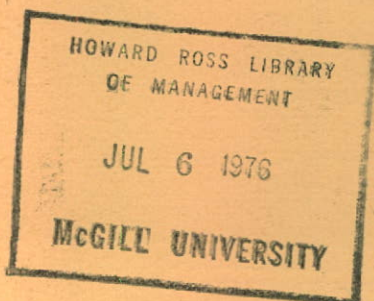


british columbia hydro and power authority

# ANNUAL REPORT

year ended 31 march 1976



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PARLIAMENT BLDGS.  
VICTORIA

MINISTER OF TRANSPORT AND COMMUNICATIONS

June 15th, 1976

The Honourable Walter S. Owen, Q.C., LL.D.,  
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the  
Annual Report of British Columbia Hydro and Power Authority  
for the year ended March 31st, 1976.



Jack Davis.

# BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

Head Office: 970 Burrard Street, Vancouver, British Columbia, Canada, V6Z 1Y3

## **DIRECTORS**

ROBERT W. BONNER, Q.C.  
CHARLES W. BRAZIER, Q.C.  
THE HONOURABLE JOHN DAVIS  
RODERICK M. HUNGERFORD  
JOHN H. STEEDE

## **OFFICERS**

ROBERT W. BONNER, Q.C., *Chairman*  
J. NORMAN OLSEN, *General Manager*  
WILLIAM A. BEST, *Assistant General Manager*  
WILLIAM A. DUNCAN, *Assistant General Manager*  
R. KEITH KIDD, *Assistant General Manager*  
ERIC H. MARTIN, *Assistant General Manager*  
CHARLES W. NASH, *Assistant General Manager*  
WILLIAM D. MITCHELL, *Secretary*  
ELIZABETH B. FULWELL, *Associate Secretary*  
WILLIAM M. WALKER, *Chief Engineer*  
IAN R. A. MILLS, *Treasurer*  
GEORGE A. WOODBURY, *Comptroller*  
DR. HARRY M. ELLIS, *Director, Research and Development*

## **AUDITORS**

PRICE WATERHOUSE & CO.

## **BANKERS**

CANADIAN IMPERIAL BANK OF COMMERCE

## **REGISTRARS**

*Securities issued by British Columbia Hydro and Power Authority:*

*Canadian issues:* B.C. HYDRO

*United States issues:* THE CANADIAN BANK OF COMMERCE

TRUST COMPANY, New York

*Securities issued by the former British Columbia Electric Company Limited:*

*Callable Bonds:* MONTREAL TRUST COMPANY

*First Mortgage Bonds:* MONTREAL TRUST COMPANY

*Debentures:* THE ROYAL TRUST COMPANY

*Securities issued by the former British Columbia Power Commission:*

B.C. HYDRO

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## **THE BUSINESS OF B.C. HYDRO AND THE AREAS SERVED**

### **Electric Service**

Generation and transmission of electricity.

Distribution of electricity throughout areas of British Columbia containing more than 90% of the population of the Province.

### **Gas Service**

Distribution of natural gas in Greater Vancouver and the Fraser Valley.

Distribution of liquid petroleum gas-air in Greater Victoria.

### **Passenger Transportation Service**

Urban bus service in Greater Vancouver and Greater Victoria.

Interurban bus service in Greater Vancouver, in the Fraser Valley, between Vancouver and Victoria and between Vancouver and Nanaimo.

### **Rail Freight Service**

Rail freight operations in Greater Vancouver and the Fraser Valley.

# BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

ROBERT W. BONNER, O. C.  
CHAIRMAN

970 BURRARD STREET  
VANCOUVER, B. C.  
V6Z 1Y3

June 14, 1976

The Honourable J. Davis  
Minister of Transport & Communications  
Parliament Buildings  
VICTORIA, B. C.

Dear Sir:

Presented herewith is the Annual Report of British Columbia Hydro and Power Authority for the year ended 31 March 1976.

During the year under review, B. C. Hydro suffered a loss of \$31,302,575 caused primarily by expansion of passenger transportation services, but compounded by rising operating costs resulting from serious inflation.

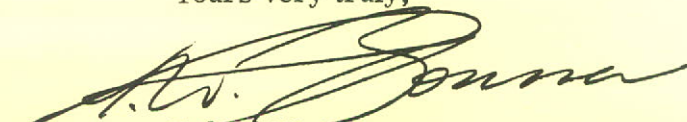
A special government subsidy of \$32,600,000 for the period, however, makes it possible to report a modest net income, after subsidy, of \$1,297,425.

B. C. Hydro has initiated a financial and management program to reverse the unfavourable earnings trend it has experienced in recent years, so as to improve its general performance and to enhance the Authority's credit as a major borrower, anticipating that the competition for funds for necessary capital expansion over the next ten years is likely to become keen as the general need for capital grows.

Rates to electric and gas customers were increased during the year. In conjunction with raising rates, steps have been taken to reduce operating expenses and to delay, where possible, capital expenditures. However, B. C. Hydro recognizes its responsibility to ensure that adequate power is available for development in the Province and does not propose to take any step that may curtail this development. Rates will be reviewed annually to ensure and maintain a sound financial base.

An inflationary period poses unusual challenge to B. C. Hydro, but I am confident that our loyal and competent staff will not find the problems of these times insurmountable.

Yours very truly,



Robert W. Bonner

## THE YEAR IN BRIEF

- B.C. Hydro suffered a loss of \$31,302,575 for the year under review. This loss was more than offset by a special subsidy from the Provincial Government, and as a result, net income of \$1,297,425 was recorded.
- Sales of kilowatt-hours of electricity in British Columbia declined .4% from the previous year, the first time in B.C. Hydro's history that a decline has been experienced.
- Therms of gas sold rose by 4.5%.
- Number of passengers carried on urban transportation services increased 10.4%.
- Expenditures on new plant amounted to \$590,504,012 compared with \$463,821,122 for the previous year.
- Rate increases were announced for all categories of electric and gas customers.

## B.C. HYDRO'S REVENUE DOLLAR

for the year ended 31 March 1976

### WHERE THE REVENUE CAME FROM

Electric .....	65.0¢	
Gas .....	17.0¢	
Passenger transportation .....	6.3¢	
Rail freight .....	2.8¢	
Miscellaneous .....	2.7¢	
Provincial Government special subsidy ...	6.2¢	

### HOW THE REVENUE WAS USED

Employment costs .....	29.9¢	
Materials and services .....	19.5¢	
Grants, school taxes & water rentals .....	7.5¢	
Interest on debt* .....	28.9¢	
Depreciation .....	13.9¢	
Retained in the business .....	.3¢	

\*less interest charged to construction

# ANNUAL REPORT OF BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

for the year ended 31 March 1976

## RESULTS OF OPERATIONS

A loss of \$31,302,575 was incurred by B.C. Hydro during the year under review compared with a net income of \$4,435,107 (restated) for the previous year. To avoid severe deterioration of B.C. Hydro's financial condition, the Provincial Government authorized payment in March 1976 of a special subsidy of \$32,600,000, thereby turning the loss into a modest net income of \$1,297,425.

Gross revenues, excluding the special subsidy, for the year ended 31 March 1976 amounted to \$492,163,490, an increase of \$66,594,524 or 15.6% over the previous year. With the inclusion of the special subsidy, gross revenues were \$524,763,490, an increase of \$99,194,524 or 23.3%.

The following table shows the principal sources of revenue and how this revenue was used:

	Year Ended 31 March 1976	Year Ended 31 March 1975
<b>Where the revenue came from:</b>		
Sale of electricity .....	\$341,384,872	\$296,779,753
Sale of gas .....	89,125,748	77,604,244
Passenger transportation .....	33,063,183	30,483,081
Rail freight operations .....	14,598,282	13,105,336
Interest on temporary investments .....	6,480,414	2,380,680
Miscellaneous .....	7,510,991	5,215,872*
Provincial Government special subsidy .....	32,600,000	—
	<u>\$524,763,490</u>	<u>\$425,568,966</u>
<b>How the revenue was used:</b>		
Salaries, wages and employee benefits .....	\$157,000,822	\$117,882,333
Materials and services .....	102,342,574	87,278,755*
Grants, school taxes and water rentals .....	39,531,674	28,830,420
Interest on debt, less interest charged to construction .....	151,811,868	121,382,409
Depreciation of plant .....	72,779,127	65,759,942
Retained in the business .....	1,297,425	4,435,107*
	<u>\$524,763,490</u>	<u>\$425,568,966</u>

Net income for the year under review was adversely affected by increased costs resulting from expansion and improvement of transit services, depressed economic conditions generally, lengthy work stoppages throughout the Province and the continuing impact of inflation. The following table, which excludes the special subsidy, shows net income (loss) by service:

	Year Ended 31 March 1976	Year Ended 31 March 1975
<b>Service:</b>		
Electric .....	\$ (2,156,275)	\$ 19,603,326
Gas .....	2,120,520	1,379,432
Urban transportation .....	(31,706,462)	(18,825,674)
Interurban transportation .....	(4,860,563)	(2,938,912)
Rail freight .....	1,709,143	1,897,174
Miscellaneous .....	3,591,062	3,319,761
	<u>\$ (31,302,575)</u>	<u>\$ 4,435,107*</u>

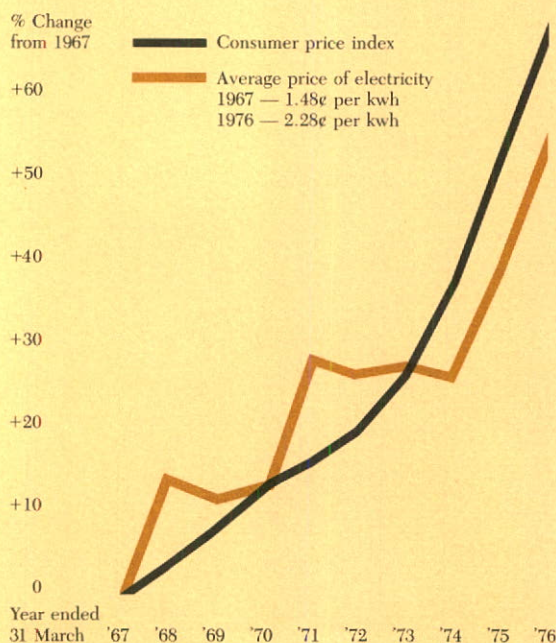
\*Restated — see Note 1 to the financial statements.

## RATES

During the year, inflationary pressures led to several rate increases. Rates to gas customers in Greater Victoria were increased 50% effective September 1975. Rates to all residential electric customers and to gas customers on the Lower Mainland were increased by about 12% effective October 1975.

In February 1976, further rate increases were announced for both electric and gas customers effective March 1976. Increases in electric rates averaged 11.9% for residential customers and in the 12% to 16% range for most commercial and small industrial customers. Transmission rates for large industrial customers will be increased by about 10% effective April 1977 and about 8% in April 1978 and, for bulk power customers, about 19% in April 1978. Increases in gas rates for most customers were in the 8% to 12% range; however, for a few large-use customers, the increases were from 12% to 24%.

**B.C. HYDRO'S AVERAGE SELLING PRICE OF ELECTRICITY FOR RESIDENTIAL USE COMPARED WITH THE CONSUMER PRICE INDEX — CANADA**



## ELECTRIC SERVICE

### Sales of Electricity

Sales of kilowatt-hours of electricity in British Columbia by B.C. Hydro were .4% less than those recorded in the previous year, the first time in the history of B.C. Hydro that a decline in sales of electricity has been experienced. In general, this decline can be attributed to depressed economic conditions in the Province, together with severe labour unrest which resulted in a shutdown of virtually the entire forest industry for approximately three months.

Gross revenues from the sale of electricity increased 15.0% to \$341,384,872 in contrast to the decline in kilowatt-hours sold. This apparent contradiction resulted from rate increases instituted in the current year and the latter part of the previous year, together with a change in sales mix by class of customer.

Sales of kilowatt-hours of electricity in British Columbia by category of customer and percentage changes from the previous year were as follows:

	Year Ended 31 March 1976 Kwh in Millions	% Increase (Decrease) from Previous Year
Residential	6,246	8.0
General	7,263	3.7
Bulk	6,808	(11.7)
Other systems	268	52.6
	<u>20,585</u>	<u>(.4)</u>

B.C. Hydro was serving 875,259 customers with electricity at 31 March 1976, an increase of 32,305 customers during the year. Average annual consumption per residential customer rose from 7,928 kwh to 8,370 kwh, an increase of 5.6%.

### Rural Electrification

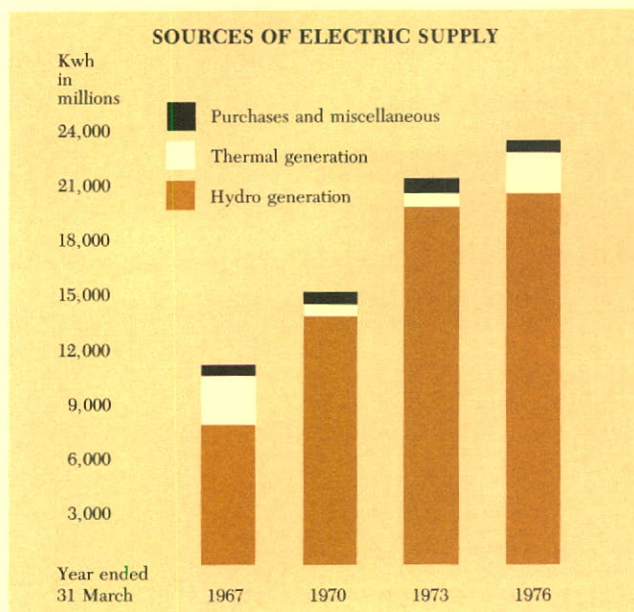
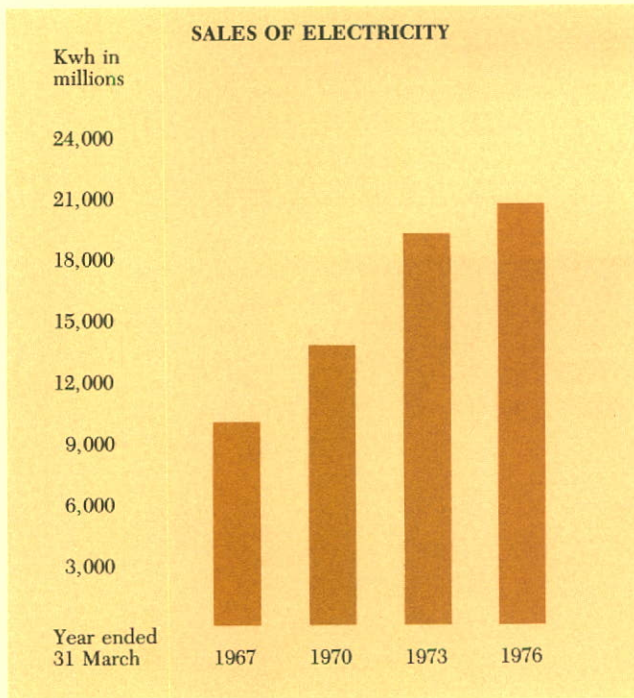
During the year ended 31 March 1976, the Government of British Columbia continued its policy of granting \$3,000,000 annually to B.C. Hydro to provide financial assistance for rural electrification. In the course of the year, B.C. Hydro extended financial help to 186 projects serving 512 customers along 190 miles of distribution lines. The largest of



these projects was construction of a diesel generating station and distribution system to serve the village of Ahousat on Flores Island off the west coast of Vancouver Island. Also of interest was a project to serve Baker Creek near Quesnel, where the residents supplied the poles for the project and the labour to clear 33 miles of right-of-way.

### Generation and Supply of Electricity

Demand for electricity during the year totalled 23,538 million kwh, approximately the same as during the previous year. In addition, B.C. Hydro, by agreement between the Canadian and United States Entities responsible for operations under the Columbia River Treaty, delivered 1,078 million kwh of power to the United States Entity as an alternative to releasing water from Mica for generation of power downstream. This delivery of power was made to ensure availability of water when the Mica generating plant becomes operational in late 1976, and to contribute to a more efficient operation of the Mica plant. The following table, which excludes the power exported in lieu of water releases, shows requirements for energy and sources of supply for the year under review:



	Kwh in Millions	% of Total
Requirements for energy:		
Sales to customers	20,585	87.5
Export	11	—
Line loss and system usage	2,942	12.5
	<u>23,538</u>	<u>100.0</u>

Sources of supply:		
Hydro generation —	<del>11,905</del>	
Peace River Project	11,905	50.6
Other	8,722	37.1
Thermal generation	2,224	9.4
Purchases and miscellaneous	687	2.9
	<u>23,538</u>	<u>100.0</u>

Hydroelectric generating capacity increased 7.3% during the year, with the placing in service of two 132,300 kw units at the Kootenay Canal plant.

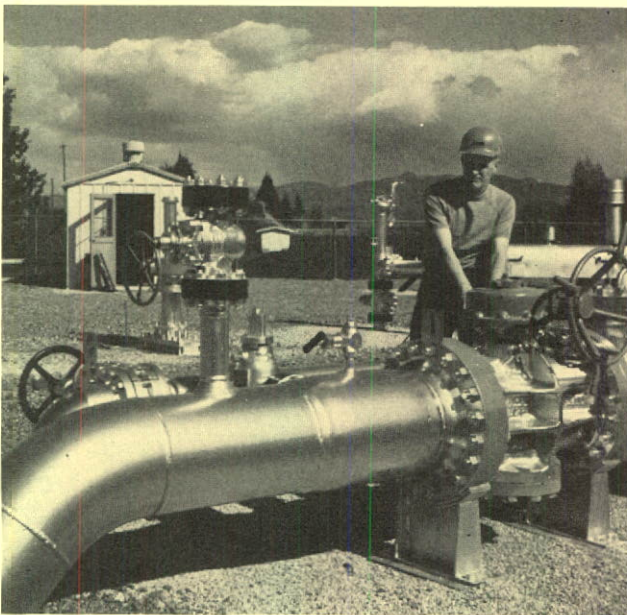
B.C. Hydro has entered into an agreement with Cominco Ltd. and West Kootenay Power and Light Company, Limited whereby generation from plants owned and operated by them will be coordinated with operations of B.C. Hydro's integrated system. Total output of their generating plants will be delivered to B.C. Hydro, and in exchange, they will be assured a supply of power equal to the output of their existing plants, excluding the effects of storages

provided by the Duncan and Libby dams. B.C. Hydro also has agreed to sell Cominco Ltd. and West Kootenay Power and Light Company, Limited the power needed to meet their future load increases.

The installed nameplate generating capacity of the B.C. Hydro system at 31 March 1976 totalled 5,181,345 kw, up 9.7% from the previous year. The highest one-hour demand ever recorded on the integrated system, 4,063,000 kw, occurred on 15 December 1975. This demand represented an increase of 7.2% over the previous one-hour peak, which occurred in January 1975.

### GAS SERVICE

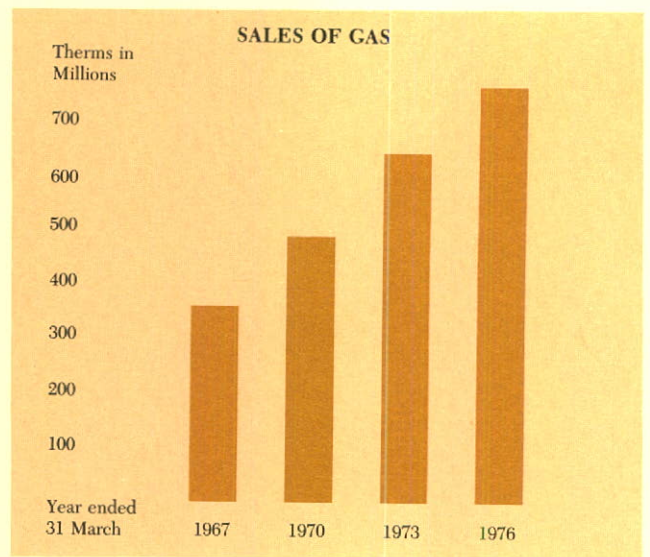
Gross revenues from the sale of gas to the public were \$89,125,748, an increase of 14.8% from the previous year. The increase resulted principally from rate increases that became effective in October 1975, as therms of gas sold increased only 4.5% over the previous year. The weather, which has a marked influence on the sale of gas for heating, was a little colder than the previous year.



*Peak one-day output of gas on the Lower Mainland was 3.5 million therms on 3 March, a new record.*

The following table shows therms sold to the public and percentage changes from the previous year, by categories:

	Year Ended 31 March 1976 Therms in Millions	% Increase (Decrease) from Previous Year
Residential	304.3	8.8
General	268.5	11.4
Interruptible	191.1	(9.2)
	<u>763.9</u>	4.5



The peak one-day output of gas in the Lower Mainland, excluding interruptible loads and gas delivered to Burrard Thermal Generating Plant, was 3.5 million therms on 3 March 1976, exceeding the previous peaks of 3.4 million therms in December 1972 and January 1975.

To optimize the supply of gas by reducing the maximum demand during the peak heating season, B.C. Hydro, in cooperation with British Columbia Petroleum Corporation and the Department of Mines and Petroleum Resources, is evaluating the potential in the Lower Mainland for the development of underground aquifer storage.

## TRANSPORTATION SERVICES

### Urban Transportation

Gross revenues from urban transportation continued to increase, rising \$2,259,592 to \$23,468,659, an increase of 10.7%. In spite of this increase and continuation of a \$2,000,000 annual grant from the Government of British Columbia, B.C. Hydro suffered its greatest loss to date on passenger transportation.



*Expanded urban transportation system attracted 104 million riders, up 10.4 per cent from previous year.*

Expansion of the system continued during the year under the direction of the Provincial Government's Bureau of Transit Services, with service being extended to the neighbouring municipalities of Surrey and Delta and to the City of White Rock, some 35 miles from downtown Vancouver. The number of passengers carried increased 10.4% over the previous year, and miles operated rose 21.6% to 33.6 million. As a result of the expansion of service, it was necessary to hire 371 additional bus operators. Maintenance facilities were expanded with the

completion of the first phase of a large transit centre in the Municipality of Surrey. The maintenance facilities at this centre are capable of providing light maintenance for a fleet of 100 vehicles and fueling, washing and parking facilities for 250 vehicles. Plans for the second phase call for expansion to accommodate light maintenance for a fleet of 250 vehicles.

During the year under review, the fleet was increased by 101 vehicles to a total of 960 at year-end. B.C. Hydro owns 724 of these vehicles, and the remaining 236 were provided by the Provincial Government without charge. At 31 March 1976, composition of the fleet was as follows:

Gas buses	29
Diesel buses	619
Trolley coaches	<u>312</u>
	<u>960</u>

### Interurban Transportation (Pacific Stage Lines)

Gross revenues from interurban bus services were \$7,594,524, an increase of 4.4% over the previous year. Revenues increased significantly in the charter and parcel express services. Charter revenues increased in part because of higher rates, but primarily because of increased availability of equipment. Parcel express revenues, which have been experiencing a steady annual growth rate, benefited from the disruption of the Canadian postal service during the year.

At 31 March 1976, Pacific Stage Lines was operating a fleet of 125 vehicles, of which 89 were owned by B.C. Hydro and 36 provided by the Provincial Government without charge.

### Rail Freight

Gross revenues from rail freight operations amounted to \$14,598,282, an increase of 11.4% over the previous year. The increase was primarily the result of higher rates, as the volume of freight handled decreased 6.9% to 2,558,085 tons, reflecting generally depressed economic conditions and, more specifically, a virtual shutdown of the forest industries for approximately three months.

In December 1975, the diesel locomotive fleet was increased to twenty-four units with the addition of

three 1,500-horsepower locomotives ordered in the previous year. During the year, four additional yard tracks and two teaming facilities were added to B.C. Hydro's system, and twelve new private spur tracks were placed in service.



*Three new diesel locomotive units were added to B.C. Hydro's railway fleet, bringing total to twenty-four.*

## COST OF PROVIDING SERVICES

The total cost of providing all services during the year was \$523,466,065, an increase of \$102,332,206 or 24.3% over the previous year.

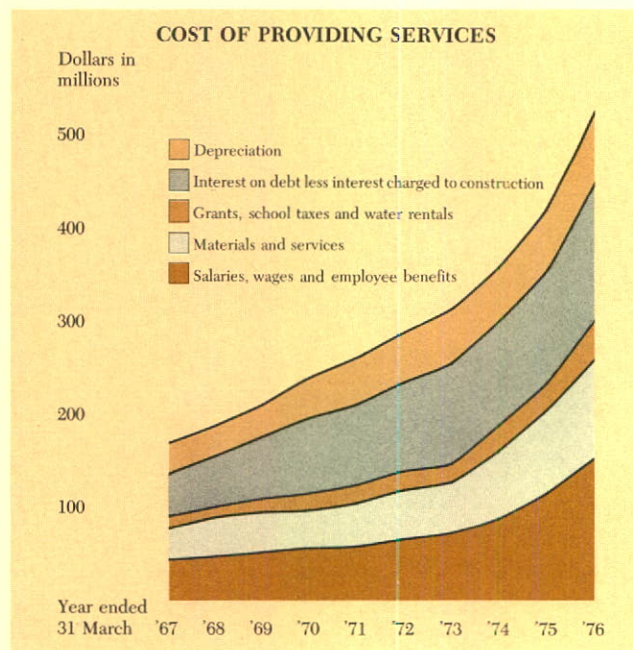
Salaries, wages and employee benefits charged to operations amounted to \$157,000,822, up \$39,118,489 or 33.2%. This increase reflects higher rates of pay, an increase in the number of regular employees and a supplement in pensions to retired employees to ease the impact of a higher cost of living. Also contributing was a provision for funding, over a twenty-five-year period, a pension fund deficit determined by an actuarial evaluation as at 31 December 1974.

Grants, school taxes and water rentals charged to operations totalled \$39,531,674, an increase of \$10,701,254 or 37.1%. Water rentals increased

\$3,443,722 or 73.0%, primarily because of higher fees. Increases in grants and school taxes were caused mainly by additions of property and higher mill rates.

Interest and other costs on debt charged to operations during the year were \$151,811,868, up \$30,429,459 or 25.1%. The increase reflects slightly higher rates of interest on borrowings and the transfer to active service of new plant. Provision for depreciation of plant, also directly related to plant in service, totalled \$72,779,127, up \$7,019,185 or 10.7% over the previous year.

Purchases of natural gas from Westcoast Transmission Company Limited totalled \$60,940,687, of which \$55,473,300 was charged to operations. The remaining \$5,467,387 was for natural gas used at Burrard Thermal Generating Plant to produce power for delivery to the United States in lieu of water releases from Mica to ensure availability of water for generation when the Mica plant becomes operational in late 1976. The cost of the natural gas used to provide this power has been deferred and, after the Mica plant becomes operational, will be charged to operations over seven years.



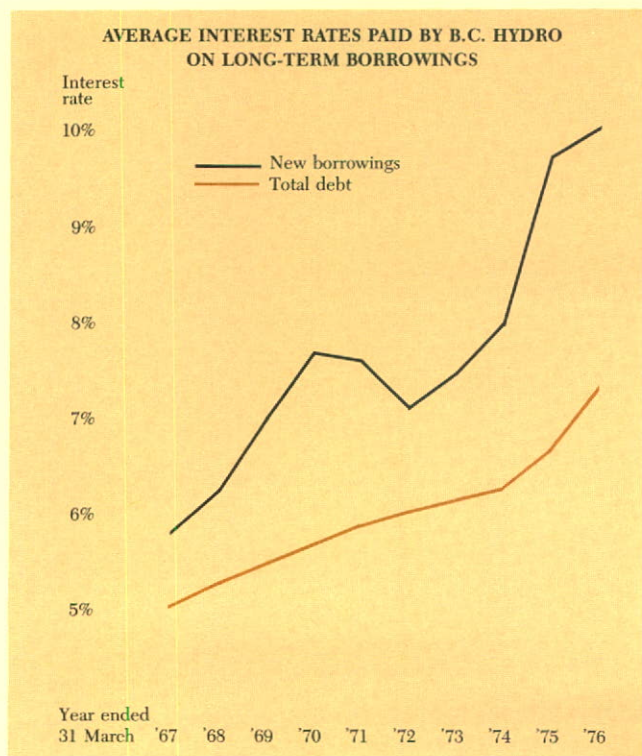
## FINANCING

During the year ended 31 March 1976, B.C. Hydro sold \$541,546,000 of bonds, as follows:

Public issues	
— in the United States	\$150,000,000 U.S.
— in Canada	50,000,000
Private placement	100,000,000
Canada Pension Plan Investment Fund	26,546,000
Provincial Government trust funds	215,000,000

On 1 September 1975, \$25,000,000 8½% Parity Development Bonds Series CG matured and were replaced by \$25,000,000 8½% Parity Development Bonds Series EA.

On 29 December 1975, \$29,000,000 5½% Sinking Fund Bonds Series T were called by the holders, and \$29,000,000 10¾% Sinking Fund Bonds Series EB were issued to replace them.



The average effective annual interest cost of all long-term bonds sold by B.C. Hydro during the year was 10.02% compared with an average of 9.71% for the previous year.

During the year, \$30,742,041 was paid to Trustees to meet sinking fund requirements of long-term debt. All sinking fund obligations have been met.

Bonds and other securities issued by B.C. Hydro and its predecessors are unconditionally guaranteed as to principal and interest by the Province of British Columbia.

## LITIGATION

A lawsuit was started on 17 July 1967 in the Supreme Court of British Columbia by the contractors constructing the underground powerhouse and associated works at Gordon M. Shrum Generating Station, alleging breach of contract. Amounts between \$20 million and \$30 million were claimed as damages. During the trial, the contractors introduced an alternative claim to which they gave priority for the total cost to them of the construction work, including interest and profit, and a balance owing of \$51 million was claimed. The alternative claim was tried and judgment delivered, declaring the contractors to be entitled to compensation on the basis of quantum meruit. In a judgment delivered 13 November 1975, the compensation on the basis of quantum meruit was determined by the Trial Judge to be \$36,124,400, and this amount together with costs was awarded to the Plaintiffs. On 3 March 1976, payment into Court was made in the sum of \$36,500,490, including interest from 13 November 1975 to 28 January 1976. By order of Court, this amount may be paid to the contractors upon deposit of a bond satisfactory to the Court. A Notice of Appeal from the judgment was filed on 20 November 1975, submitting that the judgment was in error both in law and fact as to there being a fundamental breach of contract by B.C. Hydro and in the award to the Plaintiffs upon the basis of quantum meruit. The contractors have filed a Notice of Cross-Appeal in which the entire amount of \$51 million is claimed. No date has been set for the hearing of the appeals.

## CONSTRUCTION PROGRAM

Expenditures on plant additions, land and improvements totalled \$590,504,012 compared with \$463,821,122 for the previous year. Net property additions were \$577,378,464 after deducting plant retirements of \$13,125,548. Expenditures on plant included an allocation of indirect costs of administration, engineering and supervision; and interest on plant under construction, at rates equivalent to the cost of borrowing funds.

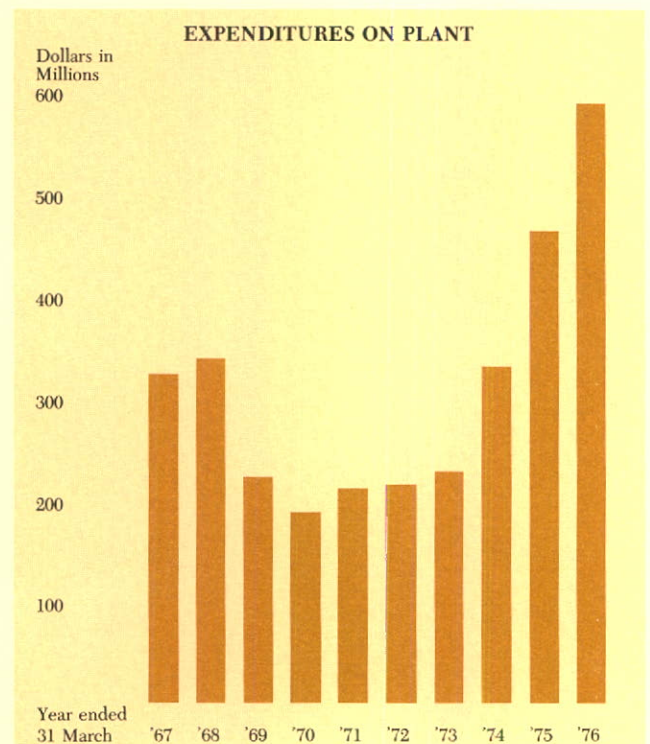
Plant expenditures for the year, by service and in broad categories, were as follows:

Electric service	
Generation	
Hydro	
Mica generating plant	\$105,024,184
Kootenay Canal project	24,006,882
Site One project	21,199,308
Seven Mile project	18,175,699
Other	16,683,414
Thermal	13,080,724
Transmission	
500 kv	121,763,536
Other	41,406,084
Transformation	74,523,518
Distribution	75,952,063
Other electric plant	28,116,895
Gas service	29,358,306
Transportation services	8,639,220
General	12,574,179

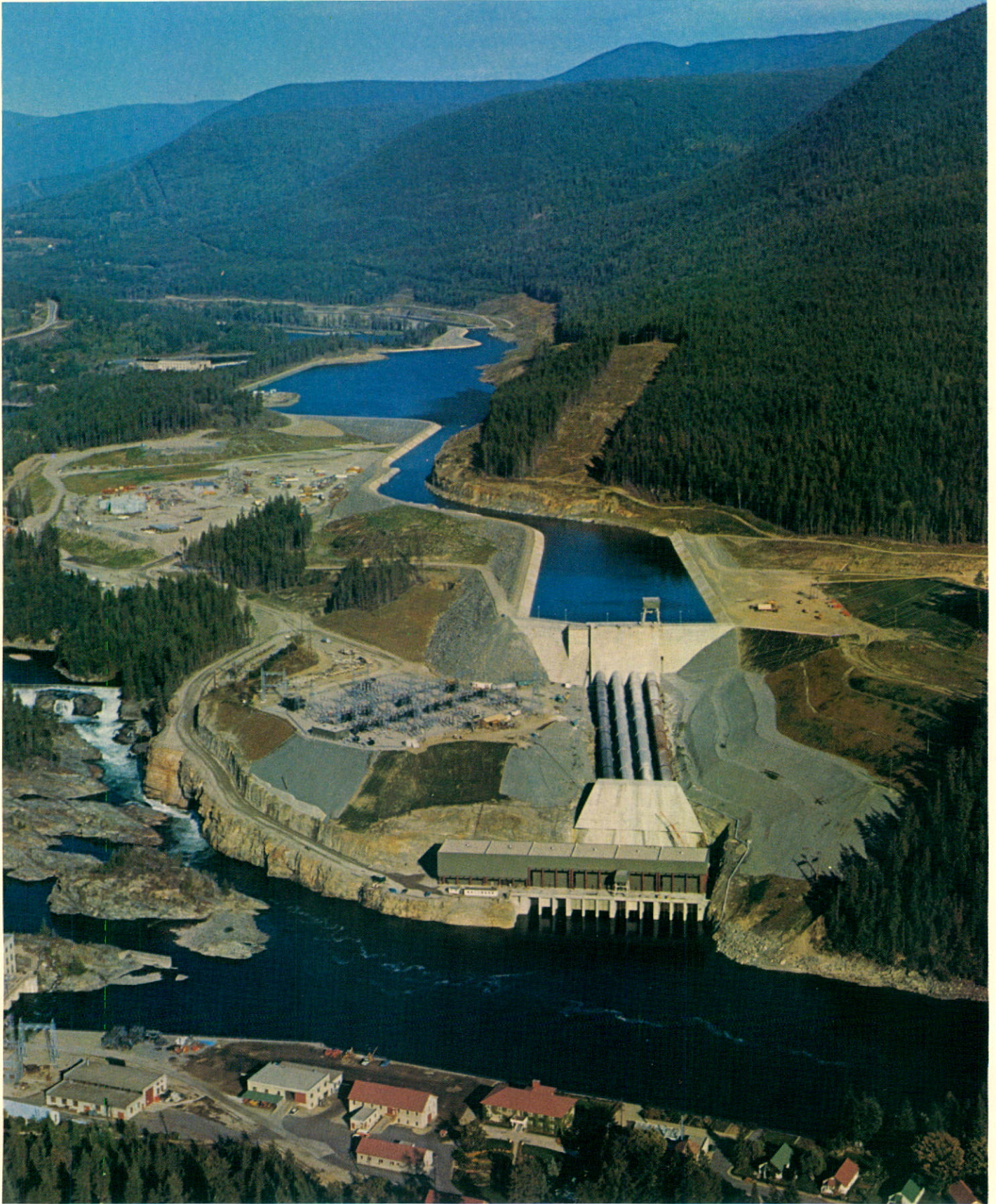
### Major Electric Service Plant Additions

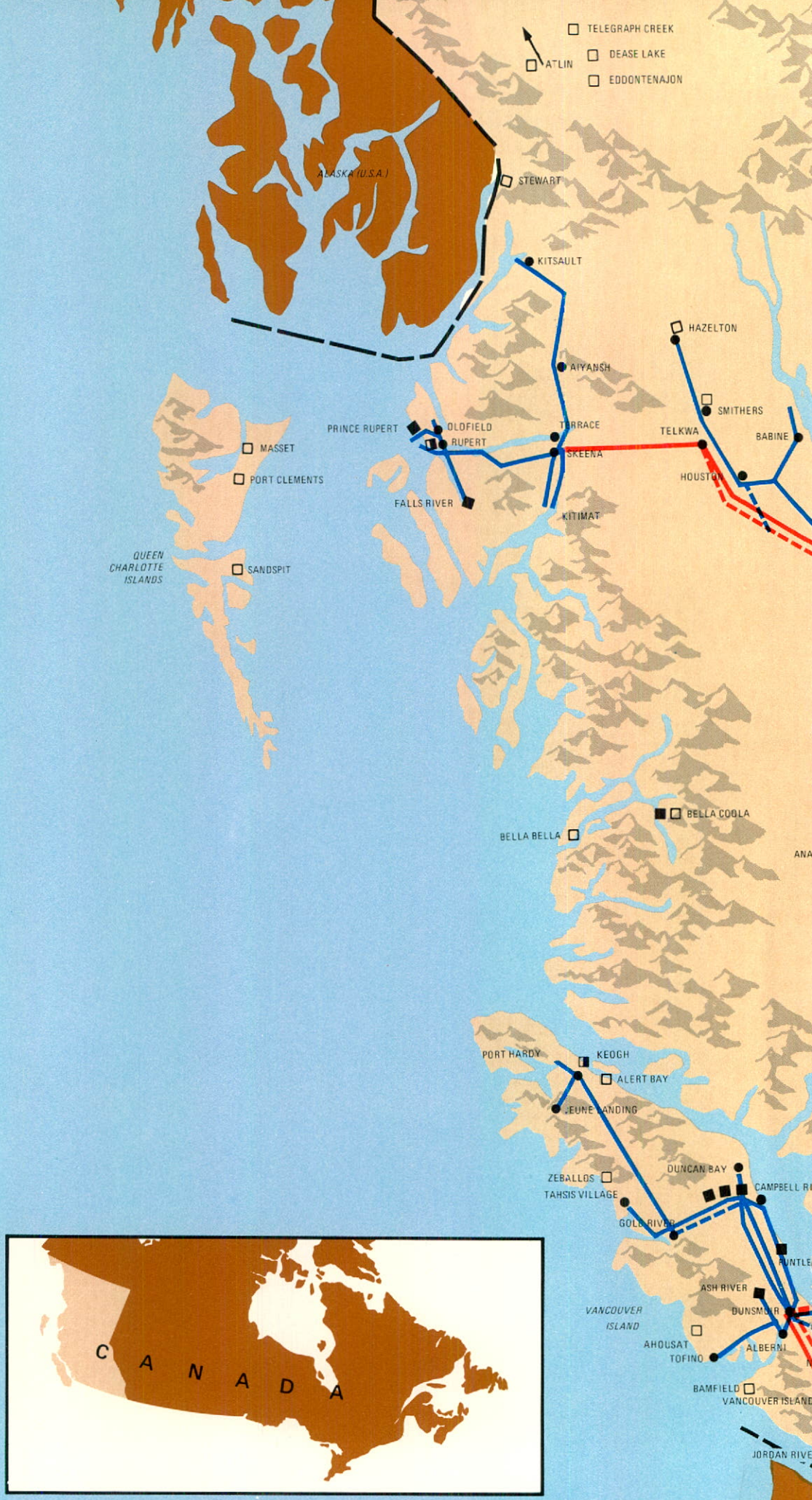
The first stage of the Kootenay Canal hydroelectric project, which includes two 132,300 kw generating units, a 230 kv line to Nelway, a 60 kv tie to the South Slocan Station of West Kootenay Power and Light Company, Limited and Nelway Substation, was completed on schedule and brought into operation in October 1975. Construction of the second stage, which includes two additional units and a 500 kv line to Ashton Creek Substation for initial operation at 230 kv, is scheduled for completion in September 1976.

McNaughton Lake, behind Mica Dam, continues to store water for future generation, as well as fulfilling operating commitments under the Columbia River Treaty. A heavy runoff has maintained reservoirs in the Columbia River Basin at high levels, and it is now expected that water levels will be adequate when Mica commences generation. In the powerhouse, installation of four 435,000 kw units and associated equipment is continuing. The first two units are scheduled for completion by September 1976, and the other two in 1977. Installation of the 500 kv gas-insulated switching equipment is under way and scheduled for completion as required for the generating units and transmission. The 500 kv gas-insulated switchgear and bus ducts, which are a first in Canada, have the advantage of small size and complete enclosure of live parts so they can be installed indoors, thereby overcoming problems caused by heavy snowfall. Construction of the two 500 kv lines from Mica to the Lower Mainland is proceeding on schedule. The Nicola to Ingledow section was completed in the fall of 1975, the Mica to Nicola and the Nicola to Meridian sections will be completed in 1976, and the second Mica to Nicola section in 1978.



*First stage of Kootenay Canal hydroelectric project was completed on schedule and brought into service.*







**BRITISH COLUMBIA HYDRO  
AND POWER AUTHORITY**  
ELECTRIC TRANSMISSION SYSTEM  
AT 31 MARCH 1976  
WITH PLANNED ADDITIONS

**LEGEND**

- HYDROELECTRIC GENERATING STATIONS
- DIESEL ELECTRIC GENERATING STATIONS
- ▣ GAS-TURBINE ELECTRIC GENERATING STATIONS
- SUBSTATIONS
- TRANSMISSION LINES 60 KV-360 KV (EXISTING AND UNDER CONSTRUCTION)
- TRANSMISSION LINES 500 KV (EXISTING AND UNDER CONSTRUCTION)
- - - TRANSMISSION LINES 60 KV-360 KV (PLANNED)
- - - TRANSMISSION LINES 500 KV (PLANNED)

**VANCOUVER AREA  
MAJOR GENERATING PLANTS**

- |                                |                               |
|--------------------------------|-------------------------------|
| Alouette:<br>Hydroelectric     | Port Mann:<br>Gas-Turbine     |
| Burrard:<br>Steam-Turbine      | Ruskin:<br>Hydroelectric      |
| Lake Buntzen:<br>Hydroelectric | Stave Falls:<br>Hydroelectric |

**MAJOR SUBSTATIONS**

- |             |                    |
|-------------|--------------------|
| Arnott      | Ingledow           |
| Atchellitz  | Kidd, Nos. 1 and 2 |
| Barnard     | Mainwaring         |
| Camosun     | Murrin             |
| Cypress     | Newell             |
| Dal Grauer  | Walters            |
| Horne-Payne |                    |

**VICTORIA AREA  
MAJOR SUBSTATIONS**

- |              |         |        |
|--------------|---------|--------|
| Esquimalt    | Colwood | Goward |
| George Tripp |         | Horsey |

**PRINCE GEORGE AREA  
MAJOR SUBSTATIONS**

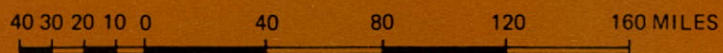
- |          |               |
|----------|---------------|
| Canreed  | Prince George |
| Patricia | Northwood     |
| Pineview | Williston     |



**PRINCE GEORGE**  
(See Legend)

**VANCOUVER**  
(See Legend)

**VICTORIA**  
(See Legend)



*Turbine shaft was transferred from rail car to low-bed trailer at Revelstoke for final leg of trip to Mica.*



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## FINANCIAL STATEMENTS

The financial statements of B.C. Hydro have been examined by Price Waterhouse & Co., the Auditors appointed by the Lieutenant-Governor in Council. The Report of the Auditors appears below, and the Statement of Income, Statement of Earnings Retained in the Business, Balance Sheet, Statement of Source and Application of Funds and Statement of Long-Term Debt are included in the following pages.

## REPORT OF THE AUDITORS

The Lieutenant-Governor in Council,  
Province of British Columbia:

We have examined the balance sheet of British Columbia Hydro and Power Authority as at 31 March 1976, the statements of income, earnings retained in the business and source and application of funds for the year then ended and the statement of long-term debt as at 31 March 1976. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these financial statements present fairly the financial position of British Columbia Hydro and Power Authority as at 31 March 1976 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied, after giving retroactive effect to the change in accounting for self-insurance referred to in Note 1 to the financial statements, on a basis consistent with that of the preceding year.

Vancouver, British Columbia  
12 May 1976

PRICE WATERHOUSE & CO.  
*Chartered Accountants*

**STATEMENT OF INCOME  
FOR THE YEAR ENDED 31 MARCH 1976**

	1976	1975
Gross revenues, excluding Provincial Government special subsidy .....	<u>\$492,163,490</u>	<u>\$425,568,966</u>
Expenses:		
Salaries, wages and employee benefits .....	157,000,822	117,882,333
Materials and services .....	102,342,574	87,278,755
Grants, school taxes and water rentals .....	39,531,674	28,830,420
Depreciation (Note 1) .....	72,779,127	65,759,942
Interest on debt (Note 7) .....	\$213,390,701	\$160,991,174
Less—		
Interest charged to construction (Note 1) .....	<u>61,578,833</u>	<u>39,608,765</u>
	<u>523,466,065</u>	<u>421,133,859</u>
Income (loss) before Provincial Government special subsidy .....	(31,302,575)	4,435,107
Provincial Government special subsidy (Note 8) .....	<u>32,600,000</u>	<u>—</u>
Net income .....	<u>\$ 1,297,425</u>	<u>\$ 4,435,107</u>

**STATEMENT OF EARNINGS RETAINED IN THE BUSINESS  
FOR THE YEAR ENDED 31 MARCH 1976**

	1976	1975
Balance at beginning of year as previously reported (Note 6) .....	\$156,876,429	\$153,526,886
Adjustment to reflect change in accounting for self-insurance (Note 1) .....	<u>4,457,301</u>	<u>3,371,737</u>
Balance at beginning of year as restated .....	161,333,730	156,898,623
Net income .....	<u>1,297,425</u>	<u>4,435,107</u>
Balance at end of year .....	<u>\$162,631,155</u>	<u>\$161,333,730</u>

See Note 1, Insurance, relating to restatement of figures for the year ended 31 March 1975.

**STATEMENT OF SOURCE AND APPLICATION OF FUNDS  
FOR THE YEAR ENDED 31 MARCH 1976**

	1976	1975
<b>Funds provided:</b>		
Operations—		
Net income .....	\$ 1,297,425	\$ 4,435,107
Depreciation .....	72,779,127	65,759,942
Other .....	(51,923)	(287,795)
	<u>74,024,629</u>	<u>69,907,254</u>
Contributions in aid of construction .....	19,090,887	11,943,232
Proceeds from sales of bonds .....	594,228,412	528,174,571
Miscellaneous .....	622,039	3,719,300
	<u>\$687,965,967</u>	<u>\$613,744,357</u>
<b>Funds expended:</b>		
Plant additions .....	\$590,504,012	\$463,821,122
Sinking funds—		
Payments .....	30,742,041	23,588,018
Income invested by Trustee (Note 7) .....	13,868,517	10,810,479
Bonds redeemed .....	58,438,000	74,037,600
Payment in respect of litigation (Note 3) .....	36,500,490	—
Deferred costs of generation (Note 1) .....	7,472,870	—
	<u>737,525,930</u>	<u>572,257,219</u>
Increase (decrease) in working capital exclusive of changes in current portion of long-term debt .....	<u>(49,559,963)</u>	<u>41,487,138</u>
	<u>\$687,965,967</u>	<u>\$613,744,357</u>

See Note 1, Insurance, relating to restatement of figures for the year ended 31 March 1975.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

**BALANCE SHEET AS AT 31 MARCH 1976**

	1976	1975
<b>PROPERTY ACCOUNT:</b>		
Lands, franchises, water rights, storage dams, plants for the generation, transmission and distribution of electricity and gas, trolley coaches, motor buses, freight railway and rolling stock, etc., at cost .....	\$3,606,706,279	\$3,254,465,246
<i>Less—</i>		
Accumulated depreciation .....	<u>706,057,493</u>	<u>634,125,592</u>
	2,900,648,786	2,620,339,654
Deferred costs of dams, powerhouse and other common property (Note 1) .....	107,827,843	150,429,460
Unfinished construction .....	<u>804,275,409</u>	<u>536,536,361</u>
	<u>3,812,752,038</u>	<u>3,307,305,475</u>
<b>CURRENT AND WORKING ASSETS:</b>		
Cash .....	2,816,089	3,844,772
Funds receivable from issue of bonds .....	—	20,299,125
Temporary investments, at cost (Note 2).....	44,840,276	54,011,050
Bonds held for sinking funds, at cost .....	3,076,441	2,813,038
Accounts receivable and unbilled revenues .....	104,397,840	94,185,535
Materials and supplies, at cost .....	50,794,457	42,579,364
Prepaid expenses .....	<u>2,168,260</u>	<u>2,409,389</u>
	<u>208,093,363</u>	<u>220,142,273</u>
<b>MORTGAGES AND OTHER DEFERRED ACCOUNTS RECEIVABLE .....</b>		
	<u>5,084,915</u>	<u>5,033,362</u>
<b>INSURANCE FUND (Note 1) .....</b>	<u>5,000,000</u>	<u>4,457,301</u>
<b>PAYMENT IN RESPECT OF LITIGATION (Note 3).....</b>	<u>36,500,490</u>	<u>—</u>
<b>DEFERRED CHARGES:</b>		
Unamortized discount and expense on debt (Note 1) .....	22,486,451	19,146,769
Deferred costs of generation (Note 1) .....	<u>7,472,870</u>	<u>—</u>
	29,959,321	19,146,769
	<u>\$4,097,390,127</u>	<u>\$3,556,085,180</u>

ON BEHALF OF THE BOARD:



J.H. STEEDE, Director



C.W. BRAZIER, Director

	1976	1975
LONG-TERM DEBT, per statement (Note 4) . . . . .	<u>\$2,990,317,901</u>	<u>\$2,514,667,304</u>
PARITY DEVELOPMENT BONDS, payable on demand (Notes 4 and 7):		
8½% Series CG due 1 September 1975 . . . . .	—	25,000,000
8½% Series CS due 15 August 1977 . . . . .	25,000,000	25,000,000
8½% Series CY due 3 August 1978 . . . . .	25,000,000	25,000,000
8½% Series DP due 1 September 1979 . . . . .	25,000,000	25,000,000
8½% Series EA due 1 September 1980 . . . . .	25,000,000	—
	<u>100,000,000</u>	<u>100,000,000</u>
CURRENT AND ACCRUED LIABILITIES:		
Accounts payable . . . . .	165,333,457	142,264,350
Interest accrued on debt . . . . .	70,020,335	55,578,389
Long-term debt payments due within one year—		
Sinking fund instalments . . . . .	42,399,383	30,741,194
Debt maturities . . . . .	11,572,575	4,526,000
	<u>289,325,750</u>	<u>233,109,933</u>
DEFERRED LIABILITIES . . . . .	<u>25,960,240</u>	<u>25,038,374</u>
CONTRIBUTIONS ARISING FROM COLUMBIA RIVER TREATY (Note 1) . . . . .	<u>451,466,705</u>	<u>460,680,311</u>
CONTRIBUTIONS IN AID OF CONSTRUCTION (Note 1) . . . . .	<u>77,688,376</u>	<u>61,255,528</u>
EARNINGS RETAINED IN THE BUSINESS (Note 6) . . . . .	162,631,155	161,333,730
COMMITMENTS (Note 9)		
	<u>\$4,097,390,127</u>	<u>\$3,556,085,180</u>

See Note 1, Insurance, relating to restatement of figures for the year ended 31 March 1975.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

STATEMENT OF LONG-TERM DEBT AS AT 31 MARCH 1976

Interest Rate %	Series	Date of Maturity	1976	1975
<i>Issued by British Columbia Hydro and Power Authority—</i>				
Bonds:				
3¼	B	1 October 1979	\$ 10,000,000	\$ 10,000,000
9¾	EH	16 December 1981	100,000,000 (1)	—
8⅞	DT	2 January 1982	25,000,000	25,000,000
5¼	A	1 May 1982	32,496,300	32,496,300
9¾	DV	3 December 1982	100,000,000	100,000,000
8⅞	DW	19 February 1985	100,000,000 (2)	100,000,000 (2)
5.46	W-A	1 February 1987	80,396,000	80,396,000
5.71	W-B	1 February 1988	95,001,000	95,001,000
6.68	W-C	3 February 1989	65,862,000	65,862,000
7.32	WD	2 September 1989	68,396,000	68,396,000
7.77	WE	2 March 1991	110,949,000	110,949,000
5¾	U	18 April 1991	40,000,000	40,000,000
5¾	X	1 July 1991	5,000,000	5,000,000
5⅝	Y	2 July 1991	43,750,000 (3)	45,000,000 (3)
6¼	AG	1 December 1991	20,000,000	20,000,000
5⅞	AH	2 January 1992	50,000,000 (3)	50,000,000 (3)
7.10	WF	2 March 1992	109,182,000	109,182,000
6	AJ	15 March 1992	25,000,000	25,000,000
6	BA	29 May 1992	2,500,000	2,500,000
6¼	AK	1 June 1992	50,000,000 (3)	50,000,000 (3)
6.10	AL-A	2 July 1992	10,000,000	10,000,000
6¼	AM	4 July 1992	25,000,000	25,000,000
6¼	BB	19 July 1992	4,000,000	4,000,000
6½	AP	1 November 1992	20,000,000	20,000,000
6¾	BC	1 February 1993	10,200,000	10,200,000
6¾	Z-S	15 February 1993	3,300,000	3,300,000
6¾	Z-T	15 February 1993	4,200,000	4,200,000
5	C	1 March 1993	15,000,000	15,000,000
7.33	WG	9 March 1993	73,847,000	73,847,000
6⅞	AR	29 March 1993	10,000,000	10,000,000
5¼	D	1 May 1993	25,000,000	25,000,000
5¼	F	1 June 1993	10,000,000	10,000,000
7¼	AS	1 June 1993	10,000,000	10,000,000
7¼	BD	2 July 1993	5,500,000	5,500,000
7	AU	5 August 1993	10,000,000	10,000,000
7	AV	1 October 1993	10,000,000	10,000,000
5¼	G	15 October 1993	15,000,000	15,000,000
7	BE	1 December 1993	12,800,000	12,800,000
7	Z-G	15 December 1993	7,000,000	7,000,000
5¼	H	15 December 1993	10,000,000	10,000,000
5¼	J	1 March 1994	10,000,000	10,000,000
	Carried forward		\$1,434,379,300	\$1,335,629,300



Interest Rate %	Series	Date of Maturity		1976	1975
	Brought forward			\$1,434,379,300	\$1,335,629,300
7.54	WH	4 March	1994	91,105,000	91,105,000
7½	AW	31 March	1994	10,000,000	10,000,000
7½	AX	2 June	1994	25,000,000	25,000,000
5¼	L	2 July	1994	10,000,000	10,000,000
7⅝	AY	1 October	1994	30,000,000	30,000,000
8	CA	1 December	1994	10,000,000	10,000,000
5¼	M	15 December	1994	20,000,000	20,000,000
8	CB	30 December	1994	15,000,000	15,000,000
8.78	WJ	7 February	1995	66,609,000 (4)	66,609,000 (4)
5¼	N	15 March	1995	10,000,000	10,000,000
8	CC	31 March	1995	20,000,000	20,000,000
8	CD	31 March	1995	5,000,000	5,000,000
8.96	VX	4 June	1995	10,000,000	—
8.96	VY	5 June	1995	10,000,000	—
8.80	VZ	2 July	1995	6,546,000	—
8	CE	1 August	1995	10,000,000	10,000,000
5⅜	S	15 September	1995	10,000,000	10,000,000
5½	T	29 December	1995	—	29,000,000 (5)
7.54	CF	30 December	1995	15,000,000	15,000,000
6.90	CH	30 March	1996	10,000,000	10,000,000
6.90	CJ	30 March	1996	20,000,000	20,000,000
7.25	CK	1 October	1996	20,000,000	20,000,000
7.25	CL	1 October	1996	5,000,000	5,000,000
6.93	CM	15 December	1996	20,000,000	20,000,000
6.93	CN	15 December	1996	5,000,000	5,000,000
6.90	CP	1 March	1997	7,000,000	7,000,000
7.38	CR	15 June	1997	10,000,000	10,000,000
7.76	CT	3 November	1997	25,000,000	25,000,000
7.76	CU	15 November	1997	4,000,000	4,000,000
7.63	CV	15 December	1997	5,000,000	5,000,000
7.63	CW	15 December	1997	25,000,000	25,000,000
10¼	EB	29 December	1997	29,000,000	—
7.48	CX	30 March	1998	25,000,000	25,000,000
8	CZ	3 July	1998	20,000,000	20,000,000
8	DA	1 September	1998	30,000,000	30,000,000
8⅞	DB	1 November	1998	13,000,000	13,000,000
8⅞	DC	1 November	1998	7,000,000	7,000,000
8.30	DD	1 December	1998	7,000,000	7,000,000
8.30	DE	15 December	1998	5,000,000	5,000,000
8.30	DF	15 December	1998	15,000,000	15,000,000
8.55	DG	15 February	1999	15,000,000	15,000,000
	Carried forward			\$2,130,639,300	\$2,005,343,300

## STATEMENT OF LONG-TERM DEBT AS AT 31 MARCH 1976 (continued)

Interest Rate %	Series	Date of Maturity		1976	1975
	Brought forward			\$2,130,639,300	\$2,005,343,300
8.55	DH	15 February	1999	5,000,000	5,000,000
8.70	DJ	29 March	1999	25,000,000	25,000,000
8.70	DK	29 March	1999	5,000,000	5,000,000
9.45	DL	15 May	1999	25,000,000	25,000,000
9.45	DM	15 May	1999	5,000,000	5,000,000
10½	DR	30 August	1999	12,000,000	12,000,000
10¼	DN	1 October	1999	100,000,000 (3)	100,000,000 (3)
10.40	DS	15 October	1999	15,000,000	15,000,000
10	DU	2 January	2000	50,000,000	50,000,000
9¾	DZ	10 February	2000	10,000,000	10,000,000
9¾	DX	1 May	2000	45,000,000	—
10½	EE	18 August	2000	10,000,000	—
10½	ED	1 September	2000	50,000,000	—
10	EC	15 October	2000	50,000,000 (6)	—
10	EF	17 February	2001	50,000,000	—
10¾	EG	29 March	2001	60,000,000	—
9½	DY	1 June	2005	150,000,000 (3)	—

Issued by the former British Columbia Electric Company Limited—

First Mortgage Bonds, after deducting bonds redeemed in accordance with sinking fund requirements:

3¾	"G"	1 December	1976	11,750,000 (3)	12,263,400 (3)
4¾	"H"	1 December	1977	8,019,000	8,508,700
4¾	"I"	1 February	1979	8,379,400	8,854,300
3¾	"J"	1 June	1980	9,082,200	9,498,600
4¼	"K"	1 February	1981	17,880,300	18,821,200
5	"L"	1 February	1982	24,811,900	26,137,100
5½	"M"	2 January	1988	31,295,500	33,172,300
5½	"N"	1 March	1989	19,849,300	20,847,500
6½	"O"	1 April	1990	21,925,800	22,833,400
5¾	"P"	1 May	1991	11,212,400	11,652,400
4	"F"	1 July	1991	1,468,600	1,649,900

Perpetual Callable Bonds:

4		198,100	204,000
4¼		80,950	82,200
4½		110,750	119,000
4¾		326,600	343,600
5		289,500	305,900
5½		189,350	202,400

Carried forward

\$2,964,508,950

\$2,432,839,200

Interest Rate %	Series	Date of Maturity		1976	1975
	Brought forward			<b>\$2,964,508,950</b>	\$2,432,839,200
25-year Callable Bonds:					
4	AA	1 August	1986	<b>11,801,900</b>	11,796,000
4¼	AB	1 August	1986	<b>10,919,050</b>	10,917,800
4½	AC	1 August	1986	<b>14,889,250</b>	14,881,000
4¾	AD	1 August	1986	<b>26,086,800</b>	26,069,800
5	AE	1 August	1986	<b>24,710,500</b>	24,694,100
5½	AF	1 August	1986	<b>14,810,650</b>	14,797,600
Sinking Fund Debentures, after deducting debentures redeemed in accordance with sinking fund requirements:					
5¾	A	1 April	1977	<b>32,800,000</b>	33,200,000

*Issued by the former British Columbia Power Commission—*

**Bonds:**

3¼	J	4 July	1975	—	10,000,000
3	S	1 April	1976	<b>17,738,000</b>	17,738,000
3½	T	1 April	1977	<b>9,285,000 (7)</b>	9,285,000 (7)
5	MC	15 September	1982	<b>5,149,000</b>	5,149,000
4	G	1 November	1988	<b>10,000,000 (3)</b>	10,000,000 (3)
3¼	H	15 July	1989	<b>6,300,000 (3)</b>	6,300,000 (3)
3¾	C	15 September	1991	<b>3,000,000</b>	3,000,000
4	D	21 May	1992	<b>1,000,000</b>	1,000,000
4	E	15 June	1992	<b>1,000,000</b>	1,000,000
4	F	15 September	1992	<b>1,500,000</b>	1,500,000
5	MD	15 September	1992	<b>18,724,000</b>	18,724,000
5	N	15 September	1992	<b>10,000,000</b>	10,000,000

**Debentures:**

3¼	K	15 June	1986	<b>20,000,000 (3)</b>	20,000,000 (3)
4¾	L	15 April	1987	<b>25,000,000 (3)</b>	25,000,000 (3)
3¾	P	1 February	1988	<b>20,000,000 (3)</b>	20,000,000 (3)

<b>3,249,223,100</b>	<b>2,727,891,500</b>
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Exchange premium at date of issue on long-term debt payable in United States dollars, including adjustment to restate debt maturing within one year at current rate of exchange

<b>11,572,502</b>	<b>7,788,837</b>
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Carried forward

**\$3,260,795,602**

**\$2,735,680,337**

STATEMENT OF LONG-TERM DEBT AS AT 31 MARCH 1976 (*continued*)

	1976	1975
Brought forward	\$3,260,795,602	\$2,735,680,337
<i>Less—</i>		
Sinking funds on deposit with Trustee, Minister of Finance for the Province of British Columbia	<u>216,505,743</u>	<u>185,745,839</u>
	<u>\$3,044,289,859</u>	<u>\$2,549,934,498</u>
(1) \$50,000,000 payable 16 December 1980 (selected by lot).		
(2) \$50,000,000 payable 19 February 1984 (selected by lot).		
(3) Payable in United States dollars.		
(4) Issued in consolidation of Series VM to VW sold during period 3 June 1974 to 7 February 1975.		
(5) Exchanged for 10¾% Series EB maturing 29 December 1997.		
(6) Redeemable at option of holder on 15 October 1983.		
(7) Payable in Canadian or United States dollars at option of holder.		
<i>Classification on Balance Sheet—</i>		
Long-term debt	\$2,990,317,901	\$2,514,667,304
Long-term debt payments due within one year:		
Sinking fund instalments	42,399,383	30,741,194
Debt maturities, less sinking fund	<u>11,572,575</u>	<u>4,526,000</u>
	<u>\$3,044,289,859</u>	<u>\$2,549,934,498</u>

Long-term debt and sinking fund requirements for the years ending 31 March 1978 to 1981 are \$81,900,000, \$49,300,000, \$44,300,000 and \$69,700,000 respectively.

**NOTES TO FINANCIAL STATEMENTS AS AT 31 MARCH 1976****Note 1 — Summary of significant accounting policies:**

The accounting policies of B.C. Hydro conform to generally accepted accounting principles for public utilities. A description of significant accounting policies follows.

**Plant and depreciation—**

The cost of plant financed by contributions arising from the Columbia River Treaty and by contributions in aid of construction, which include grants for rural electrification from the Government of the Province of British Columbia and amounts paid by customers towards construction of plant, is included in property account. Contributions arising from the Columbia River Treaty are being amortized over the remaining term of the Treaty, and the credit resulting therefrom is offset against and is equal to the annual provision for depreciation of the related assets. Contributions in aid of construction are being amortized over the estimated service lives of the related assets, and the credit resulting therefrom is offset against the applicable provision for depreciation.

Consistent with the accounting practice adopted in 1968, the construction costs of the dam, powerhouse and other common property relating to the Peace River Project were transferred to plant in service by instalments proportionate to the number of completed and operational generating units in relation to the ten units contemplated. By 31 March 1975, nine generating units were in service and consequently at that date 90% of the cost of the dam, powerhouse and other common property had been transferred to plant in service. As originally planned, the transfers to plant in service were completed by 31 March 1976, although the tenth generating unit had not yet been installed. The amount not transferred to plant in service at 31 March 1975 was included in deferred costs under property account.

The difference of \$107,827,843 as at 31 March 1976 (\$99,914,491 as at 31 March 1975) between construction costs associated with the three Columbia River Treaty storage projects and the total contributions arising from the Columbia River Treaty is considered to relate to the future generation of power at the Mica damsite on the Columbia River and has been included in deferred costs under property account. These costs will be transferred to plant in service as the Mica generating plant becomes operational.

B.C. Hydro charges interest to these deferred costs and to plant under construction at rates equivalent to the cost of borrowing funds.

The depreciation policy of B.C. Hydro is to allocate the original cost of plant to operations over the estimated service lives of the assets. Depreciation is provided on all depreciable assets in service at the beginning of each year and is computed on the straight-line method.

**Non-owned equipment—**

Approximately 25% (15% at 31 March 1975) of the buses and trolley coaches operated and maintained by B.C. Hydro are provided by the Provincial Government without charge.

**Insurance—**

In 1969, B.C. Hydro generally adopted a policy of self-insurance for damage to plant and equipment and for general liability where insurance was formerly purchased. To 31 March 1975, a reserve for insurance was accumulated by annual charges to operations commensurate with the current cost of insurance, and funds equivalent to the reserve were invested in government and municipal bonds and short-term deposits with financial institutions.

A decision was made in the year ended 31 March 1976 to discontinue the charge to operations in respect of the self-insurance program, and the results of operations of prior years have accordingly been restated. As a result of this retroactive change in accounting principles, the reserve for insurance, which amounted to \$4,457,301 as at 31 March 1975, has been eliminated, earnings retained in the business at 31 March 1974 has been increased by \$3,371,737 and net income for the year ended 31 March 1975 has been increased by \$1,085,564. Net income for the year ended 31 March 1976 is approximately \$1,139,000 greater than it would have been under the previous method of accounting for self-insurance.

A decision was also made to establish the insurance fund at \$5,000,000, invested in securities and deposits as described above. Consideration is being given to purchasing insurance to provide protection against major losses in excess of \$5,000,000.

**NOTES TO FINANCIAL STATEMENTS AS AT 31 MARCH 1976 (continued)**

Insurance coverage on major projects under construction is purchased either by B.C. Hydro or by its contractors as required by B.C. Hydro. Motor buses, trolley coaches and service vehicles are insured by the Insurance Corporation of British Columbia. Fire insurance coverage on certain plant and equipment is also purchased to comply with trust deed requirements.

Unamortized discount and expense on debt—

These costs are amortized by charges to expense over the original life of the respective issues.

Deferred costs of generation—

By agreement between the Canadian and United States Entities which are responsible for the operating plans under the Columbia River Treaty, B.C. Hydro, in order to accelerate filling of the Mica reservoir, delivered power generated at Burrard Thermal Generating Plant to the United States Entity as an alternative to releasing water from Mica for generation of power downstream. This delivery of power will ensure availability of water when the Mica plant becomes operational and will contribute to a more efficient operation of the Mica plant. The cost of fuel used at Burrard Thermal Generating Plant to provide such power has been deferred and, after the Mica plant becomes operational, will be charged to operations over seven years. Of the amount of \$7,472,870 so deferred, \$2,005,483 was incurred during the year ended 31 March 1974 and carried in unfinished construction and \$5,467,387 was incurred during the year ended 31 March 1976.

Rural electrification assistance grant—

B.C. Hydro receives annual grants from the Provincial Government for rural electrification assistance ("REA"). Most of these funds are used for expenditures to improve and extend electric service in rural areas. Such funds are also used to offset operating losses of electric systems purchased or constructed in isolated areas with REA funds. From 1 January 1971 to 31 March 1975, REA funds were used to offset such operating losses during the first year only of operation by B.C. Hydro. Effective 1 April 1975, the practice in effect prior to 1 January 1971 of using REA funds to offset such operating losses incurred during the first and subsequent years of operation by B.C. Hydro was reinstated. As a result of this change, net income for the year ended 31 March 1976 is greater by \$1,023,000 than it would have been under the practice in effect during the previous year.

Foreign exchange—

The liability for long-term debt payable in United States dollars has been translated to Canadian dollars at the rates of exchange prevailing at the date the debt was incurred. Translated at the rates prevailing at 31 March 1976, the liability for long-term debt payable in United States dollars would have been reduced by approximately \$18,900,000. Current and working assets and current and accrued liabilities in United States dollars and long-term debt payable in United States dollars when reclassified to current liabilities are translated at the rate of exchange prevailing at the date of the balance sheet. The resulting unrealized profits or losses, which were not significant for the years ended 31 March 1976 and 1975, have been included in income.

**Note 2 — Temporary investments:**

	1976	1975
Short-term deposits and investment receipts—		
Banks . . . . .	\$44,840,276	\$49,011,050
Other financial institutions . . . . .	—	5,000,000
	<u>\$44,840,276</u>	<u>\$54,011,050</u>

**Note 3 — Payment in respect of litigation:**

A lawsuit was started on 17 July 1967 in the Supreme Court of British Columbia by the contractors constructing the underground powerhouse and associated works at Gordon M. Shrum Generating Station, alleging breach of contract. Amounts between \$20 million and \$30 million were claimed as damages. During the trial, the contractors introduced an alternative claim to which they gave priority for the total cost to them of the construction work, including interest and profit, and a balance owing of \$51 million was claimed. The alternative claim was tried and judgment delivered, declaring the contractors to be entitled to compensation on the basis of quantum meruit. In a judgment delivered 13 November 1975, the compensation on the basis of quantum meruit was determined by the Trial Judge to be \$36,124,400, and this amount together with costs was awarded to the Plaintiffs. On 3 March 1976, payment into Court was made in the sum of \$36,500,490, including interest from 13 November 1975 to 28 January 1976. By order of Court, this amount may be paid to the contractors upon deposit of a bond satisfactory to the Court. A Notice of Appeal from the judgment was filed on 20 November 1975,

submitting that the judgment was in error both in law and fact as to there being a fundamental breach of contract by B.C. Hydro and in the award to the Plaintiffs upon the basis of quantum meruit. The contractors have filed a Notice of Cross-Appeal in which the entire amount of \$51 million is claimed. No date has been set for the hearings of the appeals. The amount of the final judgment or any settlement by B.C. Hydro as a result of this litigation will be capitalized as part of the cost of construction and included in property account.

**Note 4 — Guarantee by Province of British Columbia:**

The Government of the Province of British Columbia has unconditionally guaranteed the principal of and interest on the long-term debt and Parity Development Bonds.

**Note 5 — Pension plans:**

Employees of B.C. Hydro are covered under contributory pension plans, and provisions are being made for current services according to the requirements of the various plans.

B.C. Hydro is funding the estimated past service costs of a contributory plan introduced effective 1 January 1965 by equal annual payments of \$393,800 over a period of 15 years which commenced 1 April 1967. An actuarial report dated 1 December 1975 indicated an evaluated accrued deficit in this plan of \$41,057,000 as at 31 December 1974, largely resulting from changes in the plan since the last actuarial report. This deficit is in addition to past service costs referred to above and will be funded by equal annual payments of \$3,061,000 over a period of 25 years commencing with the year ended 31 March 1976. The liability for the year ended 31 March 1976 has been included in accounts payable. The actuarial report also indicated that, if contributions to the plan continued at the rates in effect at 31 December 1974, there would be a future additional evaluated deficit in the plan of \$10,702,000, which could be funded by an increase of 1% in the rate of contribution; the additional annual contribution based on payrolls for the year ended 31 December 1975 would be approximately \$1,300,000. B.C. Hydro is considering how this deficit will be funded. Changes in the plan and increases in rates of pay since 31 December 1974 will result in an additional deficit, the amount of which will be determined by a future actuarial evaluation.

The charge to income in respect of pension plans, including provision for supplementary payments and B.C. Hydro's share of Canada Pension Plan costs, for the year ended 31 March 1976 was \$11,928,611 (1975 — \$8,488,927).

**Note 6 — Earnings retained in the business:**

Earnings retained in the business at 31 March 1975 included a reserve for stabilization of rates established by allocation thereto of \$10,000,000 and \$5,000,000 in 1973 and 1974, respectively. In the year ended 31 March 1976, this reserve was combined with other retained earnings.

**Note 7 — Interest on debt:**

	1976	1975
Gross interest .....	\$225,293,837	\$170,130,530
Amortization of discount and expense .....	<u>1,965,381</u>	<u>1,671,123</u>
	227,259,218	171,801,653
Less—		
Income from sinking fund investments held by Trustee .....	<u>13,868,517</u>	<u>10,810,479</u>
	<u>\$213,390,701</u>	<u>\$160,991,174</u>

The interest rate on Series CG, CS and CY Parity Development Bonds was increased to 8½% from rates varying from 6% to 7% effective 1 September 1974.

**Note 8 — Provincial Government special subsidy:**

In March 1976, B.C. Hydro received a special subsidy of \$32,600,000 from the Provincial Government to offset the projected loss for the year ending 31 March 1976.

**Note 9 — Commitments:**

Purchase commitments and contracts of B.C. Hydro for capital projects (including the estimated costs relating to the litigation referred to in Note 3 above) aggregated approximately \$551,000,000 as at 31 March 1976.

## FINANCIAL STATISTICS

(in millions of dollars)

YEAR ENDED 31 MARCH	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
<b>SOURCES OF REVENUE</b>										
Electric .....	341.4	296.8	268.0	235.0	211.4	193.0	162.8	149.4	137.7	118.4
Gas .....	89.1	77.6	60.7	55.2	51.7	47.5	41.0	40.6	34.4	32.1
Passenger transportation .....	33.1*	30.5*	27.7*	25.1*	24.2*	21.3*	20.7*	19.5*	18.1	17.6
Rail freight .....	14.6	13.1	12.1	10.8	10.2	8.0	8.4	7.4	7.0	6.4
Miscellaneous .....	14.0	7.6†	7.9†	8.9†	8.5†	7.2†	7.0	4.2	4.3	3.6
Provincial Government special subsidy .....	32.6	—	—	—	—	—	—	—	—	—
Total .....	524.8	425.6	376.4	335.0	306.0	277.0	239.9	221.1	201.5	178.1

\*Includes metropolitan transit subsidy received from Provincial Government.

†Restated — see Note 1 to the financial statements.

## DISPOSITION OF REVENUE

Salaries, wages and employee benefits .....	157.0	117.9	88.5	72.7	67.6	57.9	55.1	49.6	44.0	40.1
Materials and services .....	102.4	87.3†	75.3†	52.3†	50.4†	44.7†	40.0†	44.9	43.4	36.7
Grants, school taxes and water rentals .....	39.5	28.8	25.0	22.2	20.0	18.6	17.0	15.0	13.3	11.3
Depreciation .....	72.8	65.8	61.7	57.7	52.9	50.2	44.7	38.6	34.7	31.7
Interest on debt, less interest charged to construction .....	151.8	121.4	110.7	108.1	97.7	88.9	83.1	63.7	53.2	49.0
Retained in the business .....	1.3	4.4†	15.2†	22.0†	17.4†	16.7†	— †	9.3	12.9	9.3
Total .....	524.8	425.6	376.4	335.0	306.0	277.0	239.9	221.1	201.5	178.1

†Restated — see Note 1 to the financial statements.

EXPENDITURES ON PLANT .....	590.5	463.8	332.3	230.2	217.9	216.0	189.6	227.3	341.2	324.1
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## OPERATING STATISTICS

YEAR ENDED 31 MARCH	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967
<b>ELECTRIC</b>										
Generating nameplate capacity at year-end (rated kw in thousands)*										
Hydro .....	3,882	3,618	3,318	3,318	2,814	2,455	2,455	2,001	1,320	1,320
Thermal .....	1,299	1,104	1,061	1,041	1,038	1,059	1,056	1,055	906	752
Total .....	5,181	4,722	4,379	4,359	3,852	3,514	3,511	3,056	2,226	2,072
Peak one-hour demand, integrated system (kw in thousands).....	4,063	3,791	3,578	3,499	2,970	2,769	2,499	2,357	2,152	1,860
Customers at year-end (in thousands) .....	875	843	801	765	726	690	652	605	583	555
Electricity sold (kwh)										
Total (in millions) .....	20,596	21,496	21,940	19,103	16,174	14,833	13,656	12,237	11,084	10,000
Increase (decrease) over previous year (%) .....	(4.2)	(2.0)	14.9	18.1	9.0	8.6	11.6	10.4	10.8	17.6
By class of customer (%)										
Residential .....	30	27	24	25	28	28	27	28	28	28
General .....	35	32	30	31	34	32	32	33	33	34
Bulk .....	33	36	36	37	36	36	37	37	37	36
Other systems .....	1	1	1	1	1	1	2	2	2	2
Export** .....	1	4	9	6	1	3	2	—	—	—
Residential service										
Average annual kwh use per customer .....	8,370	7,928	7,694	7,365	7,342	6,949	6,651	6,674	6,222	6,016
Average revenue per kwh (cents) .....	2.3	2.1	1.9	1.9	1.9	1.9	1.7	1.7	1.7	1.5
<i>*Excludes electricity available from other systems. Rated capacity has been exceeded on occasion. **Less than ½ of 1% 1967 through 1969.</i>										
<b>GAS</b>										
One-day capacity at year-end (therms in thousands)										
Mainland—firm pipeline contracts*										
—plant .....	4,000	3,900	3,260	2,660	2,400	2,460	2,360	2,529	2,260	2,140
—plant .....	1,000	1,000	1,000	1,000	1,000	1,000	250	250	250	250
Greater Victoria—plant .....	50	60	60	60	53	53	45	45	36	36
Peak one-day demand (therms in thousands)										
Mainland system—including interruptible .....	4,080	3,491	3,640	3,461	3,279	2,939	2,770	3,108	2,537	2,634
—excluding interruptible .....	3,456	3,379	3,136	3,359	3,065	2,762	1,962	2,889	1,905	1,474
Greater Victoria system .....	22	22	24	29	29	22	19	24	19	16
Customers at year-end (in thousands) .....	259	249	238	227	215	205	197	186	178	169
Gas sold (therms)										
Total (in millions) .....	764	731	711	649	601	554	485	470	391	357
Increase over previous year (%) .....	4.5	2.8	9.6	8.0	8.5	14.2	3.1	20.2	9.6	10.7
Average revenue per therm (cents) .....	11.7	10.6	8.5	8.5	8.6	8.6	8.4	8.6	8.8	9.0
<i>*On basis of 100 cu. ft. to one therm.</i>										
<b>PASSENGER TRANSPORTATION</b>										
Vehicles in operation at year-end										
Urban—buses .....	648	558	447	335	326	353	340	339	340	321
—trolley coaches .....	312	301	293	293	298	298	296	296	296	296
—total .....	960	859	740	628	624	651	636	635	636	617
Interurban buses .....	125	134	98	91	90	85	66	71	70	56
Passengers carried (in millions)										
Urban .....	104.0	94.3	85.5	76.7	72.6	65.9	78.7	77.4	74.6	72.7
Interurban .....	2.4	2.9	2.8	2.6	2.5	2.2	2.3	2.2	2.1	2.1
Revenue miles run—urban (in millions) .....	33.6	27.7	23.6	20.4	20.0	19.3	21.2	20.9	20.8	20.5
Passenger revenue per mile—urban (cents) .....	68.9	75.6	80.9	85.2	83.7	78.9	71.6	72.1	71.2	70.2
<b>RAIL FREIGHT</b> (tons in thousands).....	2,558	2,749	2,799	2,674	2,606	2,200	2,466	2,265	2,057	2,011
<b>EMPLOYEES AT YEAR-END</b>										
Regular .....	11,226	10,361	8,945	7,474	7,173	7,205	7,056	6,905	6,737	6,452
Temporary .....	807	1,255	1,080	772	669	481	810	717	614	687
Total .....	12,033	11,616	10,025	8,246	7,842	7,686	7,866	7,622	7,351	7,139

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## SENIOR MANAGEMENT

### GENERAL MANAGER

J.N. Olsen

### ASSISTANT GENERAL MANAGERS

W.A. Best, *Electrical Operations*  
W.A. Duncan, *Transportation*  
R.K. Kidd, *Gas*  
E.H. Martin, *Engineering*  
C.W. Nash, *Administration and Finance*  
(also *Executive Assistant to the Chairman*)

### GENERAL SOLICITOR

W.D. Mitchell

### CHIEF ENGINEER

W.M. Walker

### DIRECTOR, RESEARCH AND DEVELOPMENT

Dr. H.M. Ellis

### DIVISION MANAGERS

W.A. Bateman, *Fraser Valley*  
E.S. Collins, *Properties*  
E. Crowley, *System Design*  
E.T. Davis, *North Coast*  
R.H. Downey, *Industrial Relations and Personnel*  
T.V. Farmer, *South Interior*  
M.A. Favell, *Thermal*  
W.B. Gale, *Operations Administration*  
W.D. Gill, *Operations Engineering*  
H.J. Goldie, *System Engineering*  
K.S. Henderson, *Gas Operations*  
R. Johnson, *Purchasing and Supply*  
J.A. MacCarthy, *Public and Customer Relations*  
D.G. McKillop, *General Services*  
D.J. McLennan, *Metro Vancouver*  
A.H. MacPherson, *Gas Engineering*  
J.W. Milligan, *Construction*  
I.R.A. Mills, *Treasurer*  
T.J. Newton, *Energy Services*  
T.A. Nordstrom, *Computer and Management Systems*  
F.J. Patterson, *Hydroelectric Design*  
G.J. Roper, *Vancouver Island*  
P.D. Swoboda, *Central Interior*  
G.A. Woodbury, *Comptroller*



