological resources, we are undertaking a program associated with the Nipawin Hydroelectric Project which will be the largest program of its kind in Canada. It will be a comprehensive study which we hope will add greatly to our knowledge of historic and prehistoric data in the area. The study will be completed before filling of the reservoir.

Comprehensive air and water quality monitoring programs are being conducted at both the Poplar River Power Station and Mine to assess the impact of power generation in the area. The resulting information is made available to Canadian and United States government agencies as part of a bilateral agreement.

Another study, in co-operation with Coronach area residents, is examining the effects of the power station on vegetation, soil, air and rainfall. A study is also continuing on soil salinity in the Cookson Reservoir area adjacent to the Poplar River Power Station.

Several proposed electricity and natural gas projects were approved by Saskatchewan Environment. These included the Nipawin Hydroelectric Project, a 230 kV (kilovolt) line between Assiniboia and Swift Current, and a number of small power line and pipeline projects.

## Reclamation

Our programs to protect the land in 1981 consisted mainly of continuous restoration of land following strip mining operations, a program started 10 years ago.

In the Estevan area, we levelled about 200 ha (hectares) of spoil piles and seeded about 200 ha to grasses and legumes.

Reclamation in the Coronach area included removing and storing for future replacement some 100 ha of topsoil, final levelling on about 40 ha and weed control on 400 ha of corporation land.

Extensive archeological studies are under way near the site of the Nipawin Hydroelectric project.





# Mining Matters



Saskatchewan lignite coal provides most of our electricity.

We continue to rely on coal as the main fuel in power generation. In 1981, about 63 per cent of the electrical generation in 1981 came from lignite burning stations.

Our mining activities continued at Poplar River Mine near Coronach and Souris Valley Mine near Estevan. Coal from the Souris Valley Mine supplements our requirements from contract suppliers in Estevan for the Boundary Dam Power Station.

The Souris Valley Mine delivered 302 000 Mg of coal to the station. Our 69 m<sup>3</sup> dragline continued operation under contract for strip mining in Estevan resulting in the delivery of about 2 400 000 Mg of coal from other mines in the area.

The Poplar River Mine delivered about 800 000 Mg of coal to the Poplar River Power Station.

The corporation's accessible coal reserves amount to a 70-year supply to fuel thermal plants including those which may be added to the system before the year 2000 if existing technology is used for recovery.

In order to supply coal to the second unit at Poplar River station, the Poplar River Mine is being expanded and a new dragline is being added. The dragline, to be completed on site in 1983, will have a longer than normal boom length because of unstable soil characteristics at the mine.





# Our Energy Future

Serving our customers with energy involves much more than producing and delivering energy supplies. It means continually searching for new sources of energy to supplement present supplies and where necessary to eventually replace worn-out and uneconomic facilities.

As energy costs are rising, particularly the cost of building new facilities and the greater lead time to bring on new facilities, energy supply planning has taken on much greater importance in our work.

We are planning possible electrical energy sources to the year 2000. These plans are referred to as Generation 2000. The program began in 1979 with the immediate objective of evaluating alternative sites for the next addition to the system. A sequence of sites and options is to be known in 1982 which will establish an order of priority for possible development of the various alternatives.

The supply options in Generation 2000 include possible hydro sites at Choiceland and The Forks on the Saskatchewan River; potential lignite-fired stations at Regina, Lake Diefenbaker and the Wood River; and coal mines near Rockglen and Fife Lake.

Also among the supply options is a Western Electric Power Grid intertie connecting Manitoba, Saskatchewan and Alberta. It would permit the transfer of renewable hydro power from Manitoba to the two other provinces where the use of coal would be reduced.

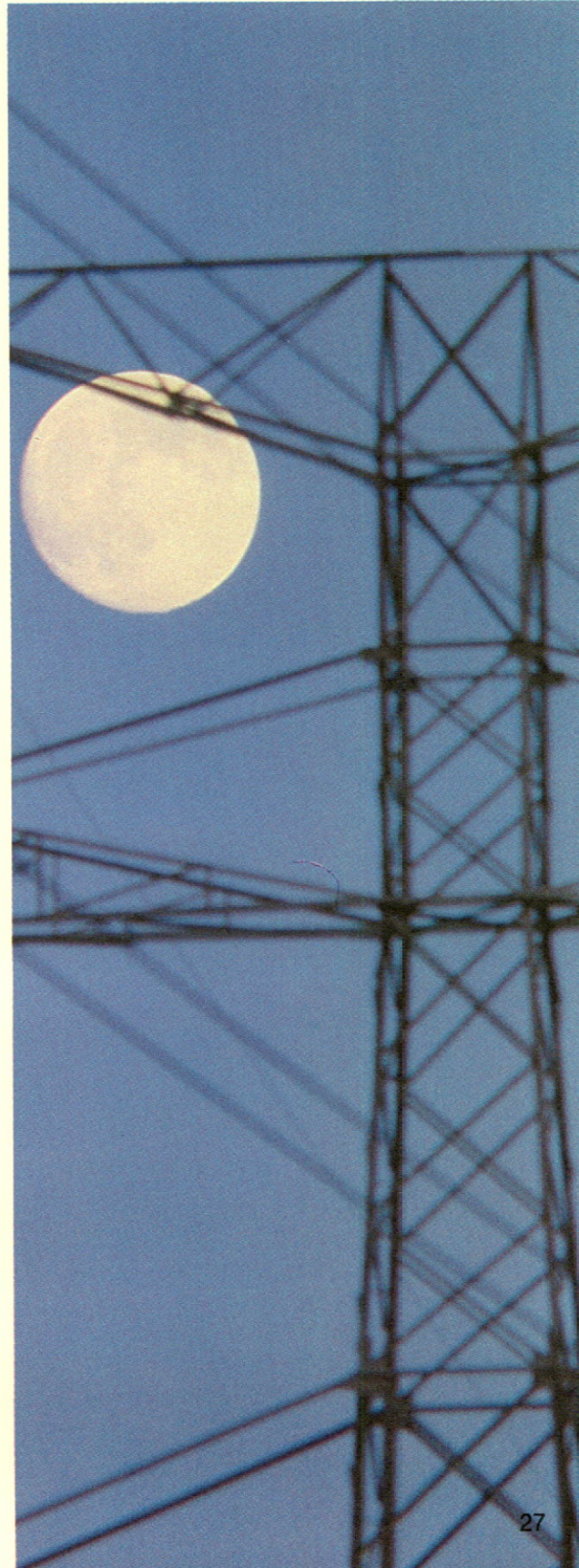
Gas supplies will continue to be provided from Alberta and Saskatchewan sources. Our proven reserves, either through ownership or contract, now total 57 451.7 millions of cubic metres. This would enable us to meet future gas requirements for 20.4 years at the 1981 rate of consumption.

During 1981, we continued our program of developing gas reserves in Saskatchewan and Alberta. This involved an investment of \$5.0 million during the year, bringing total expenditure since the program began in 1972 to \$102.2 million. To meet future demand, we must continue to develop our reserves at the same time as we seek additional supply contracts in both Alberta and Saskatchewan.

Renewable resources are also increasing in importance for their future potential in the supply of energy. We are involved in several pilot projects such as wood gasification, wind turbines, low-head hydro and solar-assisted heating systems.

**Electric transmission lines deliver power to meet the growing needs of customers.►**

**◀ Coal mining is a major industry in Saskatchewan.**

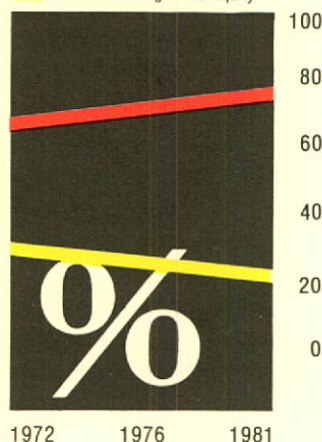




# The Bottom Line

COMPOSITION OF CAPITAL

Long Term Debt  
Retained Earnings Plus Equity



## Net Income

The corporation's net income declined for the second consecutive year, from \$40.7 million in 1979, \$20.5 million in 1980, to a \$2.3 million loss in 1981. The decline in 1981 was primarily due to higher interest rates and reduced sales due to milder than normal weather.

Corporate net income for the period 1972-1981 averaged \$18.0 million and, with the exception of 1979 and 1975, yearly net incomes did not deviate significantly from average. However, capital expenditures have risen from \$40.5 million in 1972 to \$248.1 million in 1981. The result has been a deterioration in our financial position as measured by the percentage equity from 28.2 per cent in 1972 to 17.8 per cent in 1981. We have borrowed an increasingly larger portion of the funds required for new capital expenditures.

## Revenue and Rates

Our revenue in 1981 amounted to \$525.3 million which is an increase of \$78.0 million or 17.4 per cent over 1980.

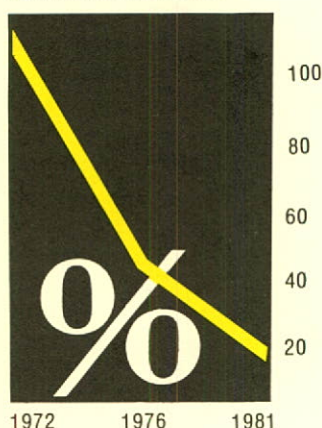
Revenue from electricity sales increased \$39.9 million to \$282.0 million, of which \$27.9 million was due to rate increases announced during the year. Large industrial electric rates were increased in January by an average 18.4 per cent and another 10 per cent in August. All remaining industrial and commercial rates were increased by an average 12.6 per cent in February.

Rates for residential, resort, farm and street light customers were increased in August from 11.5 per cent for farms to 19.2 per cent for resort customers.

Gas retail sales revenue in 1981 totalled \$227.8 million, an increase of \$39.4 million or 20.9 per cent over 1980. Natural gas rates were increased to all customers by 0.56 ¢/m<sup>3</sup> to recover the Canadian Ownership Tax imposed by the federal government in May and another increase of 0.56 ¢/m<sup>3</sup> in the Federal Natural Gas and Gas Liquids Tax in July. These federal taxes resulted in an average increase to the customer of 11.2 per cent during 1981. The revenue increase of \$39.4 million resulted from passing on the increases in federal taxes and Alberta border price increases in 1980 and 1981.

During 1981, the provincial government challenged the constitutionality of the federal gas taxes. As a result of negotiations and an agreement on energy between the

FUNDS FROM OPERATIONS  
AS A PERCENTAGE OF  
CAPITAL EXPENDITURES





Government of Saskatchewan and the Federal Government, these taxes will be replaced by a grant in lieu of taxes.

A change in the form of our rate structures to better reflect the costs of production and to promote conservation was announced during 1981. We will gradually eliminate the traditional rate structure which offered progressively lower prices as consumption increased. Instead, consumers will be charged a straight-line rate, which includes a single price for each unit of energy used plus a basic charge for the cost of maintaining service. This basic charge would cover the costs of a portion of distribution facilities that remain in service whether or not energy is used.

The new rate structure is easier to understand and is designed to encourage conservation on the part of our customers, particularly those in the high-use category.

## Expenses

The corporation's total expenses for 1981 were \$527.7 million, an increase of 23.6 per cent or \$100.9 million more than 1980.

The cost of fuel, water and purchased electricity increased by \$0.2 million to \$54.3 million in 1981, reflecting the favorable river flows experienced during 1981.

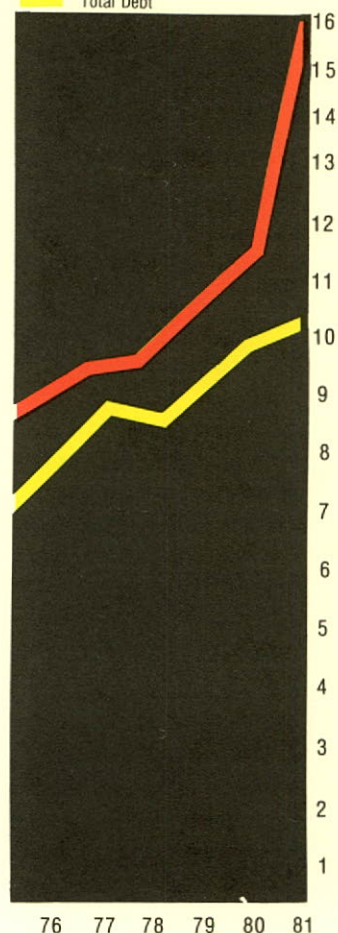
The cost of gas sold increased by \$30.7 million to \$147.0 million because of price increases at the Alberta border and increased federal taxes.

Higher costs were also experienced for materials, equipment, supplies, and labor so that operating, maintenance, and administration expenses increased by \$32.1 million to \$179.3 million in 1981. Inflation, the increases in the number of new customers served and new program initiatives, were the principal causes. These expenses included grants in lieu of taxes totalling \$10.2 million to Saskatchewan cities and towns. This was \$1.7 million more than grants paid during 1980.

Interest costs increased by 41.7 per cent or \$28.3 million in 1981. The major reasons for the increase were higher interest rates and foreign exchange charges, the full year's effect of 1980 financing and the commissioning of the first unit at Poplar River. Whenever a new plant is commissioned, interest costs cease to be charged to construction work in progress and are recorded as interest expense.

EFFECTIVE COST OF DEBT  
(percentage)

■ New Debt  
■ Total Debt



## Capital Expenditures

Capital expenditures in 1981, totalled \$248.1 million, an increase of \$88.1 million or 55.0 per cent over 1981. Expenditures by major category were as follows:

	1981	1980	1976	1972
	(\$ millions)			
<b>Electric Projects</b>				
Generation . . . . .	156.2	86.1	76.8	14.2
Transmission . . . .	20.8	12.6	12.3	6.4
Distribution . . . . .	35.7	32.1	17.1	6.5
	<u>212.7</u>	<u>130.8</u>	<u>106.2</u>	<u>27.1</u>
<b>Gas Projects</b>				
Resource				
Development . .	5.0	5.5	26.0	1.7
Production and				
Transmission . .	4.8	8.6	4.7	5.6
Distribution . . . . .	7.1	6.7	6.9	5.8
	<u>16.9</u>	<u>20.8</u>	<u>37.6</u>	<u>13.1</u>
<b>General</b>	<u>18.5</u>	<u>8.4</u>	<u>1.8</u>	<u>0.3</u>
	<u>248.1</u>	<u>160.0</u>	<u>145.6</u>	<u>40.5</u>

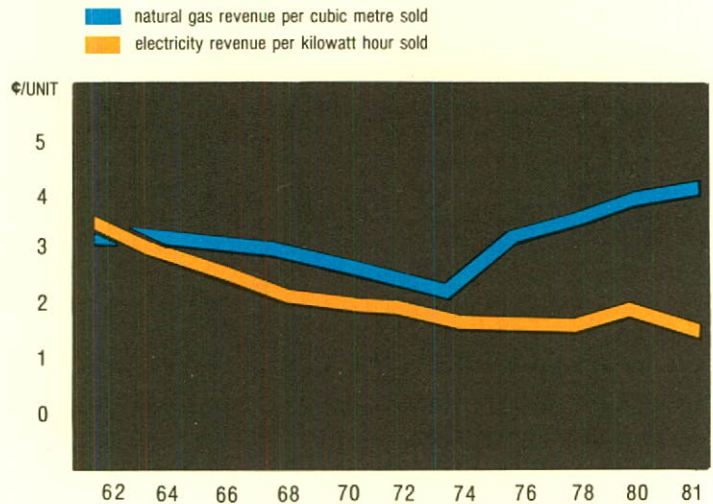


Depreciation charges increased by \$9.6 million or 23.4 per cent. Of this increase, \$4.7 million was due to depreciation expense on the first unit at Poplar River.

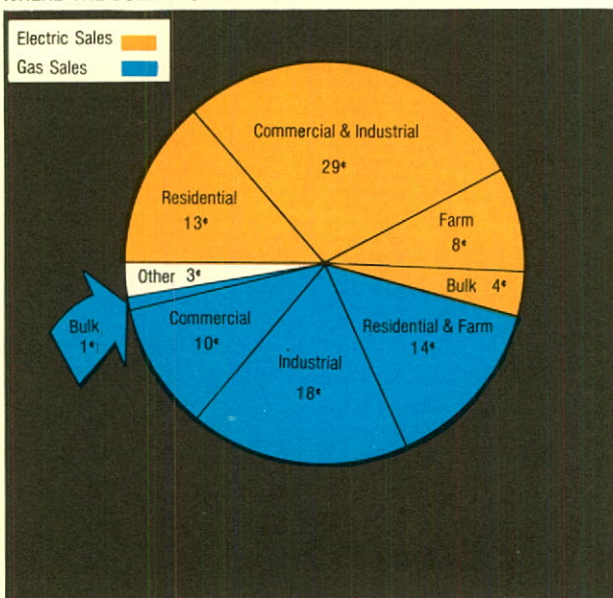
## Financing

The province borrowed \$225 million for the corporation in 1981 to finance capital construction. Of this amount \$42.5 million was to complete 1980 financing. Of the total amount borrowed, \$75 million or 33.3 per cent was received at 13.5 per cent while the remaining \$150 million or 66.7 per cent was borrowed at 16.5 per cent. An additional \$22.0 million in short-term debt was advanced against the corporation's established lines of credit.

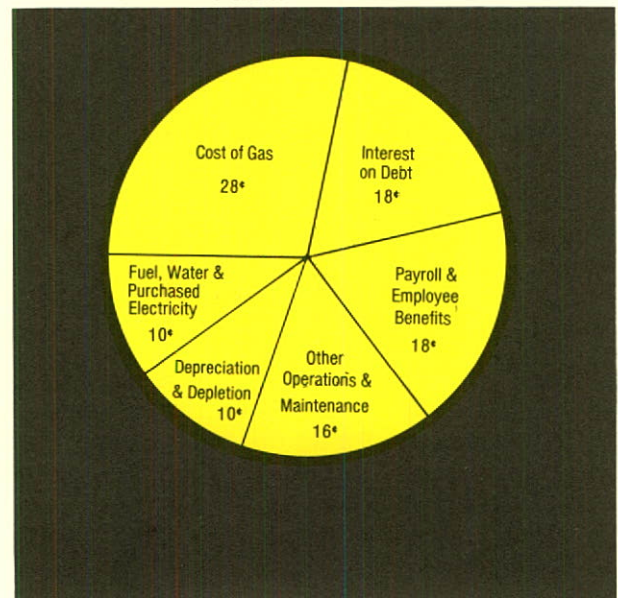
RESIDENTIAL COST ELECTRICITY AND NATURAL GAS  
(in constant 1971 dollars)



WHERE THE DOLLAR CAME FROM



HOW THE DOLLAR WAS SPENT





## Generation Statistics

	1981 Rated Generating Capacity (kilowatt)	1981 Gross Generation 10 <sup>3</sup> kW·h	1981 Generation % Increase or (Decrease) From 1980
<b>HYDRO</b>			
Squaw Rapids .....	280 000	1 227 194	19.9
Coteau Creek .....	187 000	1 042 550	56.3
Island Falls .....	97 600	550 900	—
Total Hydro .....	564 600	2 820 644	66.8
<b>STEAM</b>			
Boundary Dam .....	874 500	5 152 640	(10.3)
Estevan .....	65 000	311 708	(21.0)
A.L. Cole .....	108 000	15 063	134.8
Queen Elizabeth .....	232 000	413 809	(28.2)
Poplar River .....	294 000	869 980	—
Total Steam .....	1 573 500	6 763 200	0.2
<b>INTERNAL COMBUSTION</b>			
Success .....	45 000	1 874	(72.5)
Landis .....	70 000	10 324	(82.1)
Total Internal Combustion ..	115 000	12 198	(81.1)
Total (capacity) Generation ..	2 253 100	9 596 042	12.8
Less Station Service .....		549 618	9.1
Net Generated .....		9 046 424	13.0
Net Purchased .....		421 849	(65.3)
Net System 10 <sup>3</sup> kW·h .....		9 468 273	2.7
Northern Diesel Plants .....	7 575	9 565	7.6
Northern Purchases .....		21 309	(12.4)
Total .....	2 260 675	9 499 147	2.7

Annual Peak Load (Net)  
(1981-12-15-17:30) ..... 1 684 000

Annual Peak Load (Gross)  
(1981-12-15-17:30) ..... 1 782 000

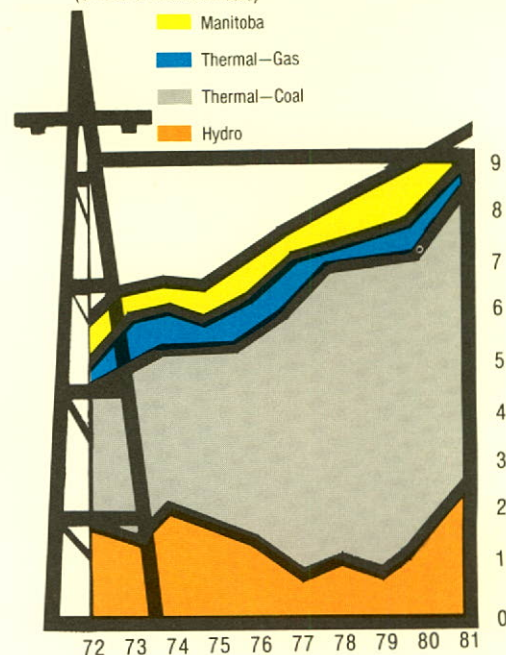
Minimum Load (Net)  
(1981-07-26-06:00) ..... 637 000

## Gas Supply Sources

(10<sup>6</sup> m<sup>3</sup>)  
(millions of cubic metres)

Sources	1981	1980	Increase (Decrease) 10 <sup>6</sup> m <sup>3</sup>	%
<b>Alberta</b>				
TCPL .....	1 058	1 173	(115)	(9.8)
Field Suppliers ...	513	496	17	3.4
Production .....	464	487	(23)	(4.7)
Total .....	2 035	2 156	(121)	(5.6)
<b>Saskatchewan</b>				
Field Suppliers ...	842	924	(82)	(8.9)
Production .....	199	78	121	155.1
Total .....	1 041	1 002	39	3.9
Total Volume Delivered .....	3 076	3 158	(82)	(2.6)
Storage, Fuel and Other Users ...	(262)	(129)	(134)	103.9
Total Sold .....	2 814	3 029	(216)	(7.1)

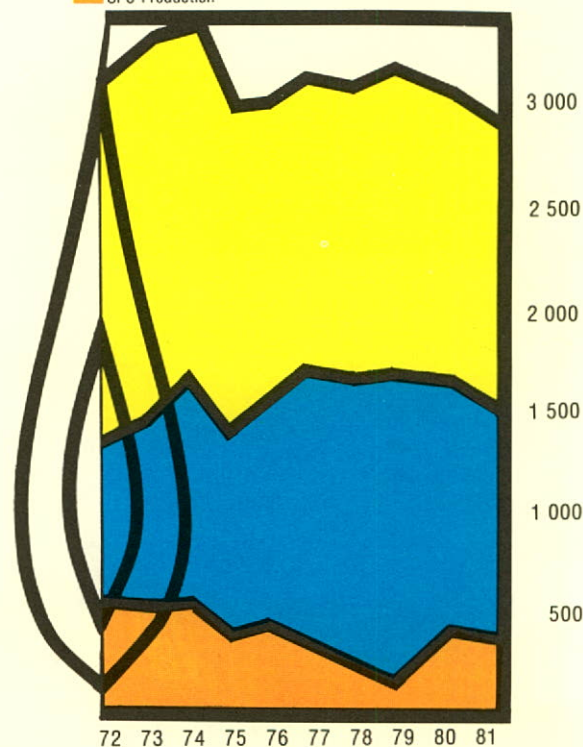
ELECTRICITY SOURCES  
(billions of kilowatt hours)



GAS SOURCES

(10<sup>6</sup> m<sup>3</sup> @ 101.325 kPa)  
(millions of cubic metres)

Other Purchases  
TransCanada PipeLines  
SPC Production











## **Financial Results 1981**

### **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.*

*Consumers Oil Inc.*



# Consolidated Statement of Earnings and Earnings Retained in the Corporation

for the years ended December 31

	Note Reference	1981 (in thousands)	1980
REVENUE			
Electricity sales .....		\$282 037	\$242 078
Gas sales .....		227 826	188 448
Other .....	2	15 479	16 784
		<u>525 342</u>	<u>447 310</u>
EXPENSES			
Fuel, water and purchased electricity .....		54 318	54 145
Cost of gas sold .....	3	146 981	116 307
Operating, maintenance and administration .....	4, 5	179 281	147 192
Depreciation and depletion .....	6	50 855	41 217
		<u>431 435</u>	<u>358 861</u>
EARNINGS BEFORE INTEREST .....		<u>93 907</u>	<u>88 449</u>
INTEREST EXPENSE			
Long-term debt .....	8	89 343	77 225
Other .....		24 443	10 470
Capitalized .....	8	(17 554)	(19 783)
		<u>96 232</u>	<u>67 912</u>
NET EARNINGS (LOSS) .....		(2 325)	20 537
EARNINGS RETAINED IN THE CORPORATION			
At beginning of year .....		219 914	209 652
Dividends to Crown Investments Corporation .....		—	(10 275)
At end of year .....		<u>\$217 589</u>	<u>\$219 914</u>

See major accounting policies and notes



## Consolidated Statement of Changes in Financial Position

for the years ended December 31

	1981	1980
	(in thousands)	
<b>SOURCE OF FUNDS</b>		
Net earnings (loss) .....	\$ (2 325)	\$ 20 537
Transactions not requiring cash:		
Depreciation and depletion .....	50 855	41 217
Other .....	<u>1 282</u>	<u>2 926</u>
	49 812	64 680
Long-term debt—Province of Saskatchewan .....	253 860	48 750
Contributions in aid of construction .....	12 907	9 405
Other .....	<u>769</u>	<u>1 851</u>
	<u>317 348</u>	<u>124 686</u>
<b>APPLICATION OF FUNDS</b>		
Capital expenditures .....	248 080	160 011
Reduction in long-term debt .....	43 181	33 086
Dividends .....	—	10 275
Other .....	<u>17 801</u>	<u>5 913</u>
	<u>309 062</u>	<u>209 285</u>
<b>INCREASE (DECREASE) IN WORKING CAPITAL .....</b>	<b><u>\$ 8 286</u></b>	<b><u>\$ (84 599)</u></b>

See major accounting policies and notes

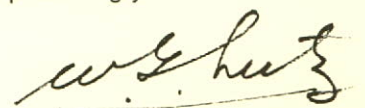
### Auditor's Report

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 1981, December 31, and the consolidated statements of earnings and earnings retained in the corporation 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 1981, 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.

Regina, Saskatchewan,  
1982 March 5

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



# Consolidated Statement of Financial Position

As at December 31

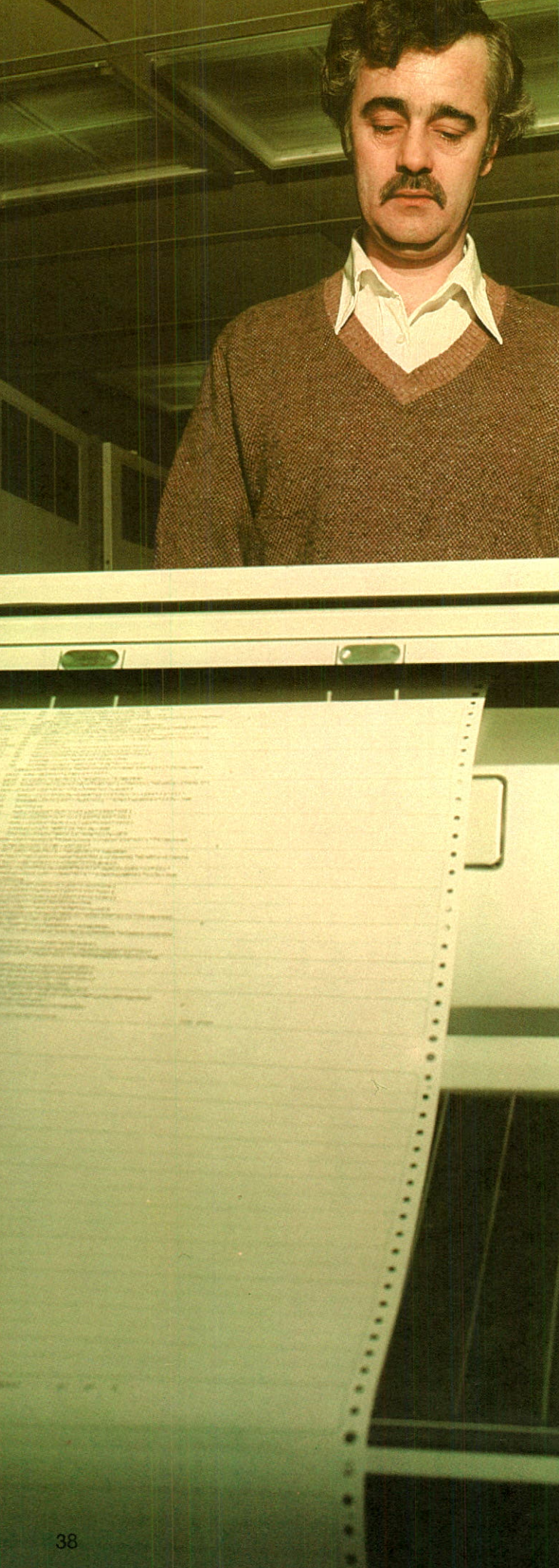
	Note Reference	1981 (in thousands)	1980
<b>UTILITY PLANT</b>			
Utility plant in service, at cost .....	17	\$1 790 278	\$1 429 953
Less accumulated depreciation & depletion ....		<u>495 349</u>	<u>448 093</u>
		1 294 929	981 860
Construction in progress .....		<u>189 708</u>	<u>306 126</u>
		<u>1 484 637</u>	<u>1 287 986</u>
<b>CURRENT ASSETS</b>			
Accounts receivable and unbilled revenue .....		104 790	91 478
Inventories, at cost .....		51 084	42 049
Prepaid expenses .....		<u>1 503</u>	<u>1 758</u>
		<u>157 377</u>	<u>135 285</u>
<b>DEFERRED CHARGES AND OTHER ASSETS .....</b>			
	9	<u>81 154</u>	<u>70 345</u>
		<u>\$1 723 168</u>	<u>\$1 493 616</u>

See major accounting policies and notes



	Note Reference	1981 (in thousands)	1980
<b>CAPITALIZATION</b>			
Equity			
Earnings retained in the Corporation .....		\$ 217 589	\$ 219 914
Rate stabilization reserve .....		13 700	13 700
		<u>231 289</u>	<u>233 614</u>
Contributions in aid of construction .....		75 415	70 796
		<u>306 704</u>	<u>304 410</u>
Long-term debt net of sinking funds .....	16	1 076 387	868 961
Obligation under capital lease .....	10	30 753	31 199
		<u>1 413 844</u>	<u>1 204 570</u>
<b>CURRENT LIABILITIES</b>			
Bank indebtedness .....		86 415	38 874
Short-term advances from the Province of Saskatchewan .....		22 000	42 500
Dividend payable .....		—	10 275
Accounts payable and accrued liabilities .....		139 761	92 106
Long-term debt due within one year .....	10, 16	25 486	76 101
		<u>273 662</u>	<u>259 856</u>
<b>COMMITMENTS AND CONTINGENT LIABILITIES .....</b>			
	11		
<b>CUSTOMER DEPOSITS .....</b>			
		<u>6 883</u>	<u>6 510</u>
<b>DEFERRED REVENUE .....</b>			
		<u>28 779</u>	<u>22 680</u>
		<u>\$1 723 168</u>	<u>\$1 493 616</u>





## Major Accounting Policies

**Consolidation**—The consolidated financial statements include the financial position and operating results of the five 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.

**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.

**Future Generation and Environmental Studies**—Costs associated with the planning, site selection and environmental and social impact studies are charged to operations as incurred, except for those related directly to the design or construction of a specific capital facility.



**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	
Oil fields .....	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.

**Joint Ventures**—Saskatchewan Power Corporation follows the proportionate consolidation method of accounting for its participation in joint ventures.

**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.

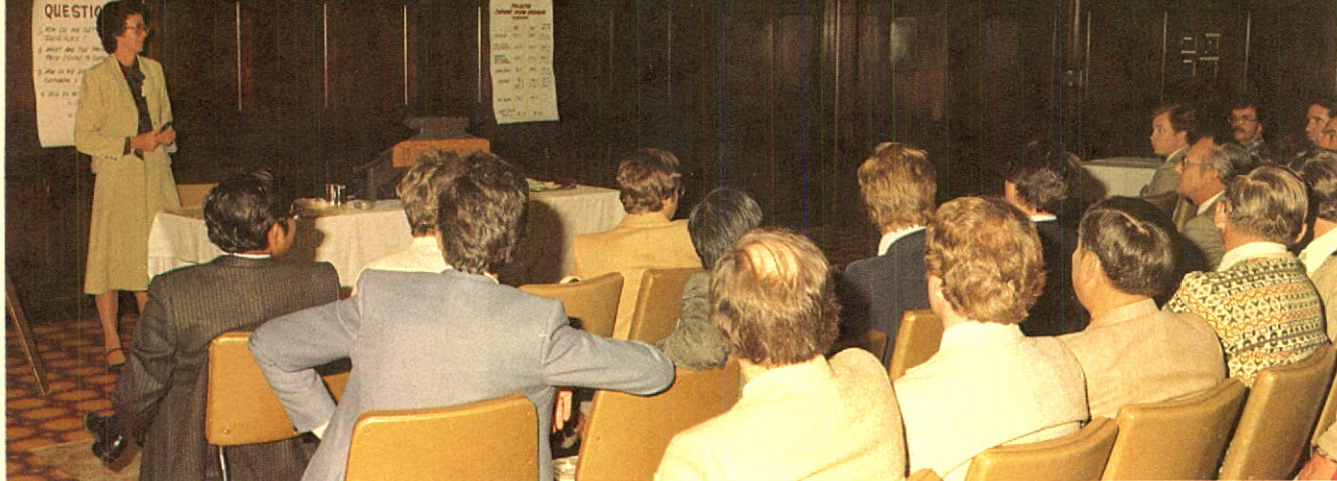
**Superannuation**—The Corporation's financial obligations for the superannuation of its employees are legislated in Sections 34 and 35 of the Power Corporation Superannuation Act and Section 42 of the Superannuation (Supplementary Provisions) Act, as amended in 1981.

The Corporation meets its obligations 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 for ad-hoc allowances payable in the future to present beneficiaries by making a payment into the Power Corporation Superannuation Fund equal to the present value of the ad-hoc allowances. The charge against income is the actuarially determined rate necessary to fund the ad-hoc increases granted to the present beneficiaries of the Power Corporation Superannuation Fund.

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 1929, the Saskatchewan Power Commission was established to manufacture and supply electrical energy in the Province. In 1949, the Saskatchewan Power Corporation was established by Order-in-Council to replace this function of the Commission. Pursuant to The Power Corporation Act passed on 1950 April 8, the Corporation was established in essentially its present form.

In accordance with the provisions of its Act, the Corporation's main functions are the generation, transmission, distribution and sale of electrical energy, the production of coal and the production, purchase, transmission, distribution and sale of natural gas.

The financial results of the Corporation are included in the consolidated financial statements of the Crown Investments Corporation of Saskatchewan.

### 2. Other Revenue (000's)

	1981	1980
Amortized revenue		
prepayments .....	\$ 2 189	\$ 1 707
Export flowback		
adjustment .....	9 478	9 691
By-products .....	656	550
Other .....	3 156	4 836
	<u>\$15 479</u>	<u>\$16 784</u>

3. 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 was appealed to the Supreme Court of Canada. In 1981 December, the court ruled that the Board had exceeded its authority in purporting to substitute the imputed Alberta Border Price for that fixed by the contract between the parties.

Delivery of gas to the Corporation started in 1976 November. The Corporation has paid the higher price under protest. The additional payments recorded as cost of gas were \$6.7 million in 1980, \$17.1 million in 1979, \$18.4 million in 1978, \$14.6 million in 1977 and \$2.7 million in 1976.

In 1979 the Corporation commenced an action in the Saskatchewan Court of Queen's Bench for the recovery of monies paid under protest. This case is now proceeding.

4. The charge against income and payments to the Power Corporation Superannuation Fund and Public Employees (Government Contributory) Superannuation Plan for employees' future superannuation benefits, was \$9 254 000 in 1981 (\$7 526 000 in 1980). An amount of \$1 500 000 was also paid into the Fund in 1981 to cover the present value of the 1981 ad-hoc increases granted to present beneficiaries of the Power Corporation Superannuation Fund.

The Corporation makes regular payments into the Power Corporation Superannuation Fund at the actuarially determined rates equal to the charges against income. These rates will provide for future pension benefits over the remaining working lives of the employees. The most recent actuarial valuation indicated that there are past service costs of \$50 983 000 which will be funded and charged to future operations in this manner.

5. Engineering and Environmental Study costs on future generation facilities charged to operations was \$8 775 000 in 1981 (\$7 978 000 in 1980).

### 6. Depreciation and Depletion (000's)

	1981	1980
Depreciation .....	\$48 094	\$38 772
Depletion .....	3 328	2 874
Capitalized .....	(567)	(429)
	<u>\$50 855</u>	<u>\$41 217</u>

7. The Corporation's ten directors (10 in 1980) received \$21 400 (\$6 400 in 1980) from Saskatchewan Power Corporation as directors. The thirteen senior officers (12 in 1980) received, in aggregate, \$783 534 in salaries for 1981 (\$650 280 in 1980).



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

	1981	1980
Interest paid and accrued . . .	\$103 889	\$ 86 731
Amortization of debt costs and gains:		
Debt discount and expense . . . . .	843	767
Gain on early repayment of debt . . . . .	(1 692)	(1 786)
Foreign exchange provision .	3 988	5 677
Sinking fund earnings . . . . .	(17 685)	(14 164)
	<u>\$ 89 343</u>	<u>\$ 77 225</u>

Interest was capitalized on construction projects at a rate of 16.0% in 1981 and 11.75% in 1980.

# 9. Deferred Charges and Other Assets (000's)

	1981	1980
Unrealized foreign exchange loss . . . . .	\$30 595	\$40 045
Unamortized debt costs and gains . . . . .	6 491	3 587
Prepaid gas purchases . . . . .	1 497	2 350
Deferred mining costs . . . . .	6 258	6 345
Deferred gas in storage . . . . .	30 956	18 089
Construction contribution . .	2 079	2 134
Farm loans . . . . .	356	381
Other . . . . .	2 922	2 414
	<u>\$81 154</u>	<u>\$70 345</u>

# 10. Obligation Under Capital Lease (000's)

	1981	1980
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% . . . . .	\$31 199	\$31 612
Amount due within one year . . . . .	446	413
	<u>\$30 753</u>	<u>\$31 199</u>

Future minimum lease payments are as follows:

Period Ended	
1982 December . . . . .	\$ 2 873
1983 December . . . . .	2 873
1984 December . . . . .	2 873
1985 December . . . . .	2 873
1986 December . . . . .	2 873
Thereafter . . . . .	56 762
	<u>71 127</u>
Less: Amount representing interest . . .	<u>39 928</u>
	<u>\$31 199</u>

# 11. Commitments and Contingencies

At 1981 December 31, the Corporation was committed in the amount of approximately \$118 million for construction materials, equipment and services on contracts not completed at year end and approximately \$963 million for natural gas contracted for future delivery valued at expected prices.

12. Approximately 1.062 million acres net of unexplored properties were transferred to Saskoil in 1979. Saskatchewan Power Corporation and its subsidiary Many Islands Pipe Lines (Canada) Limited have an overriding royalty interest and certain repurchase rights in these properties.

13. The Corporation conducts a portion of its operations on a joint venture basis. The 1981 comparisons are:

	(000's)	
	Corporation	Joint
	Total	Venture
Revenues . . . . .	\$ 525 342	\$ 19 171
Expenses . . . . .	527 667	7 293
Plant in Service—at cost . . . .	1 790 278	60 113

14. Included in these consolidated financial statements are income and expense amounts resulting from routine operating transactions conducted at prevailing market prices with various Saskatchewan Crown controlled departments, agencies and corporations with which the Corporation is related.

Account balances resulting from these transactions are included in the consolidated statement of financial position and are settled on normal trade terms.

Other amounts due to and from related parties and the terms of settlement are described separately in the consolidated financial statements and the notes thereto.

15. On 1981 April 1, the Island Falls Hydroelectric Development on the Churchill River in northeastern Saskatchewan became the property of the Province on expiry of the water license which had been in effect for 50 years. Saskatchewan Power Corporation had been appointed as the agent of the Government to negotiate compensation to the original owner, the Churchill River Power Company Limited, under the terms provided for in the regulations under the Water Power Act.

Negotiations were unsuccessful and the issue of compensation was therefore referred to the Court of Queen's Bench as provided for in the Regulations.

At year end, the issue had not been resolved and the asset has therefore been included on the consolidated statement of financial position of Saskatchewan Power Corporation at \$43 194 000 which is the amount estimated to be the appropriate compensation value under the Regulations. Of this amount \$33 579 000 has been paid by Saskatchewan Power Corporation to the previous owner and agreement has been reached that any additional amount awarded by the Court will be subject to interest at the rate of 13¾% per annum.

It is not possible at this time to estimate whether the Court decision when made will be greater or smaller than the amount included on the consolidated statement of financial position. Any settlement, of a material nature, in excess of book value will be treated as a prior period adjustment.



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

## Advances from Province of Saskatchewan

Received	Repayable	Interest Rate	Face Amount In Foreign Currency (1)	Debt Recorded	Equity in Sinking Fund
1962	1982	5 $\frac{1}{8}$ -5 $\frac{1}{2}$		\$ 17 416	\$ 9 651
1963	1982	5 $\frac{1}{4}$		7 880	4 703
1958	1983	4 $\frac{1}{8}$	10 505	12 454	16 933
1963	1983	5 -5 $\frac{1}{4}$	15 855	20 819	13 143
1959	1984	4 $\frac{3}{4}$ -5	16 318	19 345	23 320
1964	1984	5 $\frac{1}{4}$ -5 $\frac{1}{2}$		3 035	695
1964	1985	5 $\frac{1}{2}$		6 064	3 256
1965	1985	5 $\frac{1}{2}$		2 140	—
1966	1986	5 $\frac{7}{8}$ -6 $\frac{1}{4}$		11 326	3 548
1976	1986	8 $\frac{3}{4}$	75 000	88 913	—
1981	1986	13 $\frac{3}{8}$		75 000	—
1966-67	1986-87	5 $\frac{1}{4}$ -5 $\frac{1}{2}$		13 033	(2) 8 126
1967	1987	6		5 855	2 044
1967-68	1987-88	5 $\frac{1}{4}$ -6 $\frac{1}{2}$		9 752	(2) 5 354
1968	1988	7 $\frac{1}{4}$		11 025	4 240
1968-69	1988-89	6 $\frac{1}{2}$ -7 $\frac{1}{4}$		27 908	(2) 12 805
1969	1989	7 $\frac{5}{8}$	11 300	13 396	3 759
1969-70	1989-90	7 $\frac{1}{4}$ -8 $\frac{1}{2}$		32 907	(2) 13 016
1965	1990	4 $\frac{7}{8}$	2 950	3 497	1 816
1970	1990	8 $\frac{3}{4}$		15 000	6 949
1970-71	1990-91	6 $\frac{3}{4}$ -8 $\frac{1}{4}$		33 062	(2) 10 933
1961	1991	5 $\frac{3}{4}$		2 450	3 128
1981	1991	16 $\frac{3}{8}$	150 000	177 825	—
1971-72	1991-92	6 $\frac{3}{4}$ -7 $\frac{1}{2}$		27 613	(2) 7 462
1972-73	1992-93	7 -7 $\frac{1}{2}$		23 189	(2) 4 771
1973-74	1993-94	7 $\frac{1}{2}$		6 297	(2) 1 106
1964	1994	5 $\frac{1}{2}$		3 769	1 322
1973	1998	7 $\frac{3}{4}$ -8 $\frac{1}{4}$		40 000	5 432
1974	1999	10		20 000	2 321
1975	2000	9 $\frac{7}{8}$		40 000	(3) 2 889
1980	2000	11 $\frac{3}{4}$		50 000	554
1976	2001	10 $\frac{1}{4}$		50 000	3 027
1977	2002	9		50 000	2 538
1978	2003	9 $\frac{1}{2}$		45 000	1 614
1979	2004	10		60 000	1 393
1976	2006	8 $\frac{7}{10}$	75 000	88 913	4 429
1977	2007	8 $\frac{5}{8}$	75 000	88 913	3 755
1978	2008	9 $\frac{1}{4}$	75 000	88 913	2 712
				<u>\$1 292 709</u>	<u>\$ 192 744</u>

## Other Long-Term Debt

House Mortgages, Nipawin—Various Rates ..... 153

Saskatchewan Economic Development Corporation—This is the amount owing on an agreement for sale for the purchase of Real Estate, bearing interest at 11% and paid in equal monthly blended payments of principal and interest, ending 1986 July 1..... 1 211

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 1982. .... 98

\$1 294 171 \$ 192 744

Long-Term Debt—net of sinking fund ..... \$1 101 427

Amounts due within one year ..... 25 040

\$1 076 387

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

1982-\$25 040; 1983-\$10 075; 1984-\$5 952; 1985-\$14 834; 1986-\$178 512



17. Utility Plant in Service (000's)

	Cost	Accumulated Depreciation and Depletion	1981 Net	1980 Net
Electric				
Generation .....	\$ 738 351	\$ 145 836	\$ 592 515	\$ 317 960
Generation—Capitalized Lease .....	32 085	2 064	30 021	30 938
Transmission .....	196 505	58 872	137 633	124 106
Distribution .....	346 609	119 393	227 216	207 667
	<u>1 313 550</u>	<u>326 165</u>	<u>987 385</u>	<u>680 671</u>
Gas				
Production .....	134 321	31 692	102 629	98 053
Gathering, Treatment & Compression .....	48 757	26 592	22 165	22 376
Transmission & Storage .....	108 813	43 399	65 414	70 747
Distribution .....	124 161	41 471	82 690	78 142
	<u>416 052</u>	<u>143 154</u>	<u>272 898</u>	<u>269 318</u>
General Plant .....	60 676	26 030	34 646	31 871
	<u>\$1 790 278</u>	<u>\$ 495 349</u>	<u>\$1 294 929</u>	<u>\$ 981 860</u>





# Financial Statistics (000's)

## CONSOLIDATED STATEMENT OF EARNINGS

	1981	1980	1979	1978	1977
<b>REVENUE</b>					
Electricity sales .....	\$ 282 037	\$ 242 078	\$ 216 161	\$ 186 875	\$ 156 728
Gas sales .....	227 826	188 448	170 620	145 142	125 358
Other .....	15 479	16 784	16 534	12 734	10 340
	<u>525 342</u>	<u>447 310</u>	<u>403 315</u>	<u>344 751</u>	<u>292 426</u>
<b>EXPENSES</b>					
Fuel, water and purchased electricity .....	54 318	54 145	40 001	34 548	37 218
Cost of gas sold .....	146 981	116 307	105 306	95 424	71 563
Operating, maintenance and administration ..	179 281	147 192	117 188	100 974	88 553
Depreciation and depletion .....	50 855	41 217	37 812	34 765	30 501
Interest expense—net .....	96 232	67 912	62 263	58 353	42 253
	<u>527 667</u>	<u>426 773</u>	<u>362 570</u>	<u>324 064</u>	<u>270 088</u>
<b>NET EARNINGS</b> .....	<u>(2 325)</u>	<u>20 537</u>	<u>40 745</u>	<u>20 687</u>	<u>22 338</u>

## CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

<b>SOURCE OF FUNDS</b>					
Funds from operations .....	49 812	64 680	79 864	57 132	55 245
Long-term debt .....	253 860	48 750	58 950	129 223	126 317
Contributions in aid of construction .....	12 907	9 405	7 309	6 620	7 100
Capital lease proceeds .....	—	—	32 085	—	—
Other .....	769	1 851	6 901	6 117	45 342
	<u>317 348</u>	<u>124 686</u>	<u>185 109</u>	<u>199 092</u>	<u>234 004</u>
<b>APPLICATION OF FUNDS</b>					
Capital expenditures .....	248 080	160 011	140 774	139 290	167 607
Reduction in long-term debt .....	43 181	33 086	35 413	82 776	30 313
Dividends .....	—	10 275	16 500	10 300	8 200
Other .....	17 801	5 913	11 837	4 469	1 240
	<u>309 062</u>	<u>209 285</u>	<u>204 524</u>	<u>236 835</u>	<u>207 360</u>
<b>INCREASE (DECREASE) IN WORKING CAPITAL</b> .....	<u>8 286</u>	<u>(84 599)</u>	<u>(19 415)</u>	<u>(37 743)</u>	<u>26 644</u>

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

<b>ASSETS</b>					
Utility plant in service, at cost .....	1 790 278	1 429 953	1 349 609	1 246 954	1 156 868
Accumulated depreciation and depletion .....	(495 349)	(448 093)	(410 839)	(378 021)	(350 012)
Construction in progress .....	189 708	306 126	230 483	198 298	157 341
Current and other assets .....	238 531	205 630	195 542	196 704	135 428
	<u>1 723 168</u>	<u>1 493 616</u>	<u>1 364 795</u>	<u>1 263 935</u>	<u>1 099 625</u>
<b>LIABILITIES AND PROVINCE'S EQUITY</b>					
Retained earnings .....	217 589	219 914	209 652	193 107	182 720
Rate stabilization reserve .....	13 700	13 700	13 700	6 000	6 000
Contributions in aid of construction .....	75 415	70 796	66 706	63 087	59 169
Long-term debt net of sinking funds .....	1 107 140	900 160	871 576	822 963	741 034
Current and other .....	309 324	289 046	203 161	178 778	110 702
	<u>\$1 723 168</u>	<u>\$1 493 616</u>	<u>\$1 364 795</u>	<u>\$1 263 935</u>	<u>\$1 099 625</u>
<b>PERCENTAGE EQUITY</b> .....	17.8	20.4	21.3	20.7	22.5



1976	1975	1974	1973	1972
\$ 126 192	\$ 100 832	\$ 90 003	\$ 86 206	\$ 79 136
99 212	71 297	51 626	44 724	44 528
5 777	3 114	3 535	2 834	2 264
<u>231 181</u>	<u>175 243</u>	<u>145 164</u>	<u>133 764</u>	<u>125 928</u>

23 405	16 540	10 473	11 128	6 733
48 826	32 914	20 800	15 748	15 255
80 624	64 460	49 262	40 297	36 735
29 397	27 656	26 957	25 483	24 398
28 468	26 421	25 936	23 779	21 903
<u>210 720</u>	<u>167 991</u>	<u>133 428</u>	<u>116 435</u>	<u>105 024</u>
<u>20 461</u>	<u>7 252</u>	<u>11 736</u>	<u>17 329</u>	<u>20 904</u>

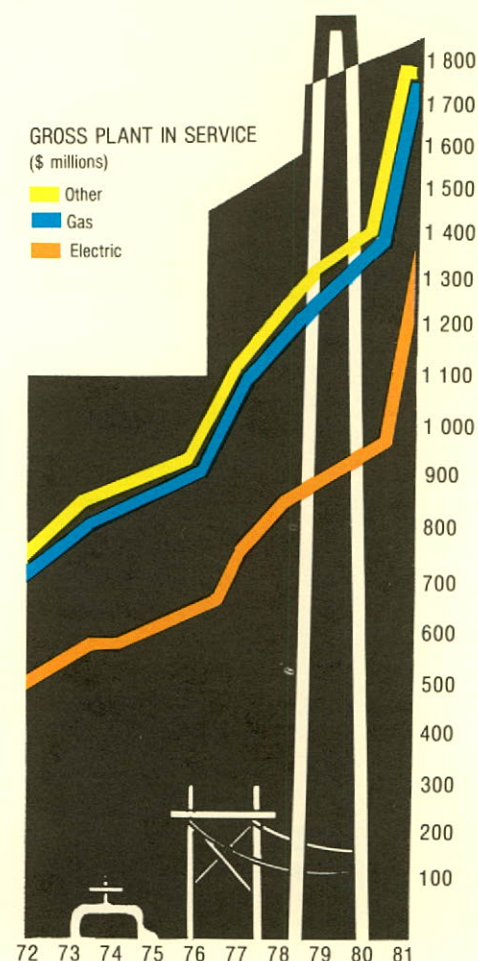
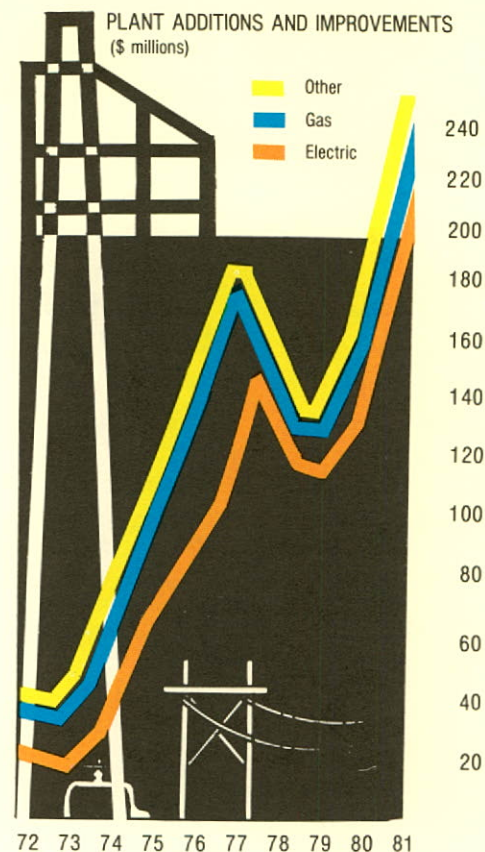
48 908	36 708	39 668	42 191	44 496
195 715	39 550	23 517	44 490	27 714
6 391	6 311	3 237	3 065	1 877
—	—	—	—	—
344	334	652	297	186
<u>251 358</u>	<u>82 903</u>	<u>67 074</u>	<u>90 043</u>	<u>74 273</u>

145 634	98 010	56 675	38 779	40 534
33 295	29 371	31 362	21 249	27 168
10 200	3 600	—	—	20 900
1 837	1 749	—	—	202
<u>190 966</u>	<u>132 730</u>	<u>88 037</u>	<u>60 028</u>	<u>88 804</u>

<u>60 392</u>	<u>(49 827)</u>	<u>(20 963)</u>	<u>30 015</u>	<u>(14 531)</u>
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995 952	933 685	871 560	844 927	789 094
(322 310)	(295 912)	(269 661)	(245 511)	(220 620)
153 785	72 906	38 859	12 702	30 411
79 636	62 951	41 229	47 591	31 088
<u>907 063</u>	<u>773 630</u>	<u>681 987</u>	<u>659 709</u>	<u>629 973</u>

174 582	164 321	160 669	148 933	131 569
—	—	—	—	—
55 212	51 406	49 052	47 342	45 997
574 362	406 879	391 336	398 660	375 254
102 907	151 024	80 930	64 774	77 153
<u>\$907 063</u>	<u>\$773 630</u>	<u>\$681 987</u>	<u>\$659 709</u>	<u>\$629 973</u>
25.3	27.9	30.8	29.8	28.2





## Record of progress (Unaudited)

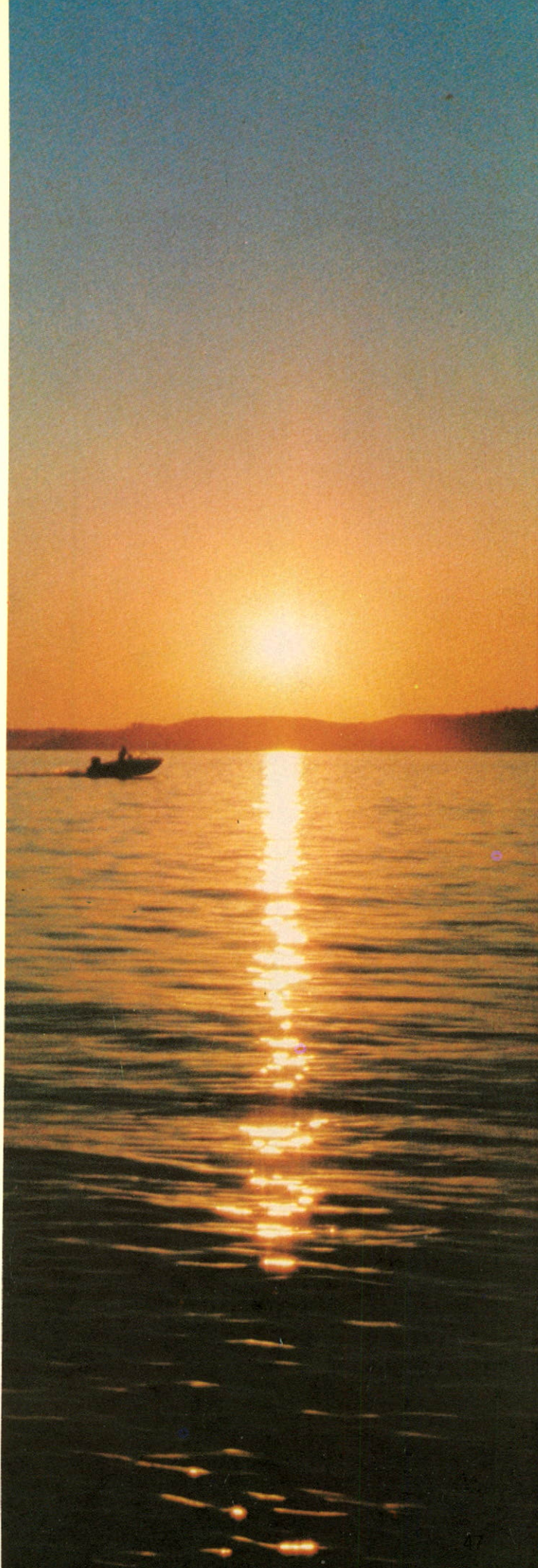
	1981	1980	1979	1978	1977
<b>ELECTRIC</b>					
Customers at December 31 .....	365 350	357 249	347 997	337 872	327 323
Electricity sold (10 <sup>6</sup> kW·h) .....	8 486	8 164	7 881	7 329	6 961
Average yearly residential consumption (kW·h) .....	6 711	6 794	6 902	6 753	6 335
Average yearly farm consumption (kW·h) .....	15 875	16 138	16 440	15 487	14 333
Rated generating capacity (kW)					
Hydro .....	564 600	467 000	467 000	467 000	467 000
Steam .....	1 573 500	1 573 500	1 349 500	1 349 500	1 349 500
Internal combustion .....	115 000	115 000	115 000	115 000	164 400
Total .....	2 253 100	2 155 500	1 931 500	1 931 500	1 980 900
Seasonal gross system peak load (kW) .....	1 925 000	1 858 000	1 724 000	1 680 000	1 585 000
Pole kilometres of line excluding urban distribution system					
72 kV and higher .....	9 698	9 447	9 153	8 990	8 752
Under 72 kV .....	124 099	123 389	122 567	121 747	121 045
<b>NATURAL GAS</b>					
(Gas volumes at 101.325 kPa)					
Customers at December 31 .....	227 127	221 378	215 684	208 761	201 892
*Gas sold (10 <sup>6</sup> m <sup>3</sup> ) .....	2 814	3 029	3 127	3 040	3 057
Average yearly residential consumption (m <sup>3</sup> ) .....	3 707	4 032	4 641	4 584	4 264
**Degree days deficiency (Regina) .....	4 988	5 526	6 165	6 038	5 485
Maximum daily consumption (10 <sup>3</sup> m <sup>3</sup> ) .....	17 046	17 515	17 588	16 801	17 931
Kilometres of pipeline in service					
Gathering .....	1 018	985	985	985	985
Transmission and laterals .....	8 097	8 068	8 013	8 010	7 955
Distribution .....	5 706	5 553	5 411	5 249	5 129
Average monthly employees .....	3 453	3 280	3 112	3 016	2 949

\*Includes intersystem usage

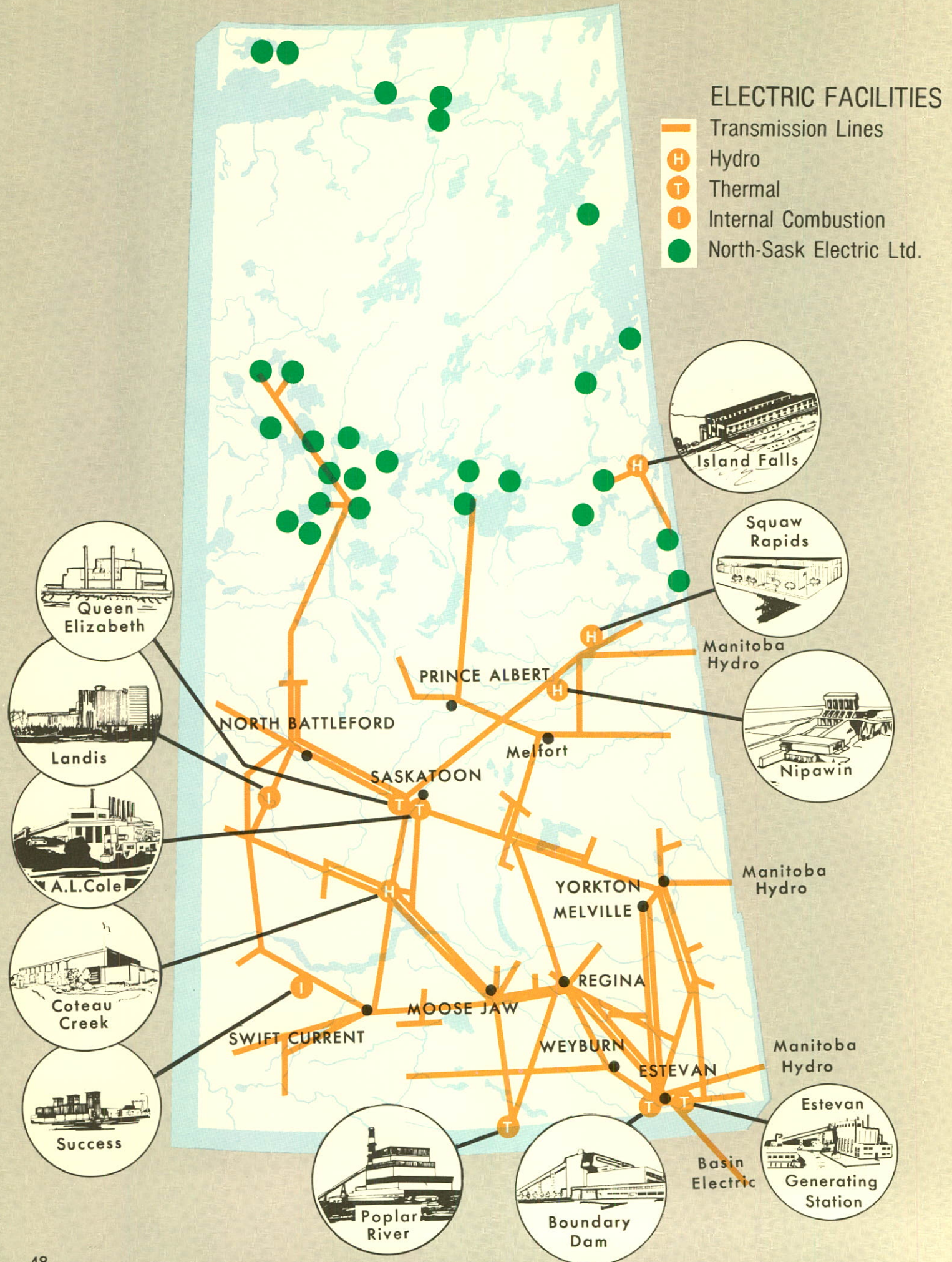
\*\*Celsius using 18°C as base temperature.



<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>
315 635	302 611	291 966	283 282	277 508
6 347	6 125	6 192	5 990	5 289
6 074	6 003	5 713	5 390	5 343
13 616	12 873	11 969	11 025	10 481
467 000	467 000	467 000	467 000	467 000
1 057 000	1 057 000	1 057 000	1 057 000	907 000
172 975	171 137	113 050	111 885	111 500
1 696 975	1 695 137	1 637 050	1 635 885	1 485 500
1 432 000	1 330 000	1 289 600	1 290 900	1 175 000
8 380	8 309	8 229	8 156	7 918
120 109	119 299	118 457	117 163	116 309
193 229	183 305	173 240	164 902	157 416
2 925	2 892	3 235	3 212	3 081
4 461	4 930	4 887	4 771	5 275
5 477	5 966	6 033	5 495	6 342
16 578	15 093	14 733	15 310	15 193
867	821	816	772	772
7 920	7 879	7 873	7 549	7 113
4 928	4 752	4 582	4 331	4 067
2 887	2 837	2 625	2 519	2 453













## GAS FACILITIES

-  Transmission Lines
-  TransCanada PipeLines
-  Compressor Station
-  Gas Storage & Compressor

