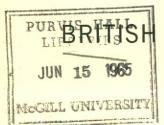
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SECOND ANNUAL REPORT Year ended 31 March 1964





COLUMBIA HYDRO AND POWER AUTHORITY

The Business Of The Authority 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 in the Fraser Valley eastward to Hope. Distribution of liquefied petroleum gas-air in Greater Victoria.

PASSENGER TRANSPORTATION SERVICE

Urban passenger transportation in Greater Vancouver and Greater Victoria.

Interurban passenger transportation in Greater Vancouver, the Fraser Valley eastward to Hope, between Vancouver and Victoria and between Vancouver and Nanaimo.

RAIL FREIGHT SERVICE

Rail freight operations in Greater Vancouver and the Fraser Valley.



THE PRIME MINISTER

VICTORIA

1 9 6 4

June 15th

Major-General the Honourable George Randolph Pearkes, V.C., P.C., C.B., D.S.O., M.C., Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the Report of the British Columbia Hydro and Power Authority for the fiscal year 1 April, 1963 to 31 March, 1964.

Most Wenned

Prime Minister

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BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

Head Office: 970 Burrard Street, Vancouver 1, B.C., Canada

DIRECTORS AND OFFICERS I

JOHN DUNSMUIR

EINAR M. GUNDERSON*

HUGH L. KEENLEYSIDE Chairman*

THE HONOURABLE W. KENNETH KIERNAN

F. ARTHUR LEE*

FRED D. MATHERS

WILLIAM C. MEARNS*

GORDON M. SHRUM Chairman*

FREDERICK A. SMITH

THE HONOURABLE RAY G. WILLISTON

GEOFFREY G. WOODWARD Secretary

MRS. P. ROSS KIDD Assistant Secretary

*Member of the Executive Management Committee

SENIOR MANAGEMENT

PHILIP W. BARCHARD Division Manager - Operations 18 years' service

WILLIAM H. Q. CAMERON General Solicitor and Division Manager – Legal 17 years' service

JOHN J. CARSON Division Manager – Staff Services 8 years' service

THOMAS CHAMBERS Comptroller and Chief Financial Officer 18 years' service

G. FREDERIC GREEN Division Manager – Production 27 years' service

ROBERT W. GROSS Division Manager – Land 18 years' service

W. DENIS KENNEDY Division Manager – Economic and Commercial Services 4 years' service

J. STUART LANG Internal Auditor 18 years' service

JOHN S. PURVES Division Manager – Purchasing and Stores 35 years' service

SIGURDUR SIGMUNDSON Division Manager – Transportation 19 years' service

JOHN H. STEEDE Chief Engineer and Division Manager – Engineering 39 years' service

Bankers: THE CANADIAN IMPERIAL BANK OF COMMERCE

Auditors: PRICE WATERHOUSE & CO.

Securities issued by British Columbia Hydro and Power Authority: Registrar: THE AUTHORITY

Securities issued by British Columbia Electric Company Limited:
Registrar, Perpetual Callable Bonds and 25-year Bonds: MONTREAL TRUST COMPANY
Registrar, Parity Development Bonds: THE AUTHORITY
Registrar and Trustee, First Mortgage Bonds: MONTREAL TRUST COMPANY
Registrar and Trustee, Debentures: THE ROYAL TRUST COMPANY

Securities issued by British Columbia Power Commission: Registrar: THE AUTHORITY

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

OFFICE OF THE CHAIRMAN

970 BURRARD STREET

VANCOUVER 1, B.C.

12 June 1964

The Honourable W.A.C. Bennett, LL.D., Prime Minister of the Province of British Columbia, Parliament Buildings, Victoria, B.C.

Sir:

The Board of Directors submits the Annual Report of British Columbia Hydro and Power Authority for the fiscal year 1 April 1963 to 31 March 1964. The year under review was a successful one and was particularly noteworthy in three respects.

Of prime importance to the Authority, the province and the nation was the agreement reached on the Columbia River Development by members of the Canadian and United States governments on 22 January 1964. This was the culmination of three years of persistent effort by representatives of the Authority working closely with their colleagues in both the provincial and federal governments. The agreement promises to be the most profitable international commercial transaction in the history of our country.

The second item of special interest was the diversion of the Peace River, achieved on 14 September, when blasting removed the last rock barrier in front of the mouths of three large diversion tunnels. In a dry river bed, protected by cofferdams already at full height, work on the 600-foot Portage Mountain Dam is proceeding on schedule.

Finally, a milestone in the history of British Columbia Hydro and Power Authority was reached this year when, as a result of accelerating expenditures on plant, total assets passed the one billion dollar mark; the Authority now joins the ranks of the few corporations with assets of this magnitude.

The Directors and staff of the Authority are determined that an ample supply of energy will be available at the lowest possible cost to meet the growing power demands of an expanding provincial economy. The supervisory staff and other employees continue to direct their many and varied skills towards this objective.

Respectfully submitted on behalf of the Board of Directors,

Chairman Chairman

Chairman

Smithrum

THE YEAR IN BRIEF

Agreement was reached between the Governments of British Columbia, Canada and the United States on development of the Columbia River.

Construction of the giant Peace River Project was pressed forward to meet urgent future demands for electricity.

Further rate reductions, effective 1 April 1964, bring total reductions since March 1962 to \$13,200,000 on an annual basis.

Net income for the year was \$8,848,895 as compared with \$13,959,937 for the previous financial period.

Kilowatt-hour sales of electricity increased 6.1% over the previous year.

Kilowatt-hour sales of electricity have increased 165% during the past decade.

Therms of gas sold increased 8.6% over the previous year.

Expenditures on new plant were \$70,578,153, about \$16,000,000 more than last year.

The court action brought by British Columbia Power Corporation, Limited relating to ownership of British Columbia Electric Company Limited was settled on 27 September 1963.

RESULTS OF OPERATIONS

Gross revenues for the year ended 31 March 1964 amounted to \$139,632,801, an increase of 1.4% over the gross revenues for the period 30 March 1962 to 31 March 1963, the previous financial period.

Net income after providing for all expenses amounted to \$8,848,895, compared with \$13,959,937 for the previous financial period. The net income was transferred to stabilization of rates and contingency reserve and has been used by the Authority to finance, in part, expenditures for plant renewals and expansion for load growth.

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

WHERE THE REVENUE CAME FROM Sale of electricity to residential customers. Sale of electricity to other customers. Sale of gas. Transportation of urban and interurban passengers. Rail freight operations. Miscellaneous.	Year Ended 31 March 1964 \$ 38,514,428 54,802,305 25,738,530 13,744,193 5,616,592 1,216,753	Period 30 March 1962 to 31 March 1963 \$ 37,384,501 55,072,379 24,634,311 13,860,636 5,325,286 1,435,402
	\$139,632,801	\$137,712,515
HOW THE REVENUE WAS USED		
Salaries, wages and employee benefits	\$ 31,297,347	\$ 28,627,898
Materials and services including natural gas	23,155,798	23,095,381
Grants, school taxes, transit franchises, etc.	9,109,736	8,405,059
Interest and other costs on debt, less interest charged to construction	41,918,621	40,787,266
Depreciation of plant.	25,302,404	22,836,974
Balance employed in the business	8,848,895	13,959,937
	\$139,632,801	\$137,712,515

RATES

Reduced rates, introduced in the electric and gas services in 1962 and 1963, were in effect throughout the year under review and adversely affected net income for the period.

Continuing the policy of reducing rates whenever possible, the Authority on 1 April 1964 made a modest reduction in the standard uniform rate for residential electric consumers. At the same time two all-electric rates were introduced to encourage the use of electricity for heating homes and other premises such as offices, apartment buildings and motels. The all-electric residential rate has the effect of reducing by about 20% the cost of heating homes with electricity. The new all-electric rates compare favourably with the lowest offered anywhere in Canada and make electricity competitive with other modern fuels for space heating purposes. These rate reductions, combined with the major reductions in 1962 and 1963, will save consumers more than \$13,200,000 annually.

SALES TO ELECTRIC CUSTOMERS

In the electric service the gross revenues for the year were \$93,316,733, an increase of .9% over the previous financial period. Kilowatt-hours of electricity sold totalled 6,430,898,173

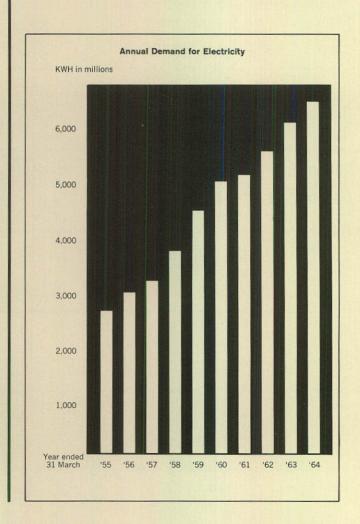
Average Selling Price of Electricity for Residential Use Compared with % change from 1955 Consumer Price Index - Canada +30 +20 +100 -10 -20 -30 Year ended '55 '56 '57 '58 '59 '60 '61 '62 '63 164 (1) Residential electric rate of British Columbia Electric Company (2) Residential electric rate of the Authority decreased March 196 (3) Residential electric rate of the Authority decreased April 1963

for the year, up 6.1%. The relatively small percentage increase in gross revenues, compared with the more substantial increase in kilowatt-hours sold, is largely the result of the rate reductions mentioned previously.

The Central Interior Region, which includes Prince George, the fast-growing industrial and transportation centre for the north, recorded an increase of 17% in kilowatt-hours sold; the Southern Interior Region, including Kamloops and Vernon, also reported an increase of 17%. The increase in consumption of electricity in these regions is well above the average for the system.

In the Fraser Valley, the growing acceptance of electric fan units for drying and curing hay and of electric space heaters for dairy heating has increased the consumption of electricity for agricultural purposes. Steady load growth has been experienced in all areas of Vancouver Island and the Lower Mainland and the trend to high-rise apartment buildings and major shopping centres has contributed to the increase in the number of customers and higher usage in these areas.

There was a net increase of 19,288 electric customers during the year, bringing the total to 478,386 at the year-end. Average



annual consumption per residential account rose from 5,029 kwh last year to 5,200 kwh this year.

The number of kilowatt-hours sold during the year was nearly 2% times the number sold ten years ago. This is a significant factor which must be considered in the assessment of future demands on the Authority's system.

SALES TO GAS CUSTOMERS

Gross revenues from the sale of gas during the year were \$25,738,530, up 4.5% from last year. This comparison is distorted, however, by the rate reductions introduced on 1 April 1963. A better indicator of growth is the increase in therms of gas sold, up 8.6% from last year. This is the seventh successive year of substantial increases in the gas service; in 1957, the first full year natural gas was available, 51,169,289 therms of gas were sold; in the fiscal year under review sales were 260,096,371 therms.

During the year, 8,204 new gas customers were added to the Authority's system and the outlook is for continued growth. Where gas is available it attracts the greater part of the space heating load for new customers.

Annual Demand for Gas Therms in millions 300 250 200 150 100 50 Year ended 31 March '55 '56 '57 '58 '59 '60 '61 '62 '63 '64 Natural gas introduced November 1956

TRANSPORTATION REVENUES

Gross revenues from the urban transportation services during the year were \$11,064,750, down .4% from last year. The number of passengers carried continued to decline.

Efforts were made to increase revenues by providing special services to football games and horse races. In November 1963 Vancouver was host for the Grey Cup Game and the resources of the transit service were deployed to handle effectively the unprecedented crowds attending the parade and the game. The number of racing fans travelling on premium fare express buses to Exhibition Park increased 18% over the previous season.

The Pacific Stage Lines services to Victoria and Nanaimo continued to show improved patronage while the Mainland routes showed only a small decrease in riding compared with the decline experienced in previous years.

Gross revenues from the rail freight operations amounted to \$5,616,592 for the year; this is 5.5% higher than last year. The increase in freight revenues reflects a general improvement in the economy, with increases in the shipments of forest products, consumer durables and construction supplies and equipment.



Busy Lower Mainland line connects with five trans-continental railroads.



Prince George, industrial and transportation centre for the north.

COST OF PROVIDING SERVICES

Cost of providing services during the year was \$130,783,906, an increase of \$7,031,328 or 5.7% over the previous year.

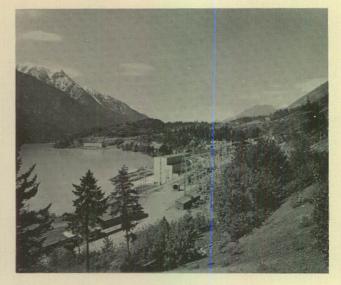
Interest and related costs aggregated \$44,743,516 of which \$2,824,895 was charged against construction accounts. Interest costs were higher this year because funds were borrowed to assist in financing the acquisition and construction of new plant and also to pay an additional \$25,281,306 to British Columbia Power Corporation, Limited in final settlement for all the common shares of British Columbia Electric Company Limited.

Provision for depreciation of plant was \$25,302,404; this is an increase of \$2,465,430 or 10.8% over last year. Of the increased provision, \$1,503,554 represents depreciation on the two units of the Burrard Thermal Generating Plant which are now in service. Provision for depreciation is based on rates which are comparable to those used by other utilities and increases in direct ratio to the increase in property in service.

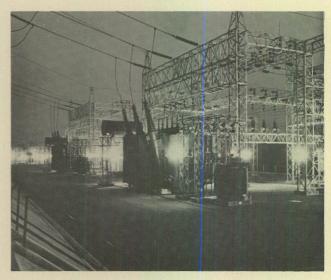
Salaries, wages and employee benefits increased \$2,669,449 or 9.3% over the previous year. Higher rates of pay negotiated with the various unions during the previous year, and the integration of former pension plans – which will provide improved pensions for the majority of employees – contributed to the increase in costs.

The cost of natural gas purchased from Westcoast Transmission Company Limited was \$9,511,482, an increase of \$410,215 or 4.5% over the previous period, which reflects the increasing volume of gas sales to customers. Costs of other materials and services for operations totalled \$13,644,316 or 2.5% less than in the period ended 31 March 1963. This amount includes additional expenses incurred to supply the increasing power needs of a growing electric service and also includes costs of the first full year's operation of the Vancouver-Nanaimo bus service. These and other increases were more than offset, however, by a significant reduction in the cost of repairing storm damage; the previous year's results included the cost of repairing damage to the system caused by "Typhoon Frieda".

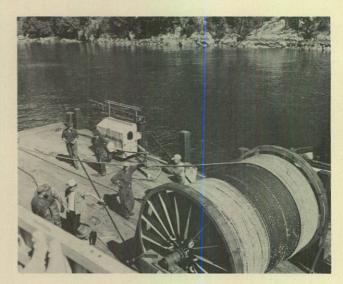
Grants, school taxes, water rentals and franchise payments charged to operations during the period amounted to \$9,109,736, an increase of \$704,677 or 8.4% over the previous period. Land and improvements owned by the Authority are taxed under the Public Schools Act; for 1963 school tax payments amounted to \$5,041,495. In addition, local governments and unorganized areas received \$2,478,966 in grants and miscellaneous taxes from the Authority during 1963.



Generation: Bridge River powerhouses on Seton Lake.



Transmission: Horne-Payne, a major terminal in Greater Vancouver.



Distribution: Cable-laying from Vancouver Island to Salt Spring Island.

FINANCING

Five issues of 51/4 % 30-year sinking fund bonds, totalling \$70,000,000, were sold by the Authority during the year, at an average effective interest cost of 5.35%.

On 15 August 1963 the Authority issued \$50,505,000 5% Parity Development Bonds Series E, maturing 15 August 1967. This issue was well received by the public and was completely sold in a very short time. Also on 15 August 1963, \$25,000,000 51/2% Series V Parity Development Bonds issued by British Columbia Power Commission became due and the holders of these securities were repaid on that date.

Short-term notes of the Authority held by the Province of British Columbia at 31 March 1964 totalled \$19,836,425, a significant reduction from the balance of \$54,021,438 outstanding at the end of the previous year. Notes of the Authority held by financial institutions and payable in United States funds increased \$10,000,000 during the year to \$50,000,000 at the year-end.

During the year the Authority paid \$10,771,029 to Trustees to meet the sinking fund requirements of the various securities. All sinking fund obligations have been met.

All bonds, debentures and notes of the Authority are unconditionally guaranteed as to principal and interest by the Province of British Columbia.

The following table shows the source and application of funds for the year:

FUNDS PROVIDED FROM

Operations:	
Net income	\$ 8,848,895
Charges against operations calling for no current outlay of cash —	
Provision for depreciation	25,302,404
Other	1,433,280
Proceeds from sales of securities:	
Parity development bonds	49,922,695
Other bonds	69,017,295
Notes (U.S. \$10,000,000)	10,775,000
Reduction in working capital, etc.	1,798,946
	\$167,098,515
FUNDS EXPENDED FOR	
Peace River Project	\$ 24,136,936
Columbia River Development	1,915,452
Other plant	44,525,765
Sinking fund purposes	12,054,043
Redemption of parity development bond issue.	25,000,000
Reduction of notes payable to Provincial Government	34,185,013
Compensation to former shareholder	25,281,306
	\$167,098,515

CONSTRUCTION PROGRAMME

Net additions to property account for the year amounted to \$65,883,262 as compared with \$47,067,216 last year. The net additions comprised \$70,578,153 gross expenditures less retirements of \$4,694,891.

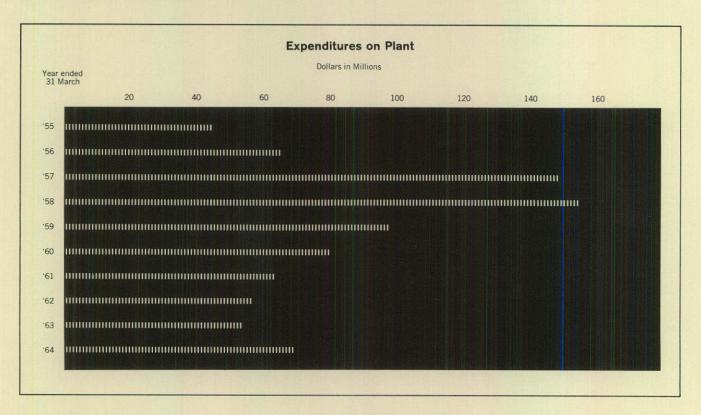
Major expenditures for the year by projects or broad classifications included the following:

Peace River Project	\$24,136,936
Columbia River Development	1,915,452
Burrard Thermal Generating Plant.	7,505,229
Diesel generating stations.	2,142,785
Major electric transmission line construction:	
Bridge River to Prince George – 230 kv	6,468,029
Dawson Creek to Chetwynd – 132 kv	1,187,155
Bethlehem to Craigmont – 60 kv.	559,730
Substations, associated distribution facilities and local transmission systems – electric	5,474,103
Electric extensions to serve new customers	9,680,309
Gas supply lines and other system improvements	2,107,966
Gas extensions to serve new customers	3,333,304
Buses for Vancouver Island transit system.	276,959
Buses for Vancouver-Nanaimo interurban route	508,977

At Burrard Thermal Generating Plant the work of installing the third 150,000 kw unit progressed steadily; this unit is scheduled to be available for service late in 1964. A fourth 150,000 kw unit has been ordered and is planned for service in 1967.

During the year the engineers of the Authority have been active in planning and designing efficient facilities for the transmission of electrical energy. Work continued on plans for the extension and reinforcement of the main transmission grid for both present and future needs. This work is of prime importance in view of plans for transmitting energy from the Peace River Project and the Columbia River Development.

The National Energy Board of Canada granted a certificate of public convenience and necessity for the construction of a second interconnection with the Bonneville Power Administration at the international boundary. This 230 kv (ultimately to be 500 kv) transmission line will be in operation by May 1965. It will permit an increase in the amount of energy which can be exchanged with other members of the Northwest Power Pool and to some extent will serve as a prototype for the future extra high voltage transmission lines from the Peace River Project.



The 230 kv transmission line from Bridge River to Prince George, started last year, was completed and commissioned as far as Soda Creek Substation, a distance of 140 miles. This line now provides power service from the integrated system to the communities of Quesnel, Williams Lake and 100 Mile House in the Cariboo District, replacing local diesel-electric service. The remaining 110 miles to Prince George will be completed by the autumn of 1964.

A 138 kv transmission line was constructed between Dawson Creek and Chetwynd (57 miles), and 60 kv transmission lines were built from Wahleach to Chilliwack (16 miles), Bethlehem Copper Corporation Ltd. to Craigmont Mines Limited (28 miles) and Canal Flats to Athalmer (16 miles). The 138 kv transmission line between Strathcona and Ladore generating plants on Vancouver Island was rebuilt.

Design is well advanced for the integration of the Southern Interior system with the Lower Mainland system. This will involve the construction of a transmission line from Kelly Lake Substation, located on the Bridge River-Prince George circuit, to the Kamloops area, a distance of about 75 miles.

Additions and extensions were made to substations in various parts of the province to meet the normal growth pattern. The final step in the programme to make all Lower Mainland substations fully automatic was taken this year when Horne-Payne Substation was placed on supervisory control. In the Interior, 60 kv substations were constructed or reconstructed at Golden, Radium and Craigmont.

Alterations and additions were made to diesel generating stations at Bella Coola, Hazelton, Houston, Valemount, Dawson Creek, Chetwynd and Port Hardy.

Load growth has continued at a high rate in the Central Interior Region; at Prince George a 6,000 kw semi-portable gas turbine was installed to meet peak loads until the transmission line from Bridge River is completed. Surveying for a line from Prince George north to McEwan near Summit Lake has been completed. In view of the increased activity in this region a combined administrative and warehousing centre is being built by the Authority at Prince George.

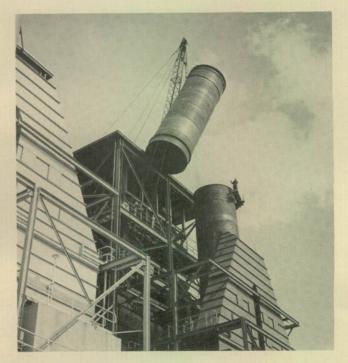
The Government winter works programme gave impetus to house construction, particularly in the Fraser Valley, resulting in the connection of many new gas and electric services to the Authority's lines.

Twenty-two buses were purchased during the year for the transportation systems of the Authority. Fourteen are being used to serve the increasing traffic on the popular ferry runs between the Mainland and Vancouver Island. The remainder were obtained as replacements for equipment in Victoria.

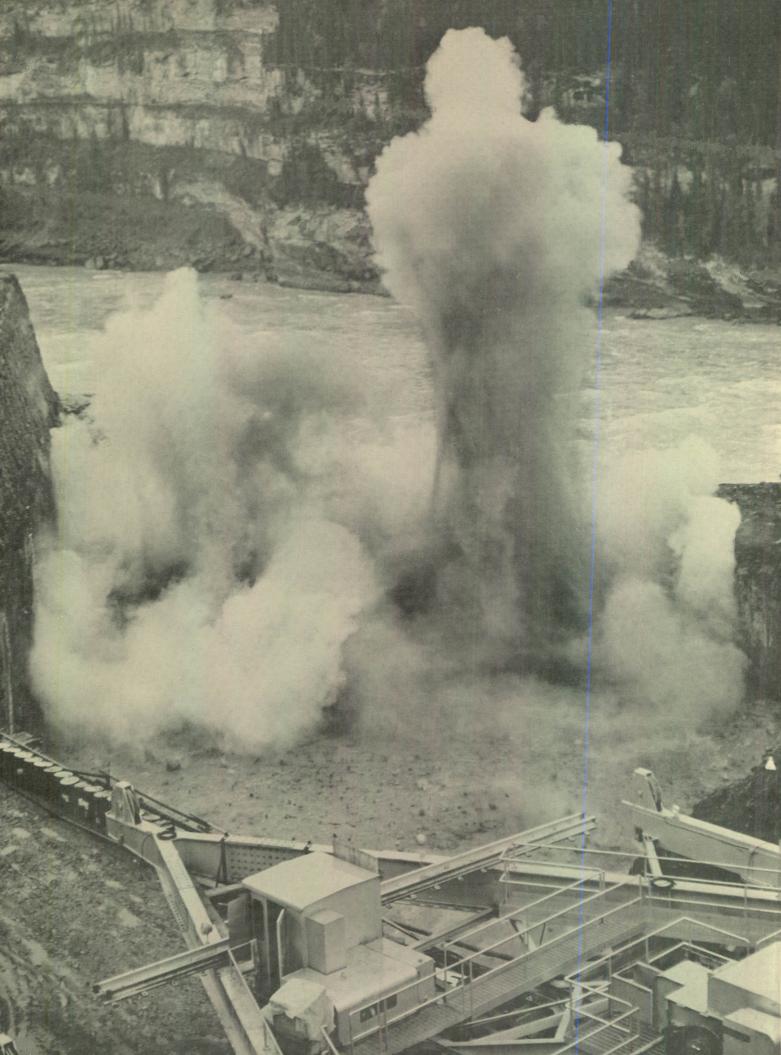
In October 1963 the Authority completed its acquisition of all the outstanding shares in International Power and Engineering Consultants Limited (IPEC), the principal engineering consulting firm employed by the Authority.



Line crew installing power pole in Columbia Valley during reconstruction of transmission line between Golden and Athalmer.



Stack being placed for third unit of the Burrard Thermal Generating Plant located on Burrard Inlet.



PEACE RIVER PROJECT

The sum of \$48,538,681 has been spent on the Peace River Project to 31 March 1964. Work has progressed according to schedule and costs of construction have been lower than the original estimates. The contract for constructing the Portage Mountain Dam, amounting to \$73,558,648, was awarded on 3 May 1963 to a joint venture of Peter Kiewit Sons Company of Canada Ltd., Al Johnson Construction Co. of Canada Limited and Dawson Construction Limited.

Before construction of the main dam could begin it was necessary to divert the river from its normal channel. This diversion was an enormous undertaking. More than 600,000 cubic yards of rock were blasted to open three tunnels, each 52 feet in diameter and extending 2,500 feet through a bend on the right bank of the river. More than 350,000 tons of gravel were processed near the construction site and 550 carloads of bulk cement were delivered from Vancouver for the concrete work. During a six-month period the three tunnels were lined with concrete at least two feet thick to give the passages added strength, to prevent erosion and to provide a smooth surface for the fast-flowing waters of the river.

On 14 September 1963, at a special ceremony, the Premier of British Columbia detonated an explosive charge which shattered the last rock barrier in front of the mouths of the diversion tunnels and opened them for the passage of water. Within a few days a low cofferdam was built to direct the water into the three diversion tunnels, and finally on 19 September 1963 the river was diverted from a 3,000-foot section of the course it had followed for thousands of years. Work on the dam could now proceed on a dry river bed.

Construction of a second stage cofferdam began immediately and has since been completed. This structure, which is 100 feet high and 1,100 feet long, is situated downstream from the first low dam. The million cubic yards of fill placed in the second stage cofferdam will form the upstream toe of the 600-foot high Portage Mountain main dam due for completion in 1968.

A \$10,000,000 conveyor system and separation plant, now rapidly reaching completion, will transport and process material for the dam. A veritable river of sand and gravel will flow over a 66-inch conveyor belt from the moraine area to the separation plant near the dam, a distance of about three miles; there the material will be screened, washed and separated and then recombined in the proportions required for the different zones of the dam.

◆ Blast shatters the last rock barrier in front of the mouths of the Peace River Project diversion tunnels. Plans are being prepared for tenders to be called during 1964 for the manufacture of turbines and generators and for the construction of the underground powerhouse.

PORTAGE MOUNTAIN DAM

Height – 600 feet. Length – 1¼ miles. Thickness – ½ mile at base. Volume – 60 million cubic yards of gravel, sand and rock.

PORTAGE POWERHOUSE

Located underground on the left bank of the river. Ultimate capacity: 2,300,000 kw.

RESERVOIR

240 miles long, covering 680 square miles. Storage capacity: 62 million acre feet of water.

TRANSMISSION

580 miles to southwest corner of the province. Two lines: one 500,000 volts A.C.; the other may be 900,000 volts D.C.

SECOND STAGE

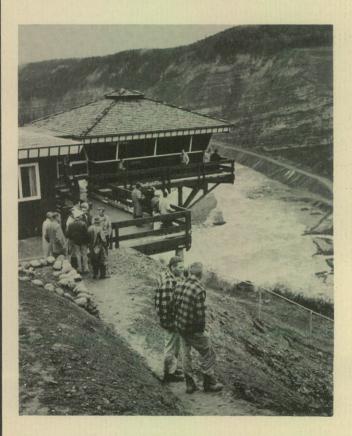
Second dam, 240 feet high, with 650,000 kw powerhouse planned for construction when needed 12 miles downstream from Portage Mountain site.

POWER COST

Latest estimate of average cost of Peace power delivered to Lower Mainland is under four mills per kilowatt-hour.

EMPLOYMENT

Estimated peak labour force: 1966 – 2,500 men 1964 – 1,400 men 1967 – 2,500 men 1965 – 1,600 men 1968 – 2,000 men

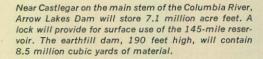


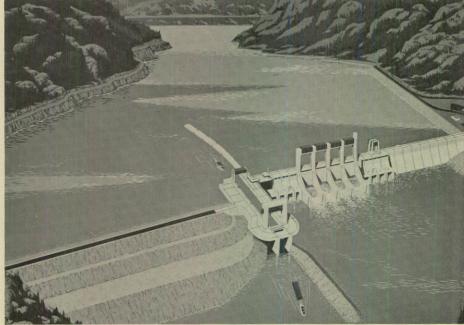
A commanding view of the site of the dam, the diversion tunnels and the dry river bed can be seen from the lookout above the Peace River.

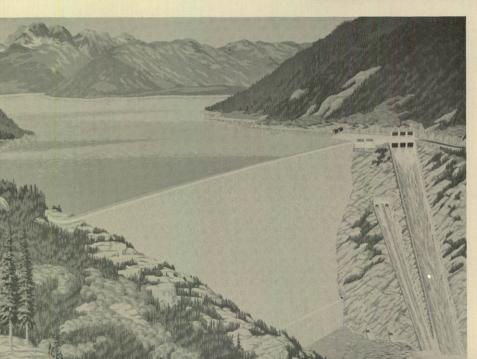


Artist's conception of the three Columbia River Projects

Duncan Lake Storage Dam. Over six million cubic yards of earth fill, 120 feet high, will store 1.4 million acre feet of water in a reservoir 28 miles long. Duncan River is a tributary flowing into Kootenay Lake and thence to the Columbia River.







Mica Creek Dam will hold 12 million acre feet at about 2,500 feet above sea level in an 85-mile reservoir in the Columbia's headwaters. Constructed of earth and rock, the structure will be about 645 feet high and will contain 37 million cubic yards. Nearly 2 million kilowatts of generating capacity will be installed.

COLUMBIA RIVER DEVELOPMENT

On 8 July 1963 an agreement was signed between the Federal Government and the Government of British Columbia on the policy to be followed in the development of the Columbia River. It was then possible for the Governments to negotiate with the United States for the sale of the downstream power benefits which accrue to Canada under the Treaty signed on 17 January 1961. The negotiations resulted in exchanges of notes between the Governments of Canada and the United States on 22 January 1964. These notes covered the terms of sale of the downstream benefits and a Protocol which clarified and improved the original Treaty.

As a result of the agreement reached by the three Governments:

- British Columbia will construct three large storage dams

 Duncan, Arrow and Mica which will provide increased power generation and flood control in the Columbia River Basin in Canada and the United States.
- The United States will make payments to Canada for British Columbia as follows:
 - (a) \$274.8 million for Canada's entitlement to its half share of the increased power generation in the United States. This payment is to be made on 1 October 1964, the expected date of the exchange of ratifications.
 - (b) \$12 million on completion of the Duncan project in 1968; \$56.3 million on completion of the Arrow project in 1969; and \$1.3 million on completion of Mica in 1973. These payments, totalling \$69.6 million, are in return for flood control benefits in the United States.
- 3. The proceeds received in advance for power and flood control are equivalent to 5.3 mills per kilowatt-hour for the Canadian share of the downstream power benefits, assuming interest at 4½% per annum.
- 4. The total amounts received from the United States will:
 - (a) Pay all the capital costs of the storage dams as they occur.
 - (b) Pay about half the capital cost of the generators at Mica.
 - (c) Enable a 1.8 million kw installation at Mica to produce 6.6 billion kwh of energy annually for less than 1.5 mills per kilowatt-hour.

Construction of the Treaty projects on this basis with all costs paid will make possible enormous advantages to Canada and British Columbia:

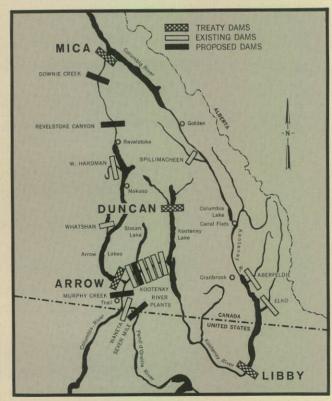
- (a) The installation of over 4 million kw at points on the Columbia River in Canada which will produce energy at a cost of about 2 mills per kilowatt-hour.
- (b) Delivery of this power to centres throughout the southern half of the province at about 3 mills per kilowatthour.
- (c) Prevention of floods in settled areas along the Kootenay and Columbia rivers.

- (d) At the end of the 30-year sales contract the storage projects in British Columbia will still be producing downstream power benefits in the United States with potential revenue to British Columbia of \$5 to \$10 million per year.
- (e) Additional payments of up to \$8 million by the United States for extra flood control, if required during the Treaty period, as well as special flood control compensation for any emergency requirements of the United States during and after the life of the Treaty.

The construction of the Libby reservoir by the United States will make possible the annual additional generation of more than 200,000 kilowatt-years of low cost energy in Canada. The Libby Dam will also provide additional flood control in the industrial and farming areas of the West Kootenay.

An average labour force of about 1,350 men with a peak force of about 3,000 will be employed on the dams during the nine-year construction period of the Treaty storage projects. Expenditures by this labour force, and by industry across Canada on the production of materials and equipment for the dams, will create a great many more jobs. Following the construction of Duncan, Arrow and Mica there will be a continuing building programme for a further 10 to 15 years for other large dams on the Columbia River.

The Canadian and United States Governments hope to exchange Treaty ratifications by 1 October 1964. The Canadian Government placed the Treaty before the Second Session of the current Parliament on 18 February 1964. It is expected that it will be approved following full examination in the External Affairs Committee and in Parliament itself.



NATURAL GAS SUPPLY

Westcoast Transmission Company Limited supplies natural gas to the Authority in accordance with the terms of agreements dated 18 February 1955 and 3 October 1957 and supplemental amendments thereto. The Authority and Westcoast Transmission Company Limited signed two additional gas service contracts in January 1964. The new contracts are subject to the National Energy Board authorizing the extension of Westcoast's gas transmission system to the Fort Nelson gas fields.

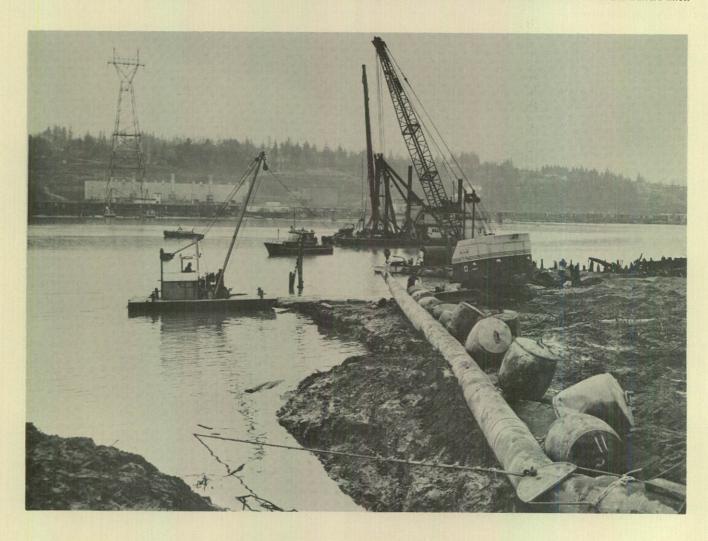
The first of the recent contracts provides for a supply of natural gas to be used during the peak season in the operations of the Burrard Thermal Generating Plant until Peace River power is available. As a result of this contract natural gas produced in British Columbia will be used instead of off-shore oil. This will be achieved at substantial savings to the Authority. The second agreement provides for the purchase of natural gas for peaking purposes in place of liquefied petroleum gas. It is estimated the Authority will save more than \$300,000 over the next five years as a result of this second contract.

Greater Vancouver is served with natural gas by an 18-inch transmission line from Huntingdon; a 12-inch branch from

this line crosses the Fraser River at Albion and serves the north shore from Mission to Coquitlam including the Burrard Thermal Generating Plant. A 24-inch branch runs from South Westminster through Delta and Richmond to South Vancouver.

These lines will be unable to supply the anticipated demand for gas service during the coming winter and the capacity of the transmission system is therefore being increased. A 30-inch line, constructed in 1962 from Huntingdon to Langley, will be extended to South Westminster and a 20-inch branch line will be constructed from Port Mann under the Fraser River to Coquitlam. The crossing at Port Mann was built early in 1964 when the Fraser River was at its lowest level. Construction of the two lines should be completed by late summer 1964. With the completion of these additions the gas transmission facilities should be adequate to meet anticipated load growth until about 1975.

Bent to fit the contours of the river bottom, this 20-inch natural gas pipe was buried under the Fraser River near Port Mann earlier this year. The 1,615-foot crossing is part of a pipeline extension which will make more gas available to the Burrard Thermal Generating Plant and to communities on the north shores of the Fraser River and Burrard Inlet.



LEGISLATION AND LITIGATION

The court action brought by British Columbia Power Corporation, Limited (the Power Corporation), against the Attorney-General of British Columbia, British Columbia Electric Company Limited (the Company) and others, relating to the ownership and valuation of the common shares of the Company, has been concluded. On 29 July 1963, Chief Justice Lett of the Supreme Court of British Columbia found that the Power Development Act, 1961; the Power Development Act, 1961. Amendment Act, 1962; and the British Columbia Hydro and Power Authority Act were ultra vires. The Chief Justice also established an amount which in his opinion represented the value of all the common shares of the Company as at 1 August 1961. After lengthy negotiations the action was settled on 27 September 1963 by agreement made that day and subsequently confirmed by the Power Measures Act, 1964. Accordingly, \$25,281,306, the balance of the total determined compensation of \$197,114,358, was paid to the Power Corporation which then released all its interest in the common shares of the Company to Her Majesty the Queen in right of the Province. The acquisition of these shares was subsequently ratified by the British Columbia Electric Company Limited Acquisition Act enacted 20 March 1964.

The Receiver of the undertaking, property and interests of the Company, appointed during the course of the action, was discharged by Court Order on 3 October 1963.

Subsequent to Chief Justice Lett's decision, the Company and British Columbia Power Commission (the Power Commission) have continued to carry on business together using the name British Columbia Hydro and Power Authority, and on 20 March 1964 this practice was confirmed by the Power Measures Act, 1964. The purpose of this Act was to clear up several matters left in doubt by the declared invalidity of the earlier statutes; the Act includes provisions:

- (a) To remove the Company from the application of the terms of the Companies Act, among other statutes.
- (b) To validate actions taken and things done since 1 August 1961 by the Directors of the Authority and the Company and by the Power Commission under the apparent authority of the invalid statutes.
- (c) To confirm the redemption on 18 June 1962 of the Convertible Sinking Fund Debentures, 6% Series B, of the Company.
- (d) To confirm the cancellation of the preferred shares of the Company as at 1 August 1961 and the substitution therefor of bonds of the Company carrying the same interest rates as the preferred shares. Provision is also made to enable those who had originally received perpetual bonds under the Power Development Act, 1961 to exchange them at any time for bonds having a term of 25 years from 1 August 1961.

EMPLOYEES

The Agreement with Local 213 of the International Brother-hood of Electrical Workers (Gas) provided that the contract could be reopened on 1 May 1963 on the matter of wages. The Union invoked its rights, with the result that wage discussions were held and ultimately taken to an Arbitration Board. The Board awarded a general wage increase of 3%.

No other collective agreements expired during the period.

Of the sixty-three employees retiring on pension during the year, eleven had service of 40 years or more and, of these, the following five had over 45 years of service:

HUGH H. LOGAN, Railway Superintendent 51 years, 8 months

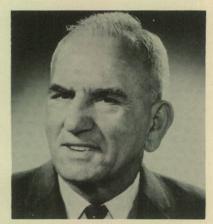
EDWARD EASLEY, Meter Installation Inspector 51 years

FREDERICK R. HARRIS, Supervisory Operator 47 years, 6 months

JOHN DOUGLAS, Meter and Service Planner 46 years, 10 months

ROWLAND M. SCHOU, Power Dispatcher 46 years, 7 months

The operations of the Authority continued to grow in scope and complexity and the Board of Directors wishes to record its appreciation of the effective work of the employees during the year.



Edward Easley, Meter Installation Inspector – 51 years' service.



Presentation of Certificate of Achievement to Gas Department, Vancouver Island Region for operating one million man-hours without a lost time accident – a record for the Authority.

DATA PROCESSING

An I.B.M. 1410-1401 electronic data processing system using magnetic tapes as record-keeping media was installed during the year. This equipment permits customers' bills and other records to be processed faster and more economically. Conversion of customer billing data to high-speed computers commenced in March 1963 and was completed by September 1963.

An innovation introduced with the new computers was an optical scanning device which automatically reads and processes bill stubs. The Authority is the first organization in Western Canada and one of the first in the Pacific Northwest to use optical scanning equipment.

The new system is also being used for engineering and research studies related to load flows, network analysis and design work.



Operator's console, magnetic tape units and high speed printer – part of new electronic data processing system.

OUTLOOK

With the demand for electricity in British Columbia growing at a rate of about 7½% compounded annually, and with still more rapid growth expected as vast quantities of low-cost energy become available from the Peace and Columbia River developments, the outlook for the future is one of accelerating expansion of the Authority's facilities and services and progressively lower costs per kilowatt-hour delivered.

Nowhere is this trend more apparent than in the north-central region of the province. Although the first power generation from the Peace River project is still four years distant, intense interest is developing in the industrial potential of population centres such as Prince George, Prince Rupert and Dawson Creek. One new pulp and paper mill is already under construction at Prince George; six other companies are planning

mills for the manufacture of pulp, paper and allied products in the Prince George-Bulkley Valley-Prince Rupert and Dawson Creek-Fort St. John areas, subject to the granting of forestry licences by the Provincial Government. In addition, new chemical plants are planned for Prince George and Prince Rupert and several large new mining properties in the same region are in an advanced stage of development.

An extensive programme of transmission construction has been scheduled to meet the demands of these new industries; by 1968 there will be more than 2,000 miles of transmission lines in the north-central region of British Columbia, of which 500 miles will be under construction during 1964. The ultimate aggregate load of the industrial plants now under construction and planned in this region is expected to exceed 250,000 kw. The advent of hydro-electric power, replacing relatively high-cost energy hitherto supplied from thermal generating stations, will transform the economy of the north-central area of the province.

FINANCIAL STATEMENTS

The Balance Sheet and the Statement of Net Income are attached. The statements have been examined by Price Waterhouse & Co., the auditors appointed by the Lieutenant-Governor in Council, and the report of the auditors is also attached.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

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 (carrying on business as such under the Power Measures Act, 1964) as at 31 March 1964 and the related statement of net income for the year ended on that date. 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, the accompanying balance sheet and related statement of net income present fairly the financial position of the Authority as at 31 March 1964 and the results of its operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

Vancouver, B.C. May 27 1964 PRICE WATERHOUSE & CO.,

Chartered Accountants.

Auditors.

STATEMENT OF NET INCOME FOR THE YEAR ENDED 31 MARCH 1964

(with corresponding figures for the period 30 March 1962 to 31 March 1963)

	1964	1963
Gross revenues	\$139,632,801	\$137,712,515
Expenses:		
Salaries, wages and employee benefits	31,297,347	28,627,898
Materials and services	23,155,798	23,095,381
Grants, school taxes, etc.	9,109,736	8,405,059
Provision for depreciation	25,302,404	22,836,974
Interest on long term debt, parity development		
bonds and notes payable	\$44,524,616	\$43,012,365
Amortization of discount and expense on long		
term debt and parity development bonds	1,433,280	1,409,366
	45,957,896	44,421,731
Less -		
Income from sinking fund investments	1,214,380	964,205
Interest charged to construction	2,824,895	2,670,260
	4,039,275 41,918,621	3,634,465 40,787,266
	130,783,906	123,752,578
Net income, transferred to stabilization of	医复数性骨髓 医乳头	
rates and contingency reserve (Note 8)	\$ 8,848,895	\$ 13,959,937
		MANAGEMENT OF THE PARTY OF THE

BALANCE SHEET AS AT 31 MARCH 1964

(with corresponding figures as at 31 March 1963)

	1964	1963
PROPERTY ACCOUNT:		
Lands, franchises, water rights, plants for the generation, transmission		
and distribution of electricity and gas, trolley coaches, motor buses,		
freight railway and rolling stock, etc., at cost	\$1,076,121,942	\$1,048,238,680
Unfinished construction	84,000,000	46,000,000
	1,160,121,942	1,094,238,680
Less -		
Accumulated depreciation	193,518,197	171,963,826
	966,603,745	922,274,854
	300,000,740	- 322,274,004
CURRENT AND WORKING ACCETO		
CURRENT AND WORKING ASSETS:	2 001 200	1 116 054
Cash Temporary investments	3,201,390 685,421	1,116,054 702,287
Accounts receivable and unbilled revenues	18,704,729	18,550,008
Materials and supplies at average cost	6,412,051	5,796,565
Prepaid expenses	457,526	444,585
	29,461,117	26,609,499
MORTGAGES AND OTHER DEFERRED ACCOUNTS RECEIVABLE	2,438,626	2,708,104
INVESTMENT (Note 3):		
Shares of International Power and Engineering Consultants Limited, at cost		1,200,000
DEFERRED CHARGES:		
Unamortized discount and expense on long term debt and parity development bonds	18,174,140	18,042,410
Other	162,159	224,196
	18,336,299	18,266,606
	\$1,016,839,787	\$ 971,059,063
	AND SHORT OF A	

APPROVED ON BEHALF OF THE BOARD:

H. L. KEENLEYSIDE, Director

E. M. Lunderson. Director

	1964	1963
LONG TERM DEBT (Notes 4 and 5)	\$ 712,451,395	\$ 663,068,008
PARITY DEVELOPMENT BONDS, payable on demand (Note 5):		
Issued by British Columbia Electric Company Limited – 51/2% Series A due 1 September 1965	85,650,400	85,650,400
Issued by British Columbia Power Commission –		
51/2% Series V due 15 August 1963		25,000,000
Issued by British Columbia Hydro and Power Authority –		
5% Series E due 15 August 1967	50,505,000	
	136,155,400	110,650,400
NOTES PAYABLE (Notes 5 and 6):		
Held by the Province of British Columbia	19,836,425	54,021,438
Held by others (1964 - U.S. \$50,000,000; 1963 - U.S. \$40,000,000)	54,062,500	43,076,562
	73,898,925	97,098,000
CURRENT AND ACCRUED LIABILITIES:		
Accounts payable	23,610,625	22,415,438
Taxes on income (Note 7)	3,737,587	3,737,587
Interest accrued on long term debt, parity development bonds and notes payable	11,277,916	10,447,144
Long term debt payments due within one year -		
Sinking fund instalments	11,959,508	10,707,417
Debt maturities	7,556,000	
	58,141,636	47,307,586
CONTRIBUTIONS IN AID OF CONSTRUCTION.	5,421,292	4,628,515
ACCUMULATED EARNINGS AND RESERVES AS AT DATE OF AMALGAMATION,		
less subsequent charges (Note 8).		34,346,617
EXCESS OF REVENUES OVER EXPENSES,		
appropriated for plant renewals and expansion for load growth (Note 8)	-	13,959,937
STABILIZATION OF RATES AND CONTINGENCY RESERVE (Note 8)	30,771,139	
	\$1,016,839,787	\$ 971,059,063
		A STATE OF THE STA

COMMITMENTS (Note 9)

NOTES TO FINANCIAL STATEMENTS AS AT 31 MARCH 1964

NOTE 1 - LEGISLATION:

In the court action brought by British Columbia Power Corporation, Limited, former owner of all the common shares of British Columbia Electric Company Limited (the Company), the trial judge found, on 29 July 1963, that the British Columbia Hydro and Power Authority Act, under which the Authority was constituted in 1962, and other provincial statutes whereby all the shares of the Company were vested in the Crown effective 1 August 1961, were ultra vires. The trial judge also made a valuation of the common shares of the Company as at 1 August 1961. After negotiation of the adjustment required to bring this valuation up to date, an aggregate amount of \$197,114,358 for the acquisition of the Company's shares by the Crown was determined by the trial judge, settled by agreement on 27 September 1963, and authorized by the British Columbia Electric Company Limited Acquisition Act in March 1964. The Legislature also enacted the Power Measures Act, 1964 which, inter alia,

- (a) validated and confirmed the carrying on of business by the Company and British Columbia Power Commission under the name of British Columbia Hydro and Power Authority;
- (b) ratified and confirmed the agreement dated 27 September 1963;
- (c) confirmed the redemption on 18 June 1962 of the Convertible Sinking Fund Debentures, 6% Series B, of the Company; and
- (d) confirmed the cancellation of the various issues of preferred shares of the Company as at 1 August 1961 and the substitution therefor of bonds of the Company bearing the same interest rates as the respective issues of preferred shares, with provision being made for those shareholders who had originally received perpetual bonds under the Power Development Act, 1961 to exchange them at any time for bonds having a term of 25 years from 1 August 1961.

NOTE 2 - INCENTIVE AGREEMENTS:

Under an agreement dated 30 December 1963, the funds held by a Trustee under incentive agreements entered into by the Company with certain of its former employees are to be paid by instalments without interest to such former employees by the Trustee; and the Company and the Authority have been released from liability for the amounts payable under these incentive agreements. The balance of the trust fund, including interest, remaining after all payments under the agreements have been made will revert to the Authority in due course.

NOTE 3 - INTERNATIONAL POWER AND ENGINEERING CONSULTANTS LIMITED:

In October 1963 the Authority purchased the balance of the outstanding shares of International Power and Engineering Consultants Limited and accordingly the accounts of this wholly-owned subsidiary have been consolidated in the financial statements of the Authority as at 31 March 1964.

NOTE 4 – LONG TERM DEBT:	BETTER BETTER DEPON	
Issued by British Columbia Electric Company Limited –	1964	1963
First Mortgage Bonds, after deducting bonds redeemed in accordance with sinking fund		
requirements:		
3¼% Series "A" due 2 January 1967	\$ 24,823,000	\$ 25,430,000
31/4% Series "B" due 1 October 1967	7,710,000	7,890,000
3%% Series "C" due 1 April 1968	13,420,000	13,732,000
3%% Series "D" due 1 February 1969	13,360,000	13,676,000
3½% Series "E" due 1 March 1975	15,869,000	16,258,000
4% Series "F" due 1 July 1991	3,058,000	3,136,000
3%% Series "G" due 1 December 1976	16,892,000*	17,209,000*
4%% Series "H" due 1 December 1977	12,783,000	13,040,000
4¾% Series "I" due 1 February 1979	13,024,000	13,274,000
3¾% Series "J" due 1 June 1980	13,354,000	13,596,000
4¼% Series "K" due 1 February 1981	26,835,000	27,304,000
5% Series "L" due 1 February 1982	36,499,000	37,071,000
5%% Series "M" due 2 January 1988	46,374,000	47,043,000
carried forward	\$244,001,000	\$248,659,000

NOTE 4 - LONG TERM DEBT (continued)

	1964	1963
brought forward	\$244,001,000	\$248,659,000
51/2% Series "N" due 1 March 1989	28,267,000	28,643,000
6½% Series "O" due 1 April 1990	29,040,500	29,381,000
534% Series "P" due 1 May 1991	14,691,500	14,850,000
Perpetual Callable Bonds:		
4%	659,950	688,950
4¼%	190,600	290,600
4½%	382,200	445,700
434%	1,066,500	1,073,000
5%	957,250	1,008,750
51/2%	549,200	600,050
25-year Callable Bonds due 1 August 1986:		
4% Series AA	11,340,050	11,311,050
4¼% Series AB	10,809,400	10,709,400
4½% Series AC	14,617,800	14,554,300
43/4% Series AD	25,346,900	25,340,400
5% Series AE	24,042,750	23,991,250
5½% Series AF	14,450,800	14,399,950
Sinking Fund Debentures:		
5%% Series A due 1 April 1977, after deducting debentures		
redeemed in accordance with sinking fund requirements	37,200,000	37,600,000
Issued by British Columbia Power Commission –		
Bonds:	7,000,000	7 000 000
3% Series A due 1 October 1967.	7,000,000	7,000,000
3% Series B due 1 November 1968.	6,000,000	6,000,000
3%% Series C due 15 September 1991	3,000,000	3,000,000
4% Series D due 21 May 1992	1,000,000	1,000,000
4% Series E due 15 June 1992	1,000,000	1,000,000
4% Series F due 15 September 1992	1,500,000	1,500,000
4% Series G due 1 November 1988	10,000,000*	10,000,000*
3¼% Series H due 15 July 1989	6,300,000*	6,300,000*
3¼% Series J due 4 July 1975	10,000,000	10,000,000
5% Series MB due 15 September 1964	3,231,000	3,231,000
5% Series MC due 15 September 1982.	5,149,000	5,149,000
5% Series MD due 15 September 1992.	18,724,000	18,724,000
5% Series N due 15 September 1992	10,000,000	10,000,000
3% Series S due 1 April 1976.	17,738,000	17,738,000
3%% Series T due 1 April 1977	0.205.000	0.005.000
(payable in Canadian or United States funds at option of holder)	9,285,000	9,285,000
Debentures: 3%% Series K due 15 June 1986	20,000,000*	20,000,000*
4%% Series L due 15 April 1987		20,000,000*
3%% Series P due 1 February 1988.	25,000,000* 20,000,000*	25,000,000*
4%% Series U due 15 July 1964	4,000,000*	20,000,000*
		4,000,000*
carried forward	\$636,540,400	\$642,473,400

NOTES TO FINANCIAL STATEMENTS AS AT 31 MARCH 1964 (continued)

NOTE 4 - LONG TERM DEBT (continued)

		1964	1963
	brought forward	\$636,540,400	\$642,473,400
Iss	ued by British Columbia Hydro and Power Authority –		
-	Bonds:		
	5¼% Series A due 1 May 1982	32,496,300	32,496,300
	3¼% Series B due 1 October 1979	10,000,000	10,000,000
	5% Series C due 1 March 1993.	15,000,000	15,000,000
	5¼% Series D due 1 May 1993	25,000,000	
	5¼% Series F due 1 June 1993	10,000,000	
	51/4% Series G due 15 October 1993.	15,000,000	_
	51/4% Series H due 15 December 1993.	10,000,000	
	51/4% Series J due 1 March 1994.	10,000,000	
		764,036,700	699,969,700
Les	ss –		
E	exchange discount incurred on long term debt payable in United States funds	2,722,973	2,724,732
		761,313,727	697,244,968
Ad	d =	701,513,727	037,244,308
	Provision for loss on exchange, since date of issue, on long term debt maturing		
	in July 1964, payable in United States funds (Note 8)	491,250	
		761,804,977	697,244,968
Les	- 22	701,804,977	097,244,968
	Sinking funds on deposit with Trustee, Minister of Finance		
	of the Province of British Columbia	29,838,074	23,469,543
		Value of the second	
Cla	ssification on balance sheet –	\$731,966,903	\$673,775,425
	ong term debt	\$712,451,395	\$663.069.000
	ong term debt payments due within one year, included in current and accrued liabilities:	Ψ/12,431,395	\$663,068,008
	Sinking fund instalments.	11,959,508	10,707,417
	Debt maturities	7,556,000	10,707,417
			\$672.77E.40E
	*Payable in United States funds and sawind at your funds	\$731,966,903	\$673,775,425
	*Payable in United States funds and carried at par of exchange.		

NOTE 5 - GUARANTEE BY PROVINCE OF BRITISH COLUMBIA:

The Government of the Province of British Columbia has unconditionally guaranteed the principal and interest of the long term debt, parity development bonds and notes payable.

NOTE 6 - NOTES PAYABLE:

Notes payable, all of which mature on or before 1 October 1964, have not been included in current and accrued liabilities as it is intended to repay these notes from the proceeds of short or long term financing rather than from current assets.

NOTE 7 - TAXES ON INCOME:

The liability for taxes on income amounting to \$3,737,587 represents the estimated taxes payable in respect of British Columbia Electric Company Limited and its wholly-owned subsidiary, British Columbia Electric Railway Company Limited. The tax returns to 1 August 1961 have been assessed, but appeals have been filed against the assessments for 1961 and several prior years. Accordingly, the provision for taxes payable on income, while deemed adequate, is subject to change but no adjustment will be made until all final assessments have been received and agreed.

NOTE 8 - STABILIZATION OF RATES AND CONTINGENCY RESERVE:

The balance remaining as at 31 March 1963 of the accumulated earnings and reserves of British Columbia Electric Company Limited and British Columbia Power Commission at 30 March 1962, the date of their amalgamation under the name of British Columbia Hydro and Power Authority, together with the accumulated net income of the Authority from 30 March 1962, have been transferred to stabilization of rates and contingency reserve as follows:

Accumulated earnings and reserves as at date of amalgamation – balance as at 31	March 1963		\$34,346,617
Deduct -			
Balance of compensation paid to British Columbia Power Corporation,			
Limited for the common shares of the Company (Note 1):			
Total compensation as determined by the trial judge and approved by			
the Legislature of the Province of British Columbia	\$197,114,358		
Less -			
Amounts previously paid	171,833,052	\$25,281,306	
Legal and other expenses incurred in the determination of the above			
compensation and in the course of related litigation:			
Portion of expenses of British Columbia Power Corporation, Limited			
paid in accordance with settlement	309,618		
Expenses of the Authority (\$402,698 of which had been included in			
expenses of the preceding period – see below)	604,866		
Costs of settlement with a former preferred shareholder of the Company			
pursuant to court action	49,968	964,452	
Additional charges of trustee in respect of 1962 redemption of Convertible			
Sinking Fund Debentures, 6% Series B		50,000	26,295,758
Balance remaining of accumulated earnings and reserves as at date of amalgamatic	on		8,050,859
Excess of revenues over expenses (net income) - balance as at 31 March 1963		13,959,937	
Add -			
Legal expenses deducted above		402,698	14,362,635
Net income for the year ended 31 March 1964			8,848,895
			31,262,389
Deduct -			
Provision for loss on exchange, since date of issue, on long term debt maturing in			
payable in United States funds (Note 4)			491,250
Balance as at 31 March 1964			\$30,771,139

NOTE 9 - COMMITMENTS:

Purchase commitments and contracts of the Authority for capital projects and inventories of materials and supplies aggregated approximately \$89,000,000 as at 31 March 1964.

FINANCIAL STATISTICS

(in millions of dollars)

	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955
SOURCES OF REVENUE										
Electric - residential	38.5	37.4	40.0	38,2	36.4	33.0	28.7	26.3	23.3	20.3
- other	54.8	55.1	50.3	46.6	44.1	39.1	33.1	29.0	25.9	23.7
Gas	25.7	24.6	22.5	19.7	17.0	12.2	8.1	5.9	5.3	4.9
Passenger transportation	13.8	13.9	13.4	13.9	14.6	14.3	13.9	13.7	13.4	14.9
Rail freight	5.6	5.3	5.0	4.8	4.9	5.1	4.9	5.2	4.5	3.5
Miscellaneous	1.2	1.4	2.1	3.0	2.2	1.8	2.3	1.5	1.5	1.2
Total	139.6	137.7	133.3	126.2	119.2	105.5	91.0	81.6	73.9	68.5
DISPOSITION OF REVENUE										
Employment costs, materials and services	54.5	51.7	47.9	46.1	45.6	40.4	39.0	35.1	32.0	31.5
Grants, school taxes, etc	9.1	8.4	7.1	6.8	6.2	5.5	4.6	3.9	3.5	3.3
Provision for depreciation	25.3	22.8	21.8	20.7	18.9	17.0	13.6	11.1	10.2	9.3
Taxes on income	-	-	2.8	12.0	11.8	9.2	7.6	9.3	8.8	7.7
Interest and other costs on debt	44.7	43.5	35.8	28.4	25.0	21.7	17.8	11.1	8.8	7.9
Interest charged to construction (deduct)	2.8	2.7	3.3	3.1	4.7	4.9	4.6	3.5	1.7	.8
Dividends on preferred shares	-	-	1.7	5.0	5.0	5.0	4.4	3.8	3.5	2.8
Dividends on common shares	_	-	1.9	8.1	7.2	6.3	5.8	5.3	4.2	3.2
Employed in the business	8.8	14.0	17.6	2.2	4.2	5.3	2.8	5.5	4.6	3.6
EXPENDITURES ON PLANT	70.6	54.2	57.1	64.3	81.0	98.8	157.1	151.3	65.8	45.3
		ST .								
NOTE: Statistics are for years ended 31 March except 1962 (Bill.			62) and 1						

NOTE: Statistics are for years ended 31 March except 1962 (1 April 1961 to 29 March 1962) and 1963 (30 March 1962 to 31 March 1963). For years prior to 30 March 1962, statistics of British Columbia Electric Company Limited and British Columbia Power Commission have been combined.

OPERATING STATISTICS

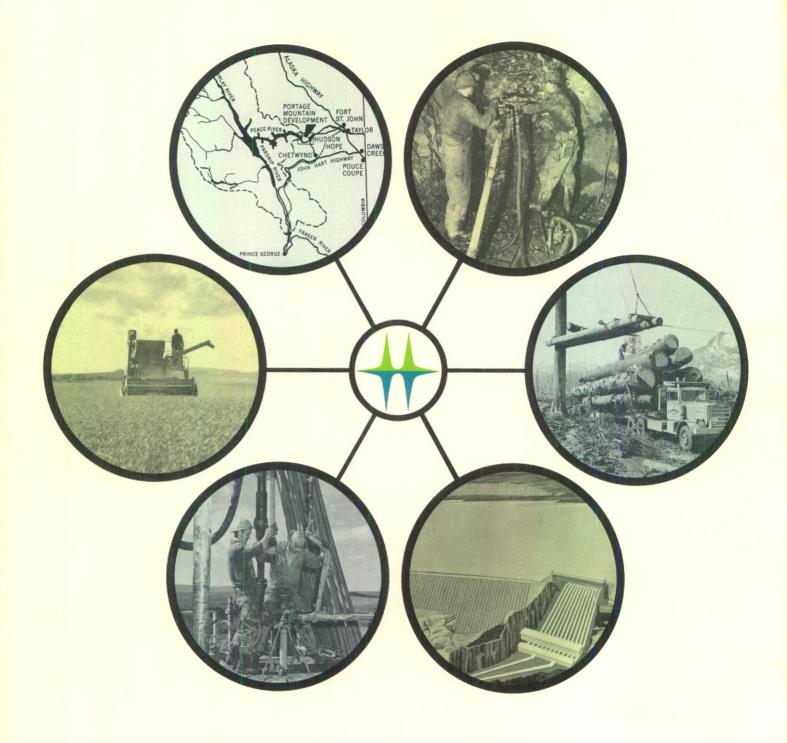
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	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955		
CLEATIO												
ELECTRIC Generating capacity at year-end												
(rated kw in thousands) (1)												
Hydro	1,295	1,295	1,295	1,296	1,172	1,023	987	799	692	663		
Thermal	571	570	268	268	253	110	84	57	46	40		
Total	1,866	1,865	1,563	1,564	1,425	1,133	1,071	856	738	703		
Integrated system peak one-hour demand (kw in thousands)	1,244	1,169	1,154	1,083	1,064	1.020	885	815	709	624		
Increase in annual demand over previous year		-,										
(percentages)	6.1	9.3	7.4	4.2	10.0	18.5	14.7	10.4	9.6	11.4		
Customers at year-end (in thousands)	478	459	443	432	420	403	385	366	344	326		
Electricity sold (kwh in millions)	6,431	6,059	5,540	5,149	4,934	4,471	3,769	3,261	2,984	2,715		
Proportionate sales by class of customer (percentages)	32	32	33	33	33	33	36	38	36	33		
Residental Other systems (largely residential)	2	2	1	2	2	2	2	2	2	2		
Commercial, industrial, etc	66	66	66	65	65	65	62	60	60	58		
Export (2)										1		
Residential service Average annual kwh use per customer	5,200	5,029	4,829	4,723	4,658	4,455	4,240	4,092	3,798	3,359		
Average revenue per kwh (in cents)	1.8	1.9	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.3		
(1) Excludes electricity available from other systems.		BUFFUE										
Rated capacity has been exceeded on occasion.												
(2) Less than ½ of 1% 1957 through 1964.												
GAS												
One-day capacity at year-end (therms in thousands)	1 700	1,780	1,780	1,540	1,000	575	575	400				
Mainland – firm pipeline contracts (3)	1,780	250	250	320	320	190	190	160	101	96		
Greater Victoria – plant		36	36	27	27	27	27	18	18	18		
Peak one-day demand (therms in thousands)					000	700	330	185	90	85		
Mainland system – including interruptible – excluding interruptible	1,359	1,580 1,342	1,287	934 733	828 690	728 663	288	180	90	85		
Greater Victoria system	16	18	21	13	16	15	13	14	13	12		
Increase in annual demand over previous year							105 1	440	0.0			
(percentages)	The second secon	12.8	17.5	17.8	53.1	66.2 96	105.1	44.0 63	9.8	5.0		
Customers at year-end (in thousands)	The state of the s	137 240	129 217	186	157	103	62	30	21	19		
Gas sold (therms in millions)		10.3	10.2	10.6	10.8	11.8	13.0	19.4	25.1	25.5		
(3) For the purpose of this table, quantities converted to	3.5	10.0										
therms on basis of 100 cu. ft. to one therm.										Paris .		
PASSENGER TRANPORTATION								SE MAR	A TELEP			
Vehicles at year-end								31 3 70				
Urban - street cars		-	-	-	241	346	340	323	325	36		
- buses trolley coaches	339	334 317	332 327	342 327	341 351	351	351	351	325	327		
- total		651	659	669	692	697	691	674	652	701		
Interurban rail passenger cars		-	-	-	_	-	_	11	17	21		
Interurban buses	80	81	75	71	67	69	69	69	71	84		
Passengers carried (in millions) Urban	75.8	77.3	78.3	82.4	89.3	98.4	102.9	100.9	99.8	103.6		
Interurban rail	_	-	_	-	_	_	.8	1.0	1.1	1.4		
Interurban bus	2.3	2.5	2.5	2.6	2.7	3.1	3.3	3.4	3.4	3.8		
Revenue miles run – urban (in millions)	20.5	20.5	20.6	21.7	22.6	23.6	23.3	50.5	23.6	24.2		
Passenger revenue per mile - urban (in cents)	52.8	54.0	54.2	54.3	56.5	52.4	51.1	50.5	40.0	55.1		
RAIL FREIGHT (tons in thousands)	1,663	1,567	1,527	1,427	1,359	1,276	1,314	1,617	1,431	1,161		
EMPLOYEES AT YEAR-END												
Regular	5,761	5,641	5,804	5,919	6,053	6,263	6,538	not available — not available —				
Temporary	451	328	292	323	340	487	802		. —			
Total	6,212	5,969	6,096	6,242	6,393	6,750	7,340	6,933	5,936	5,634		

NOTE: Statistics are for years ended 31 March except 1962 (1 April 1961 to 29 March 1962) and 1963 (30 March 1962 to 31 March 1963). For years prior to 30 March 1962, statistics of British Columbia Electric Company Limited and British Columbia Power Commission have been combined.



COMMUNITIES SERVED BY BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

ABBOTSFORD • ADAMS LAKE • AENNOFIELD • AGASSIZ • ALBERNI • ALBION • ALDERGROVE • ALERT BAY • ALEXANDRIA • ALKALI LAKE ANGLEMONT · ANMORE · ANNACIS ISLAND · ANNIEVILLE · ANNIS · ARMSTRONG · ARRAS · ARROW PARK · ASHCROFT · ASHTON CREEK ATCHELITZ • ATHALMER • AUSTRALIAN • BALDONNEL • BAMBERTON • BARNET • BARNHART VALE • BARRIERE • BEACH COVE BEACH GROVE . BELLA COOLA . BESSBOROUGH . BEVAN . BEAVERLY . BIRCH ISLAND . BLACK CREEK . BLACK POOL . BLAEBERRY BLIND BAY . BLOEDEL . BLUBBER BAY . BLUE RIVER . BLUE SPRINGS . BOSTON BAR . BOUCHIE LAKE . BOUNDARY BAY BOWEN ISLAND . BOWSER . BRACKENDALE . BRADNER . BRALORNE . BRENTWOOD BAY . BRIAR RIDGE . BRISCO . BRITANNIA BEACH BROCKLEHURST . BROUSE . BUCKHORN LAKE . BUCKLEY BAY . BUFFALO CREEK . BURNABY . BURNS LAKE . BURTON . CACHE CREEK CAMBIE . CAMERON LAKE . CAMPBELL CREEK . CAMPBELL RIVER . CAMPBELLTON . CANAL FLATS . CANFORD . CANIM LAKE . CANOE CARLIN . CARR'S LANDING . CASSIDY . CASTLEDALE . CAYCUSE . CECIL LAKE . CEDAR . CELISTA . CENTRAL SAANICH . CHARLIE LAKE CHASE . CHASE RIVER . CHEMAINUS . CHERRY CREEK . CHERRYVILLE . CHETWYND . CHILLIWACK . CHINOOK COVE . CHOATE CHU CHUA • CLAYBURN • CLAYHURST • CLAYTON • CLEARBROOK • CLEARWATER STATION • CLINTON • CLOVERDALE • COBBLE HILL COLDSTREAM . COLLETVILLE . COLQUITZ . COLUMBIA LAKE . COLWOOD . COMOX . COOMBS . COQUITLAM . COURTENAY . COVE CLIFF COWICHAN BAY . COWICHAN STATION . CRAIGELLACHIE . CRAIGS CROSSING . CRESCENT BEACH . CROFTON . CROYDON STATION CULTUS LAKE . CUMBERLAND . CYPRESS PARK . DALLAS . DANSKIN . D'ARCY . DARFIELD . DASHWOOD . DAWSON CREEK . DECKER LAKE DEEP BAY . DEEP COVE . DEEP CREEK . DEERHOLME . DELTA . DENMAN ISLAND . DEPARTURE BAY . DEROCHE . DEVEREAUX . DEVINE DEWDNEY . DOE RIVER . DOLLARTON . DONALD STATION . DOUGHTY . DOUGLAS LAKE . DRAGON LAKE . DRIFTWOOD . DUCK RANGE DUNCAN • DUNCAN BAY • DUNSTER • DURIEU • EAGLE BAY • EAGLE CREEK • EAGLE HARBOUR • EAST ARROW PARK • EAST BLACK POOL EAST PINE • EAST POUCE COUPE • EAST SOOKE • EAST WELLINGTON • EDDY • EDGEWATER • EDGEWOOD • ENDAKO • ENDERBY • ENGEN ENTERPRIZE • ERRINGTON • ESQUIMALT • EVELYN • EXETER • EXLOU • EXTENSION • FAIRBRIDGE • FAIRMONT • FALKLAND • FANNY BAY FARMINGTON . FAUQUIER . FLATROCK . FLOOD . FORDE . FOREMAN . FOREST GROVE . FORT FRASER . FORT GEORGE . FORT LANGLEY FORT NELSON . FORT ST. JAMES . FORT ST. JOHN . FRANCOIS LAKE . FRASER LAKE . FRUITLAND . FULFORD HARBOUR . GABRIOLA ISLAND • GALIANO ISLAND • GANGES • GARDEN BAY • GIBSONS • GIFFORD • GILLIES BAY • GLENDALE • GLENEDEN • GLEN LAKE GLENORA • GLENTANNA • GLEN VALLEY • GLEN VOWELL • GOLATA CREEK • GOLD BRIDGE • GOLDEN • GOLDSTREAM • GRANTHAMS LANDING . GRAND HAVEN . GRASSY PLAINS . GREAT CENTRAL . GREATA . GREENDALE . GRINDROD . GROUNDBIRCH . GUNDY HAGENSBORG . HALFMOON BAY . HANEY . HAREWOOD . HARRISON HOT SPRINGS . HARRISON MILLS . HARROGATE . HATZIC HAZELTON . HEADQUARTERS . HEFFLEY CREEK . HERIOT BAY . HILLIERS . HILL'S SIDING . HIXON . HOLMWOOD . HONEYMOON BAY HOPE . HOPKINS LANDING . HORNBY ISLAND . HORSEFLY . HOUSTON . HUDSON HOPE . HUNTINGDON . HUPEL . INVERMERE . IOCO IRVINE'S LANDING . ISLE PIERRE . JAMES ISLAND . KAMLOOPS . KEATS ISLAND . KELLEY LAKE . KENNEDY LAKE . KERSLEY . KILGARD KILKERRAN · KINGSGATE · KISPIOX · KNUTSFORD · KOKSILAH · KUPER ISLAND · KYE BAY · LAC LA HACHE · LADNER · LADYSMITH LAIDLAW . LAKE COWICHAN . LAKE KATHLYN . LAKEVIEW . LAMMING MILLS . LANGDALE . LANGFORD STATION . LANGLEY . LANTZVILLE LARKIN . LAVINGTON . LEJAC . LILLOOET . LINDELL BEACH . LIONS BAY . LITTLE FORT . LONE BUTTE . LONG BEACH . LOON LAKE LOUIS CREEK . LOWER MUD RIVER . LOWER NICOLA . LUMBY . LUND . LUXOR . LYTTON . MCBRIDE . McGILLIVRAY FALLS . McLEESE LAKE . MCLURE . MCLURE LAKE . MCMURDO . MABEL LAKE . MACALISTER . MADEIRA PARK . MAGNA BAY . MAKINSON . MALAHAT MALAKWA · MAPLE BAY · MARA · MARGUERITE · MARTIN PRAIRIE · MARTON · MAYNE ISLAND · MATSQUI · MERRITT · MERVILLE MESACHIE LAKE . METCHOSIN . MILBURN LAKE . MILL BAY . MILNER . MILNES LANDING . MIOCENE . MISSION . MOBERLY MONTE CREEK . MONTE LAKE . MONTNEY . MOOSE HEIGHTS . MOUNT LEHMAN . MOUNTAINVIEW . MUD BAY . MURRAYVILLE MUSKWA . NAHTLI INDIAN RES. . NAKUSP . NANAIMO . NANOOSE . NEEDLES . NEW DENVER . NEW HAZELTON . NEWTON . NEW WESTMINSTER . NICOLA . NICHOLSON . 93 MILE . NORTH BEND . NORTH COWICHAN . NORTH KAMLOOPS . NORTH PINE . NORTH SAANICH . NORTH VANCOUVER . NORTHWEST BAY . NOTCH HILL . NUKKO LAKE . OAK BAY . OCEAN PARK . OCHILTREE . OKANAGAN CENTRE . OKANAGAN LANDING . 100 MILE HOUSE . 141 MILE HOUSE . 150 MILE HOUSE . OTWAY . OYAMA . OYSTER RIVER . PALDI PALLING . PARKSVILLE . PARSON . PAUL LAKE . PAVILION . PEACHLAND . PEARDONVILLE . PEMBERTON . PENDER HARBOUR PENDER ISLAND . PINE VALLEY . PINEVIEW . PIONEER MINE . PITT MEADOWS . PLEASANTSIDE . PORT ALBERNI . PORT ALBION PORT COQUITLAM . PORT HAMMOND . PORT HARDY . PORT KELLS . PORT MCNEILL . PORT MANN . PORT MELLON . PORT MOODY PORT RENFREW . PORT WASHINGTON . POUCE COUPE . POWELL RIVER . PRAIRIEDALE . PRINCE GEORGE . PRITCHARD . PROGRESS PUNTLEDGE . QUADRA ISLAND . QUALICUM BAY . QUALICUM BEACH . QUATHIASKI COVE . QUEEN CHARLOTTE CITY . QUESNEL QUESNEL VIEW . QUICK . QUILCHENA . RADIUM . RADIUM HOT SPRINGS . RAYLEIGH . RED BLUFF . RED ROCK . REMO . REID LAKE RICHMOND . RIVER JORDAN . ROBERTS CREEK . ROLLA . ROSEBERY . ROSEDALE . ROSE HILL . ROSE LAKE . ROSE PRAIRIE . ROUND LAKE . ROYSTON . RUBY CREEK . RUSKIN . SAANICH . ST. JOSEPH'S MISSION . SALMON ARM . SALTAIR . SALTERY BAY . SALTSPRING ISLAND . SANDSPIT . SANDWICK . SARDIS . SATURNA ISLAND . SAVONA . SCOTCH CREEK . SECHELT . SETON-PORTAGE . 70 MILE HOUSE SHALALTH . SHANNON LAKE . SHAWNIGAN LAKE . SHELLEY . SHEARER DALE . SHUSWAP . SICAMOUS . SIDNEY . SILVER CREEK SILVERDALE . SILVERTON . SIX MILE LAKE . SKIDEGATE . SKIDEGATE MISSION . SKOOKUMCHUCK . SMITHERS . SODA CREEK . SOINTULA SOLSOUA . SOOKE . SORRENTO . SOUTHBANK . SOUTH FORT GEORGE . SOUTH HAZELTON . SOUTH TAYLOR . SOUTH WELLINGTON SOUTH WESTMINSTER . SPALLUMCHEEN . SPENCES BRIDGE . SPILLIMACHEEN . SPUZZUM . SPRINGHOUSE . SPROAT LAKE . SQUAMISH SOUAM BAY . SOUILAX . STAVE FALLS . STEELHEAD . STEVESTON . STILLWATER . STONER . STONEY CREEK INDIAN RES. . STRAITON STUMP LAKE . SULLIVAN STATION . SUMAS . SUNNYBRAE . SUNNYBROOK . SUNRISE VALLEY . SUNSET PRAIRIE . SURREY . SWAN LAKE SWARTZ BAY . SWEETWATER . TAFT . TAKYSIE LAKE . TAPPEN . TA TA CREEK . TATTON . TAYLOR . TCHESINKUT LAKE . TELKWA TEN MILE LAKE . TERRACE . TETE JAUNE CACHE . TEXADA ISLAND . THETIS ISLAND . TIMOTHY HILL . TOFINO . TOMSLAKE TRANQUILLE . TREPANIER . TRINITY VALLEY . TSAWWASSEN . TUPPER . TURTLE VALLEY . TWO MILE FLATS . TWO RIVERS . UCLUELET UNION BAY . UNIVERSITY ENDOWMENT LANDS . UPPER CHASE CREEK . UPPER MUD RIVER . VALEMOUNT . VALLEYVIEW VANANDA • VANCOUVER • VANDERHOOF • VAVENBY • VEDDER CROSSING • VERNON • VESUVIUS • VICTORIA • VIEW ROYAL • VINSULLA WALHACHIN . WALNUT GROVE . WEBSTERS CORNERS . WELLINGTON . WESTBANK . WESTHOLME . WESTSYDE . WEST VANCOUVER WESTVIEW . WESTWOLD . WHALLEY . WHITE ROCK . WHONNOCK . WILLIAMS LAKE . WILLIAMSONS LANDING . WILLOW RIVER . WILMER WILSON CREEK . WINDERMERE . WINFIELD . WOODPECKER . WRIGHT STATION . YAHK . YALE . YARROW . YELLOW POINT . YOUBOU



For countless aeons the waters of the mighty Peace have surged without restraint through the wilderness of north-central British Columbia. With their taming – still four years from completion – the vast interior hinterland of the Province stands poised on the threshold of a new age – an age of dynamic growth seldom before seen or likely to be seen again. Abundant hydroelectric power is the key. Already the key begins to turn as men of vision prepare to translate their dreams into reality – to harvest and transform the produce of mine, forest, natural gas and oil well, and to prosper from their enterprise.

