

C file

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# 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 east to Hope.  
Distribution of liquefied petroleum gas-air in Greater Victoria.

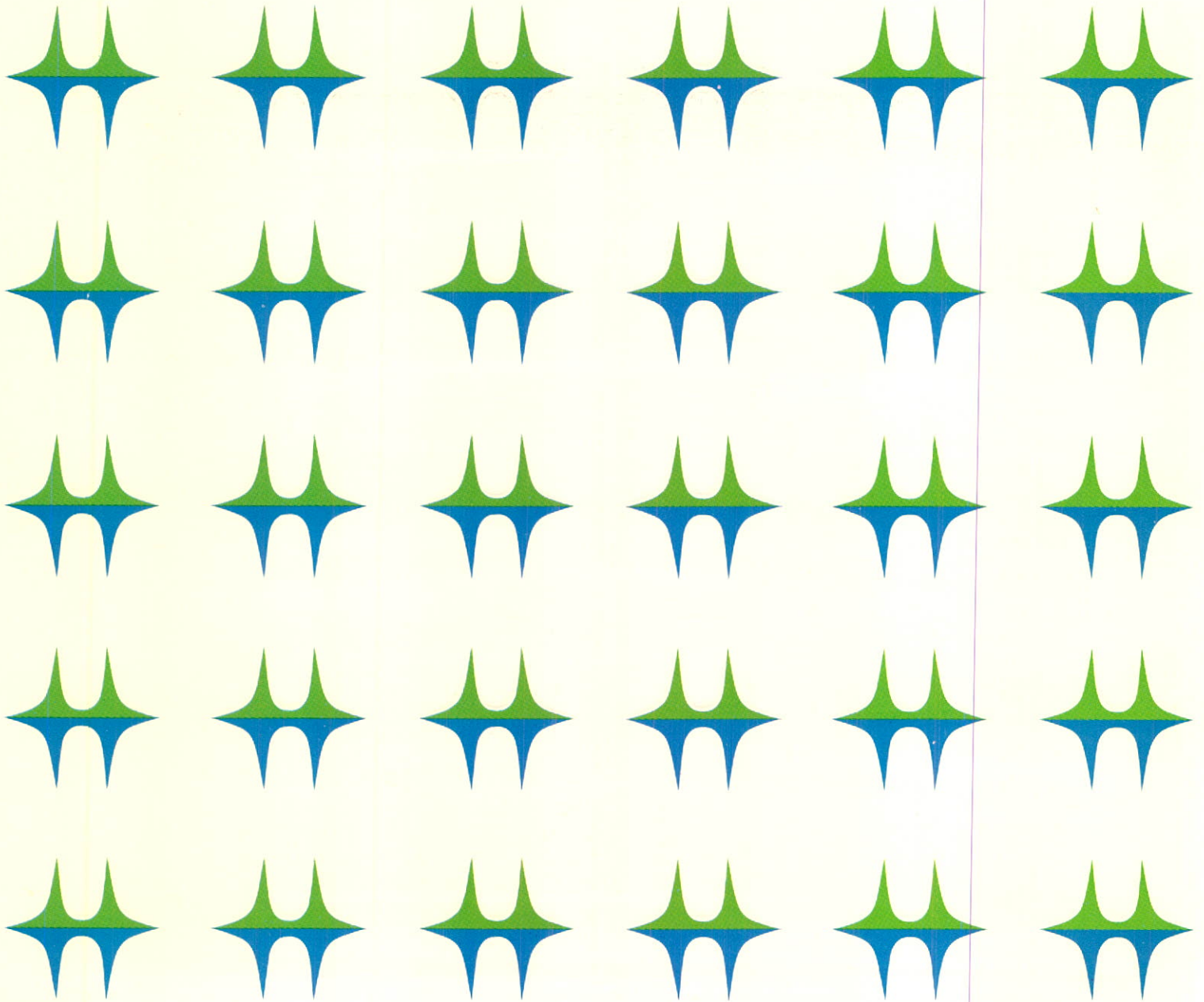
## PASSENGER TRANSPORTATION SERVICE

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

## RAIL FREIGHT SERVICE

Rail freight operations in Greater Vancouver and the Fraser Valley.

*Area below and pattern on cover is composed of a repeat of the new insignia of the Authority*





THE PRIME MINISTER

VICTORIA

1 9 6 3

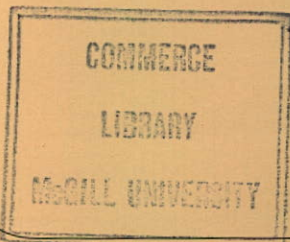
June 12th

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 period 30th March 1962 to 31st March 1963.

Prime Minister



## BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

HEAD OFFICE: 970 BURRARD STREET, VANCOUVER 1, B.C., CANADA

### DIRECTORS AND OFFICERS

JOHN DUNSMUIR  
EINAR M. GUNDERSON\*  
HUGH L. KEENLEYSIDE *Chairman\**  
THE HONOURABLE W. KENNETH KIERNAN  
F. ARTHUR LEE\*  
FRED D. MATHERS  
WILLIAM C. MEARNES\*  
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*  
WILLIAM H. Q. CAMERON *General Solicitor and Division Manager - Legal*  
JOHN J. CARSON *Division Manager - Staff Services*  
THOMAS CHAMBERS *Comptroller and Chief Financial Officer*  
G. FREDERIC GREEN *Division Manager - Production*  
ROBERT W. GROSS *Division Manager - Land*  
W. DENIS KENNEDY *Division Manager - Economic and Commercial Services*  
J. STUART LANG *Internal Auditor*  
JOHN S. PURVES *Division Manager - Purchasing and Stores*  
SIGURDUR SIGMUNDSON *Division Manager - Transportation*  
JOHN H. STEEDE *Chief Engineer and Division Manager - Engineering*

*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

*Trustee, First Mortgage Bonds:* MONTREAL TRUST COMPANY

*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.

10 June 1963

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

Dear Sir:

The first annual report of British Columbia Hydro and Power Authority, for the period 30 March 1962 to 31 March 1963, is presented herewith. The Authority was constituted on 30 March 1962 by the amalgamation of British Columbia Electric Company Limited and British Columbia Power Commission pursuant to the British Columbia Hydro and Power Authority Act.

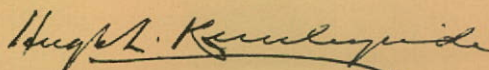
The difficulties inherent in the merger of two extensive undertakings were met, and largely overcome, primarily through the excellent spirit of cooperation shown by all employees. The broad experience and abilities of the staffs of both organizations have been utilized in the development of a competent management group capable of reconciling and integrating the divergent policies and procedures of the former organizations and equally capable of meeting the responsibilities of the new organization.

Since the amalgamation, adjustments in rates have been made which will reduce the cost of electricity and gas to customers of the Authority by more than \$11,000,000 annually. As part of the rate reduction programme a uniform electric rate was established for residential customers in all areas served by the Authority.

Construction work at the Peace River Project has progressed according to schedule and we report with considerable satisfaction that costs of construction to date have been lower than the estimates used in the feasibility study. The contract for Portage Mountain Dam in the sum of \$73,558,648 was awarded to a joint venture of Peter Kiewit Sons Company of Canada Ltd., Al Johnson Construction Co. of Canada Limited, and Dawson Construction Limited on 3 May 1963. It is believed this is the largest single construction contract ever written in British Columbia.

With the guidance of an experienced Board of Directors the Authority has successfully concluded the first year of its existence and looks forward to the challenges of the years ahead, resolved that its customers shall receive a high standard of service at the lowest possible cost.

Yours very truly,



Chairman



Chairman

**AMALGAMATION  
OF BRITISH COLUMBIA  
ELECTRIC COMPANY LIMITED  
AND BRITISH COLUMBIA  
POWER COMMISSION**

Effective 30 March 1962 the Legislature enacted the British Columbia Hydro and Power Authority Act which amalgamated British Columbia Electric Company Limited (the Company) with British Columbia Power Commission (the Commission) and provided that the two should continue as one corporation under the name of British Columbia Hydro and Power Authority (the Authority). The Act provides that the Authority is possessed of, among other things, all property, rights and obligations of the Company and the Commission.

At the date of the amalgamation the Company had a gross investment of \$809 million in property, 348,664 electric customers, 128,939 gas customers and 4,976 employees; in addition to supplying electricity and gas the Company operated urban and interurban transit systems and a freight railway. The Commission had a gross investment of \$238 million in property, 94,283 customers and 1,119 employees, and provided electric service only. The combined undertakings constitute the most com-

prehensive system of public utility services in Canada.

After careful consideration of all factors it was decided that the Authority's Head Office should be located in Vancouver. This necessitated the transfer to Vancouver from Victoria of 190 employees of the Commission and the Company. It was also decided to organize the operations of the Authority into the following five Regions:

1. Vancouver Island Region (including Alert Bay, Bella Coola and the Queen Charlotte Islands).
2. Metropolitan Vancouver Region (which extends northward to include Powell River).



*Head Office Building, Vancouver, B.C., Canada.*

3. Fraser Valley Region (extending to Ashcroft and Lillooet).
4. Southern Interior Region (including Vernon, Kamloops, the Columbia Valley and surrounding areas).
5. Central Interior Region (including the Cariboo, Prince George, Terrace, Dawson Creek, the Peace River country and other areas extending from Clinton in the south to Fort Nelson in the north).

The amalgamation of the Company and the Commission proceeded during the year with three prime objectives: first, that during the transition period the standard of service to the public be provided at a level equal to, or better than, that which prevailed prior to the amalgamation; second, that every member of the permanent staff of each of the amalgamating corporations be offered useful employment in the combined undertakings; and third, that the new organizational structure be designed to provide maximum efficiency and economy consistent with the Authority's responsibilities and objectives. These primary aims have been accomplished, and continuing efforts will be made to improve the quality of service and effect economies in the operations of the entire organization.

## RESULTS OF OPERATIONS

Gross revenues for the period 30 March 1962 to 31 March 1963 amounted to \$137,712,515, an increase of 2.2% over the combined gross revenues of the Company and the Commission for the previous corresponding period.

Excess of revenues over expenses for the period 30 March 1962 to 31 March 1963 was \$13,959,937. This was used by the Authority to finance, in part, expenditures during the period 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.....	\$ 37,384,501
Sale of electricity to other customers.....	55,072,379
Sale of gas.....	24,634,311
Transportation of urban and interurban passengers.....	13,860,636
Rail freight operations.....	5,325,286
Miscellaneous.....	1,435,402
	<u>\$137,712,515</u>

### HOW THE REVENUE WAS USED

Salaries, wages and employee benefits.....	\$ 28,627,898
Materials and services including natural gas.....	23,095,381
School taxes, grants, transit franchises, etc.....	8,405,059
Interest and other costs on debt, less interest charged to construction.....	40,787,266
Depreciation of plant.....	22,836,974
Plant renewals and expansion for load growth.....	13,959,937
	<u>\$137,712,515</u>

## RATES

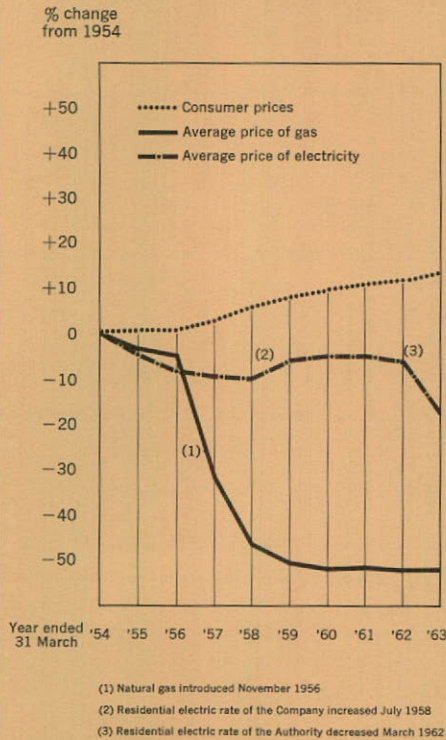
Two major reductions in rates to consumers have been introduced by the Authority since the amalgamation of the Company and the Commission. The first reduction, effective 30 March 1962, applied to all residential electric consumers. Fourteen different residential electric rates were replaced by one rate which is now uniform in all regions served by the Authority. The second reduction, announced on the anniversary of the amalgamation, will become effective with the billings for the first full month subsequent to 1 April 1963; savings from this reduction will accrue principally to residential and commercial electric customers and also to small commercial and residential gas users. The combined effect of these rate reductions will be to decrease the cost of electricity and gas to customers by more than \$11,000,000 annually.

In addition to the establishment of a single rate for residential electric customers, considerable progress was made towards eliminating variations in rates within any given class of service. A new rate for small commercial electric customers is available in all areas and the majority of customers in this category now benefit from this rate. Studies leading towards standardization within other categories are continuing.

Another important rate development was the adoption of new bulk power rates designed for large industries. This has resulted in the addition of significant loads to the system.

A uniform extension policy applicable to all residential and farm electric customers has been initiated by the Authority. Consumers in rural areas formerly

### The Authority's Average Selling Price of Electricity and Gas for Residential Use Compared with Consumer Price Index—Canada



served by the Commission will benefit from the new policy because the Authority now pays a greater proportion of the initial costs of extensions.

In addition, a standard extension policy has been introduced for commercial, industrial and general customers in all areas. The adoption of new extension policies and the introduction of lower power rates are designed to encourage the development and expansion of industry in British Columbia.

### COST OF PROVIDING SERVICES

Cost of providing services during the period 30 March 1962 to 31 March 1963 totalled \$123,752,578.

Interest on bonds, debentures and notes

payable aggregated \$43,012,365. The net charge against operations for interest and related costs, after deducting interest charged to construction and interest received on sinking funds, represented 33% of the total cost of providing service.

Salaries, wages and employee benefits were \$28,627,898, or 23% of the total cost of the combined services.

Purchases of materials and services for operations, including the purchase of natural gas, amounted to \$23,095,381. Gas purchases reflect the increasing volume of sales and a related increase in demand charge under terms of the contracts with Westcoast Transmission Company Limited.

Labour and material costs included more than \$750,000 to repair transmission and distribution circuits extensively damaged by the severe storms which struck the Lower Mainland and Southern Vancouver Island during the autumn of 1962.

Provision for depreciation of plant was \$22,836,974. This provision is directly related to the property in service, and is based on rates which are comparable to those used by other utilities.

Land and improvements owned by the Authority are taxed under the Public Schools Act. School taxes paid during 1962 amounted to \$4,385,642. In addition, local governments received \$2,467,293 in grants from the Authority. Various municipalities were paid a total of \$377,922 under transit franchise agreements. Other taxes, such as sales taxes, fuel taxes and licence fees, some of which are included in expenditures on plant, brought the Authority's total annual tax payments to more than \$11,000,000.



**CONSTRUCTION PROGRAMME**

Net additions to property account for the period 30 March 1962 to 31 March 1963 amounted to \$47,067,216 comprising gross expenditures of \$54,174,297 less retirements of \$7,107,081.

Major expenditures by projects or broad classifications included the following:

Major electric generating developments:

Peace River Project.....	\$16,181,822
Burrard Thermal Generating Plant.....	8,254,539
Columbia River Development.....	3,201,787

Major electric transmission line construction:

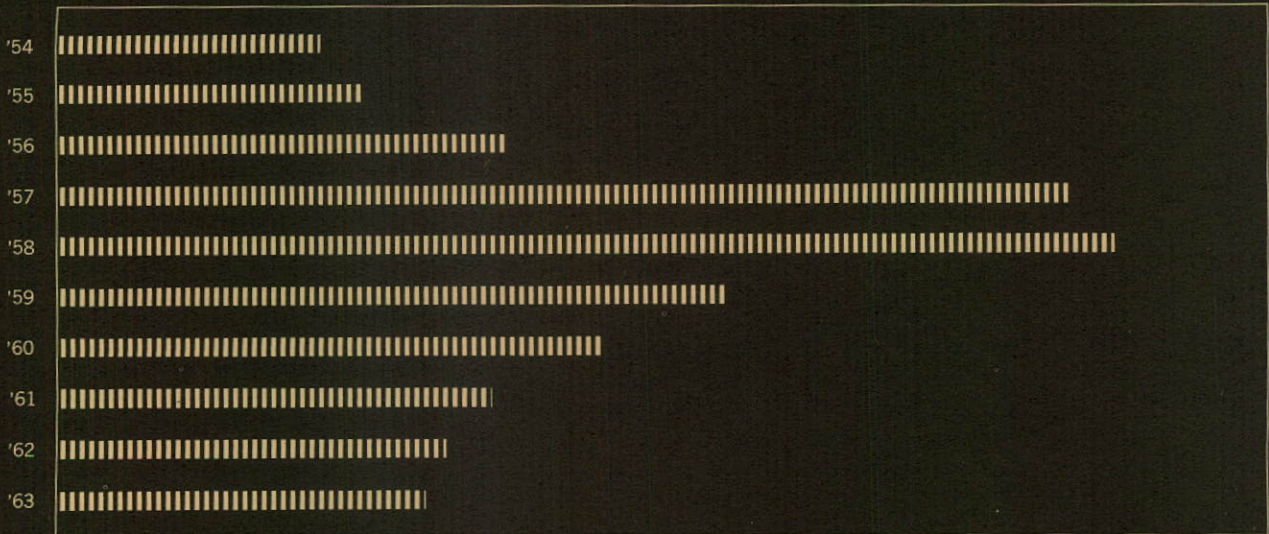
Bridge River to Pavilion, Kamloops and Prince George - 230 kv line.....	3,147,159
Murrin to Horne-Payne - 230 kv line.....	970,707
Lytton to Ashcroft, Highland Valley and Craigmont - 60 kv line.....	547,163
Substations, associated distribution facilities and local transmission systems - electric.....	5,028,346
Electric extensions to serve new customers.....	6,767,704
Gas supply lines and other system improvements.....	1,559,656
Gas extensions to serve new customers.....	2,696,962
Interurban diesel buses.....	404,261
Purchase and rehabilitation of old Queensborough Bridge.....	748,532

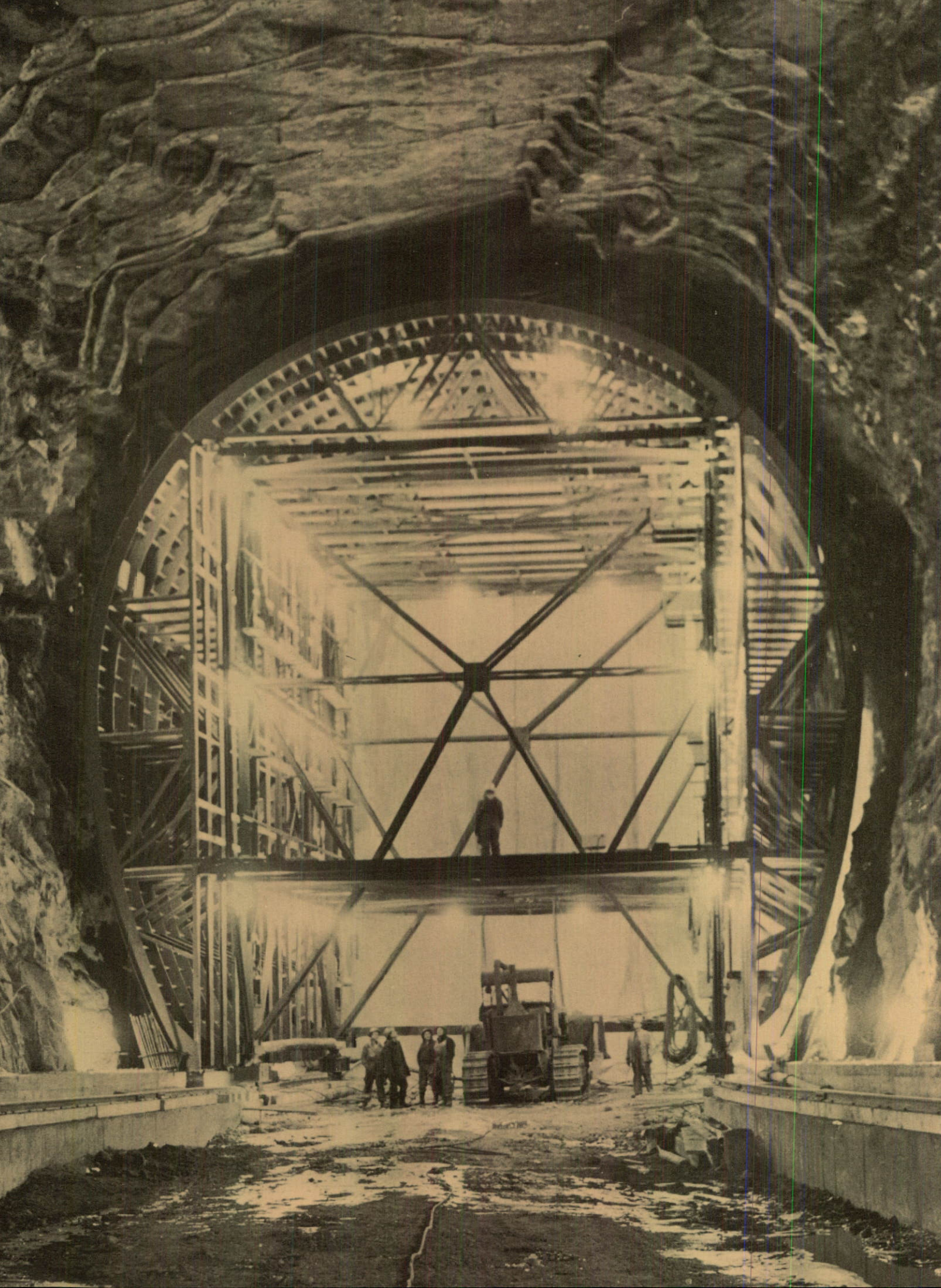
**Expenditures on Plant**

Year ended  
31 March

Dollars in millions

20      40      60      80      100      120      140      160





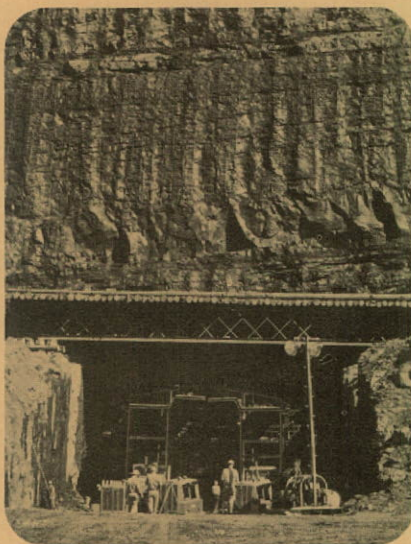
## PEACE RIVER PROJECT

*Left: two-foot concrete lining for diversion tunnels under right bank of Peace River, held in place to set by steel forms, 48 feet in diameter.*

Work on the Peace River Project commenced in October 1961. It is anticipated that construction will continue for more than ten years with a view to developing an ultimate capacity in excess of 3 million kw at two sites. First delivery of power to customers on the Lower Mainland is currently scheduled for 1968.

During the year under review a number of important developments took place. The chief task was the excavation of the diversion system to unwater the river bed in preparation for construction of the main dam. This \$17 million job, undertaken by Portage Mountain Constructors, includes cutting a diversion channel 800 feet long and 200 feet wide, blasting three tunnels which extend 2,500 feet under the right bank of the river, and lining the tunnels to an internal diameter of 48 feet with concrete 2 feet thick. At the end of March 1963 the driving of the tunnels had been substantially completed to full diameter and work on the diversion channel was well advanced. Lining of the tunnels has since commenced and diversion of the river is scheduled for the autumn of 1963.

A panel of authorities on hydro-electric engineering was commissioned to review engineering and design work relating to the power development. The panel comprises Mr. G. M. Binnie, Senior Partner, Binnie & Partners, Chartered



*Over 260,000 cubic yards of material was blasted from downstream end of diversion system to prepare cliff face for tunnel drilling.*

Civil Engineers, London, England; Mr. J. Barry Cooke, Consulting Engineer, San Rafael, California, U.S.A.; and Mr. Tore Nilsson, Civil Engineering Director, Swedish State Power Board, Stockholm, Sweden.

Continuing study led to important modifications in design. These include a reduction in the height of the dam from 650 to 600 feet, a reduction in the size of the flooded area from 950 to 680 square miles, and relocation of the powerhouse from an above-ground position on the right bank of the river to an underground site on the left bank. With the lower flood line there will be no need for highway, pipeline or railway relocation at the southern end of the reservoir. These modifications should result in important savings in construction costs. Tenders for the contract to build the main embankment of Portage Mountain

Dam were called on 7 January 1963 and opened in public at the Head Office of the Authority shortly after the end of the period under review. Portage Mountain Dam will be one of the very high dams in the world. It will be 1.25 miles long, contain 60 million cubic yards of fill and create a reservoir which will be the largest lake in British Columbia.

Electric power to meet the needs of contractors working at the site of the Peace River Project is being supplied by the Authority's 36-mile powerline from Chetwynd which was completed in December 1962. The installation at the Chetwynd Generating Plant was increased at that time by 1,800 kw of additional capacity and further additions will be made as needed.

During the year \$11.5 million was spent on the main diversion system and approximately \$4.7 million on providing camps, clearing, exploration for embankment materials and preparation of the construction site.



*Cofferdam across Peace River will direct waters through this 800-foot channel to tunnels, bypassing the site of the Portage Mountain Dam.*



## COLUMBIA RIVER DEVELOPMENT

Power-laden Columbia River (left) turns here at the "Big Bend" to begin its long route southward to the Pacific. The proposed Mica Creek dam (site is at extreme lower right) would create a huge reservoir backing up against the Rockies.

While the Columbia River Treaty was signed by Canada and the United States and approved by the United States Senate in 1961, the Canadian Government has not, as yet, agreed to the exchange of ratifications.

During the past year negotiations have been continued with representatives from the United States, for the sale in the United States of Canada's portion of the downstream power benefits, but these have not yet been concluded.

In April 1962 the Comptroller of Water Rights issued Conditional Water Licences to the Authority to store water in the Arrow Lakes, Duncan Lake and on the Columbia River near Mica Creek in conformity with the requirements set out under the Treaty. The licences are subject to conditions to be established by the Comptroller on such matters as reservoir clearing, protection of fisheries and wildlife, public access, release of water, log handling and water transport facilities.

On the Arrow Lakes project, field investigations and design studies have advanced to the point where all controlling dimensions and scheduling of construction can be determined. Final designs and specifications for the dam are proceeding, and a hydraulic model is being used to assist in determining layouts, capacities of hydraulic passages and locations of cofferdams.

On the Duncan Lake project, designs and specifications for the dam have been

completed and have been generally approved by the Comptroller of Water Rights subject to review of details. Tenders for the dam could be called on short notice and construction commenced two months thereafter.

On the Mica project, field investigations and design studies have continued to the point of establishing the general profile of the dam. A hydraulic model is being used as an aid in designing the diversion tunnels and will later be used to establish the dewatering sequences for the dam.

Applications have been made to the Federal Government for permits for the three Treaty projects under the Navigable Waters Protection Act and for ex-



Barge-mounted drilling rig investigates foundations for the proposed Mica Creek dam on the Columbia River about 90 miles north of Revelstoke. Operation was part of field surveys and investigations carried out during the past year.

emption under the International Rivers Improvement Act.

Investigations into the many social and human problems connected with the development were continued by the Columbia Reservoirs Redevelopment Group. Consideration is being given to navigation and log-handling problems created by the construction of the Arrow Lakes and Duncan Lake dams. An economic survey of the Revelstoke area was carried out for the Authority by British Columbia Research Council. Professor H. Peter Oberlander, head of the Department of Community and Regional Planning at University of British Columbia, completed a report on various aspects of resettlement in one region of the Arrow Lakes. This report is currently under consideration.

In summary, work on all phases of the Treaty projects has proceeded steadily to ensure that construction of the projects could commence as soon as authorized.



## ELECTRIC SERVICE

Throughout the period the electric system operations continued at a high level of efficiency; however, natural causes were responsible for a number of major interruptions in service during the year. A series of ground disturbances and floods in an area traversed by the Kitimat-Terrace transmission line necessitated relocation of the line and on several occasions mobile diesel generating units were used. Severe windstorms occurred on the Lower Mainland and, to a lesser extent, on Vancouver Island during the nights of 11 and 12 October 1962. These storms, known together as "Typhoon Frieda", were the worst ever to strike a utility in British Columbia. More than 57% of the distribution circuits carrying power to customers, and many transmission lines connecting service areas to power sources, were cut by trees and other debris falling on the lines.

When "Typhoon Frieda" struck, pre-arranged emergency plans to restore service were immediately set in motion. All available line crews and equipment in the affected areas were mobilized. Additional crews were obtained from contractors, and Authority employees were rushed by air and highway from as far away as the Peace River district to assist



Stringing conductor on the first stage of the Bridge River-Prince George transmission line.

the hard-pressed line crews in the Metropolitan Vancouver and Fraser Valley Regions. An emergency force of 596 men was assembled – more than double the regular work force in the two regions. For several days repair work continued around the clock. As a result of this major effort service was rapidly restored in all areas, an achievement which earned widespread recognition from the public.

### SALES TO CUSTOMERS

During the period 30 March 1962 to 31 March 1963 sales of electricity totalled 6,058,779,764 kwh, an increase of 8.2% over the combined sales of the Company and the Commission during the previous corresponding period. Gross electric revenues were \$92,456,880, an increase of 1.3%. This modest increase reflects a \$5.5 million reduction in rates to residential customers introduced on 30 March 1962. The number of electric customers in all categories at 31 March 1963 was 459,098, an increase of 16,151. Average annual residential consumption per customer rose by 200 kwh to 5,029 kwh.

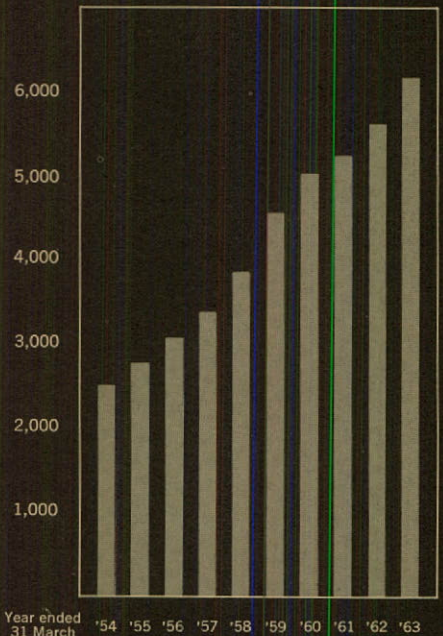
### OPERATIONS

Changes in staff and system control methods to permit the coordinated operation of the Commission's generating plants on Vancouver Island with the generating plants in the Company's system were effected by 1 July 1962. Of the total energy generated and purchased during the year, 91.3% was produced by hydro-electric plants, 5.3% by thermal plants and 3.4% was purchased from other utilities.

Combined installed generating capacity at 31 March 1963 was 1,864,786 kw, an increase of 301,599 kw since 29 March 1962. Installed capacities by type of

Annual Demand for Electricity

KWH in millions

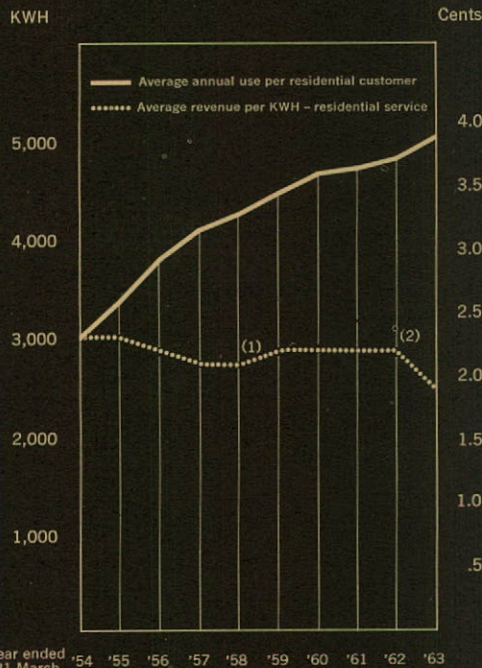


plant are: hydro 1,294,802 kw, and thermal 569,984 kw.

In January 1963 the maximum one-hour demand on the integrated system, which includes approximately 93% of the total generating capacity, amounted to 1,169,000 kw. Load growth requirements in areas served by isolated diesel-electric generating systems were met by transferring units from areas now served by main transmission systems. Plant additions were made at Alert Bay, Chetwynd and Sandspit. Two mobile units were purchased and installed temporarily at Prince George. There are now 23 diesel generating stations in service, augmented by 7 mobile diesel generating stations.

In December 1962 the Hudson Hope system of Canadian Utilities, Limited was acquired

**Average Annual Use of Electricity per Residential Customer and Average Revenue per KWH – Residential Service**



(1) Residential electric rate of the Company increased July 1958  
 (2) Residential electric rate of the Authority decreased March 1962

and was incorporated in the Authority's Central Interior Region.

**CONSTRUCTION**

Total gross expenditure for additions to electric plant, excluding expenditure on the Peace River Project and the Columbia River Development, amounted to \$27,538,726 during the period under review.

At Burrard Thermal Generating Plant a second unit was completed and became operational on 31 January 1963. This unit has a capacity of 150,000 kw and will operate using either oil or natural gas as fuel. Construction of the third unit was started during the year and this unit is expected to be in service by September 1964.

The design and construction of transmission lines for both present and future

transmission grid requirements demanded a major effort during the past year. In this overall concept, several lines were built for initial use at 60 kv but capable of operating at 138 kv without further construction, for example, the line from Chetwynd serving the Peace River Project. A similar line from Ashcroft to Spences Bridge carries energy by way of a tap from Spatum to the new Bethlehem Copper Corporation Ltd. mine in the Highland Valley. Designs for extending this line to the Craigmont Mines Limited copper mine have been completed.

As part of a larger-capacity grid, construction was started on a 230 kv transmission line from Bridge River to Prince George, a distance of 257 miles. The first stage to Soda Creek, approximately 12 miles north of Williams Lake, will be completed in 1963, and the final stage to Prince George in 1964.

Planning, design and land acquisition have been started for a second transmission line to the other members of the Northwest Power Pool through the facilities of Bonneville Power Administration. This line has been designed to permit eventual operation at 500 kv and will parallel the existing transmission line from Ingledow Substation in Surrey to the international border.

In the Fraser Canyon a 40-mile 60 kv transmission line from Haig to Boston Bar has been completed.

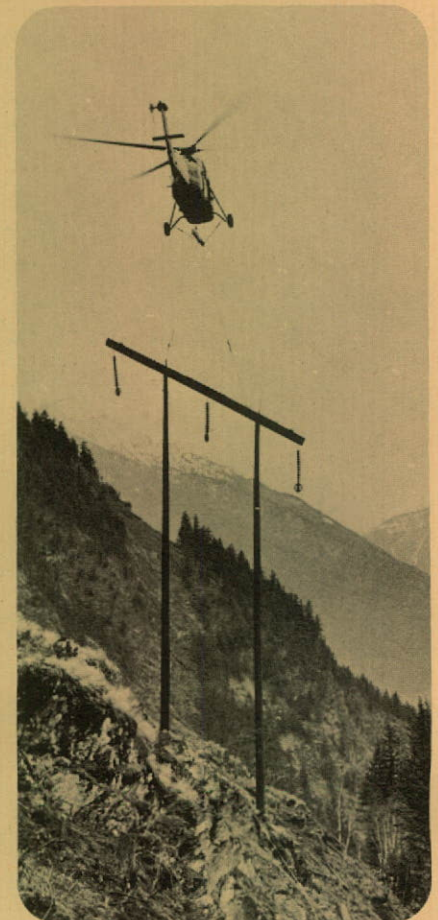
The programme to put overhead wires underground in a downtown section of Victoria has been completed. In the Metropolitan Vancouver area a 230 kv underground cable circuit between Horne-Payne and Murrin Substations was also completed, adding 4.5 miles to the existing 230 kv underground

system. This new circuit provides greater flexibility and reliability of service.

Planning, design and land acquisition are currently under way for the extension of power to Saturna Island. This project involves reinforcement of the present service to Saltspring, Galiano and Mayne Islands.

Service was extended to Gambier Island in June 1962 by means of two 12 kv submarine cables.

Conversion of the Fraser Valley distribution system to a higher voltage was completed in 1962. The total cost of this conversion, which began in 1946, was about \$5.5 million.



*Huge Sikorski helicopter helped powerline builders make short work of erecting transmission structures this spring along rugged right-of-way bordering the shore of Seton Lake.*

## GAS SERVICE

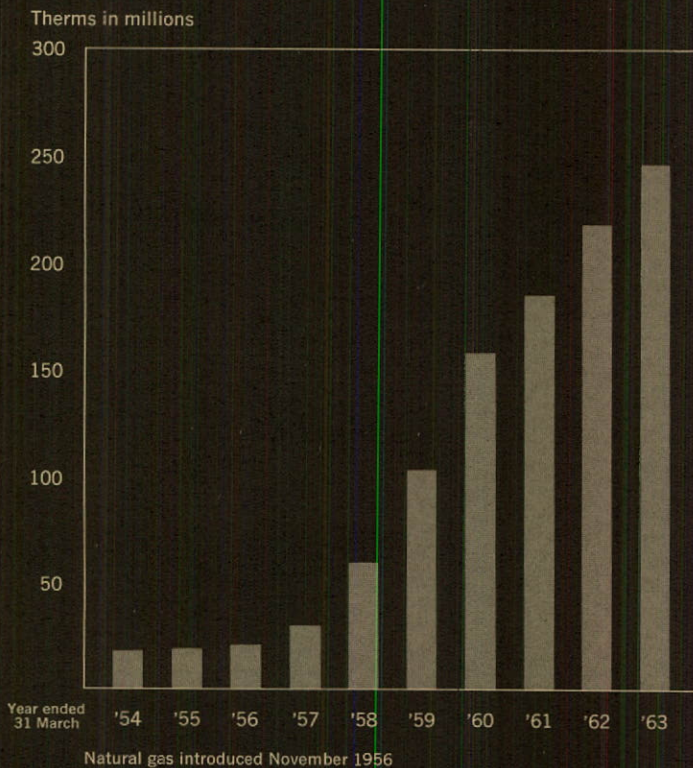
In areas where it is available, natural gas continues to grow in importance as a source of energy and captures the greater part of the space heating load for new customers. The number of gas customers rose to 137,077, an increase of 8,138 during the period under review.

### SALES TO CUSTOMERS

Gross revenues from the sale of gas during the period 30 March 1962 to 31 March 1963, and percentage comparisons with the previous corresponding period, are shown by sales categories in the following table:

		<i>% Increase</i>
Residential.....	\$15,197,153	7.4
General.....	4,293,245	1.8
Large volume.....	2,084,592	14.5
Interruptible.....	2,981,199	14.8
Meter rentals, etc.....	78,122	—
Total.....	<u>\$24,634,311</u>	<u>8.0</u>

### Annual Demand for Gas



### GAS SUPPLY

The gas service on the Lower Mainland has an assured supply of natural gas from the Peace River district through long-term contracts with Westcoast Transmission Company Limited. These contracts provide for volumes up to 226 million cubic feet of gas per day. The Lower Mainland peak one-day demand, including sales of gas on an interruptible basis, reached 147 million cubic feet on 10 January 1963. A reserve of liquefied petroleum gas is available to help control the demand on the pipeline during periods of peak loads.

### CONSTRUCTION

Gross expenditures on new construction for the gas service during the period under review were \$4,550,563. These expenditures were principally for extensions to serve new customers, including mains, services and meter installations, and for system improvements and renewals.

### GENERAL

The reduction in residential and commercial rates effective in April 1963 is expected to improve the competitive position of gas as a source of energy. For the next few years, the space heating market will continue to be the dominant factor in load growth; substantial increases in the interruptible load can also be anticipated.



## PASSENGER TRANSPORTATION SERVICE

The downward trend of urban passenger riding which developed shortly after the end of the war was reversed somewhat in 1956 and 1957; however, in 1958 the downward trend was once more apparent and has continued to the present.

During the period 30 March 1962 to 31 March 1963 the urban transit systems in Greater Vancouver and Greater Victoria carried 77,344,825 passengers, a decrease of 2.3% compared with the

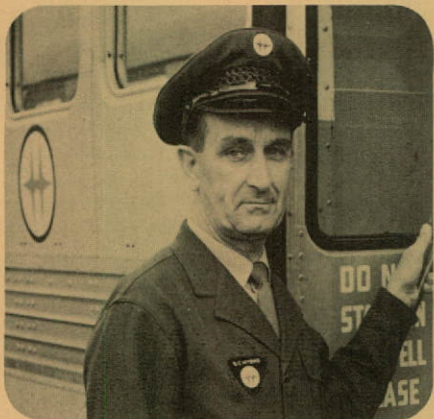
previous corresponding period; gross revenue declined 1.9%.

Gross revenues from the interurban bus service, operated by Pacific Stage Lines, amounted to \$2,752,408 and showed a substantial increase over the previous corresponding period. A through inter-city bus service between Vancouver and Nanaimo, operated jointly with Vancouver Island Coach Lines, was introduced in October 1962 and has been well received by the travelling public. Increased

activity in sightseeing and charter work, and increased travel by bus between Vancouver and Victoria, also contributed to the favourable results.

Nine new diesel buses were purchased during the year and nine more are on order as replacements and additions to the interurban bus fleet.

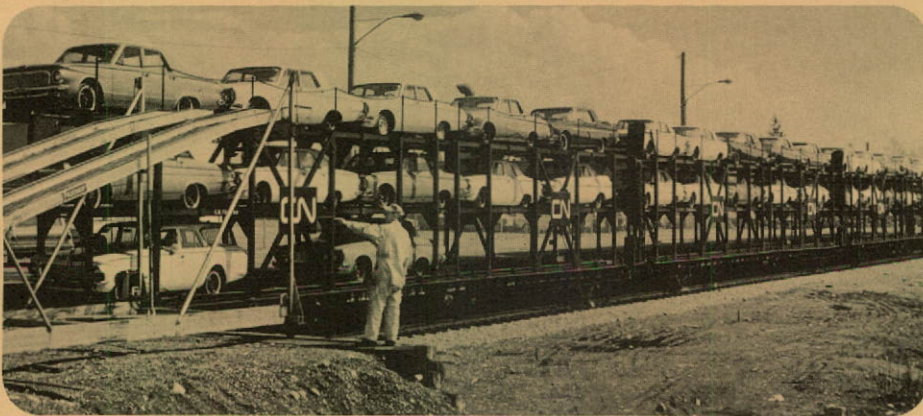
Pacific Stage Lines has withdrawn bus service to West Vancouver. This area is now served solely by buses of the Municipality of West Vancouver.



*Transit operator George Blair models uniform with the new insignia adopted this year. All vehicles have also been identified with the insignia.*



*A Pacific Stage Lines bus ready to disembark from the ferry at Horseshoe Bay on the new rapid service to Nanaimo on Vancouver Island.*



*Important addition to B.C. Hydro freight railway facilities in past fiscal year was construction of unloading centre in Burnaby for new tri-level rail cars used to ship automobiles.*

## RAIL FREIGHT SERVICE

Gross revenues from the rail freight service for the period 30 March 1962 to 31 March 1963 were \$5,325,286, up 6.2% over the previous corresponding period.

New routing and rate arrangements were completed to provide for the handling of lumber shipments from Pacific Great Eastern Railway via the Authority's line between New Westminster and Sumas. These arrangements represent an expansion in service without immediate addition to existing facilities.

During 1962 a new facility for unloading automobiles from tri-level freight cars was completed and brought into service on the Authority's Central Park Line.

The Authority acquired the old Queensborough Bridge from the City of New Westminster to secure continued access to freight customers located on Annacis Island and in the Queensborough district. The structure was renovated and converted from a combination highway and rail bridge to one for rail freight traffic only.

## EMPLOYEES

The amalgamation of the Company and the Commission, and the subsequent major reorganization, made it necessary to assess employee resources, particularly at the managerial and supervisory levels.

It is gratifying to record that by careful planning and transfers the amalgamation was accomplished without recourse to layoffs of permanent employees. By the autumn of 1962 the newly formed Authority was effectively staffed and a reduction of 60 employees had been achieved through normal retirements and resignations.



*Leonard J. Lascelles, staff accountant. He has retired after 51 years and one month of service.*

A "Moving Policy" was developed to meet the special conditions of the amalgamation; many employees at all levels moved to new work locations. A large number of other employees also accepted new or changed duties.

Reorganization and the realignment of responsibilities resulted in the need for comparative job and salary evaluation of all senior, supervisory and other administrative positions. This evaluation is nearing completion.

The several employee benefit plans of the two former organizations had certain distinctive characteristics; an employee benefit programme incorporating some

of the best features of the former plans is being developed. The new plans will provide improved sick leave benefits and improved pensions for the majority of employees; the cost of these improvements is to be shared equally by the employees and the Authority.

## COLLECTIVE AGREEMENTS

All the collective agreements expired and were renegotiated during the period. In particular, the agreements with the office employees and the electrical workers required extensive negotiations to merge a variety of working condi-



*John H. W. Matthews, claims manager, now in retirement, served 50 years, four months.*

tions. The thorough exploration by the bargaining teams to find satisfactory solutions is evidenced by the fact that, of the eight agreements settled, none was taken to conciliation board level. Contracts were concluded for terms of 24 months and 28 months, with increases in wage rates averaging 3% to 3½% per year.

Two interesting features of the new agreements are the introduction on a much wider scale of income continuance insurance covering lengthy periods of illness, and the sharing of the cost of Medical Services Association coverage

with employees of all unions instead of only certain unions as heretofore.

## RETIREMENTS

Seventy-six employees retired during the period; seven had over forty years of service, and four of these had over forty-five years of service. The four men are: Leonard J. Lascelles, Staff Accountant, 51 years and 1 month; John H. W. Matthews, Claims Manager, 50 years and 4 months; Edmund F. Key, Chief Load Dispatcher, 47 years and 4 months; Victor Usher, Load Dispatcher, 46 years and 3 months.



*Hugh H. Logan, railway superintendent, still in service after 51½ years, will be retiring in 1963.*

## GENERAL

The assessment by the Workmen's Compensation Board for 1962 has been reduced for the electric and gas operations, reflecting the effectiveness of the Authority's accident prevention and safety programme.

The Board of Directors and the Executive Management Committee express their sincere appreciation of the spirit of cooperation shown during the past year by the supervisory staff and other employees, especially in meeting the difficult conditions arising from the amalgamation of the Company and the Commission.

## LITIGATION

The court action (the action), commenced on 13 November 1961 by British Columbia Power Corporation, Limited (the Power Corporation), former holder of all the common shares of British Columbia Electric Company Limited (the Company), against the Attorney-General of British Columbia, the Company and others, still continues. The Power Corporation, with the leave of the Court, amended its claim in the action to allege that the British Columbia Hydro and Power Authority Act was ultra vires as well as the Power Development Act, 1961 and the Power Development Act, 1961, Amendment Act, 1962.

On 25 June 1962, in the course of the action, the Supreme Court of Canada, on appeal by the Power Corporation from a decision of the Court of Appeal of British Columbia, restored the Receiving Order made by the Supreme Court of British Columbia on 22 March 1962, and therefore Dr. H. L. Purdy remains as Receiver of the undertaking, property and interests of the Company for the purpose of preserving them pending the outcome of the action.

Among other matters in the action, the rights and obligations of the parties relating to the \$40,000,000 principal amount of Convertible Sinking Fund Debentures, 6% Series B, of the Company are in issue. The Authority called these debentures for redemption as of 18 June 1962 and, up to 31 March 1963, \$39,819,000 principal amount of debentures were surrendered against payment of the redemption price.

The presentation of evidence in the trial of the action was completed on 14 November 1962; argument was begun on 6 December 1962 and completed on 25 February 1963. The judge reserved judgment and has not yet given his decision.

## FINANCING

The Power Development Act, 1961, Amendment Act, 1962, required the Company to pay the sum of \$171,833,052 to the Power Corporation as compensation for all the common shares of the Company. By this Act the payment of \$110,985,045 on 4 August 1961 to the Power Corporation was declared to have been a partial payment; accordingly, the balance of \$60,848,007 was paid to the Power Corporation on 30 March 1962.

The Authority called the Convertible Sinking Fund Debentures, 6% Series B, of the Company for redemption as of 18 June 1962. The aggregate principal amount of the debentures was \$40,000,000 but the amount paid to the Trustee for the holders of the debentures included a premium of 5.7%, bringing the total payment to \$42,280,000.

British Columbia Electric Company Limited Parity Development Bonds aggregating \$15,359,700 were redeemed by the Authority during September 1962.

The aforementioned payment to the Power Corporation and redemptions of Series B Debentures and Parity Development Bonds required disbursements of \$118,487,707 during the past year. To meet these payments and to provide additional funds for the construction of plant the Authority issued bonds and short-term notes.

Three bond issues were sold by the Authority during the period 30 March 1962 to 31 March 1963. These were \$32,496,300 5¼% Revenue Bonds, Series A, due 1 May 1982; \$10,000,000 3¼% Sinking Fund Bonds, Series B, due 1 October 1979; and \$15,000,000 5% Sinking Fund Bonds, Series C, due 1 March 1993. Proceeds from the bonds issued during the period totalled \$53,792,419 at an average effective interest cost of 5¾%.

Notes held by the Province of British Columbia at 31 March 1963 totalled \$54,021,438. Notes held by financial institutions at 31 March 1963 amounted to \$43,076,562; most of these notes do not mature until 1964.

During the year Perpetual Callable Bonds in the principal amount of \$19,317,800 were surrendered in exchange for 25-year Callable Bonds due 1 August 1986, under the terms of Order-in-Council 2225 dated 28 August 1961.

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

During the year the Authority paid \$8,292,455 to Trustees in respect of sinking fund requirements of the various securities. All sinking fund obligations have been met.

## FINANCIAL STATEMENTS

The Balance Sheet and the Statement of Revenues and Expenses 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

## BALANCE SHEET AS AT 31 MARCH 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.....	\$1,048,238,680	
Unfinished construction.....	46,000,000	
	<u>1,094,238,680</u>	
Less -		
Accumulated depreciation.....	171,963,826	\$922,274,854

## CURRENT AND WORKING ASSETS:

Cash.....	1,116,054	
Temporary investments.....	702,287	
Accounts receivable and unbilled revenues (Note 2).....	18,550,008	
Materials and supplies at average cost.....	5,796,565	
Prepaid expenses.....	444,585	26,609,499

MORTGAGES AND OTHER DEFERRED ACCOUNTS RECEIVABLE.....		2,708,104
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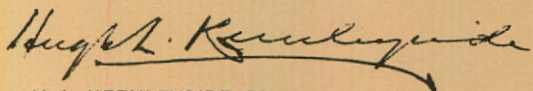
## INVESTMENT:

Shares of International Power and Engineering Consultants Limited, at cost.....		1,200,000
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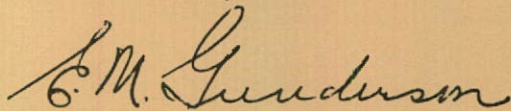
## DEFERRED CHARGES:

Unamortized discount and expense on long term debt and parity development bonds.....	18,042,410	
Other.....	224,196	18,266,606
		<u>\$971,059,063</u>

## APPROVED ON BEHALF OF THE BOARD:



H. L. KEENLEYSIDE, Director



E. M. GUNDERSON, Director

LONG TERM DEBT (Notes 3 and 5).....\$663,068,008

PARITY DEVELOPMENT BONDS, payable on demand (Note 5):

Issued by British Columbia Electric Company Limited —

5½% Series A due 1 September 1965.....\$85,650,400

Issued by British Columbia Power Commission —

5½% Series V due 15 August 1963..... 25,000,000 110,650,400

(Interest rates increased from 5% effective 5 July 1962)

NOTES PAYABLE (Notes 4 and 5):

Held by the Province of British Columbia..... 54,021,438

Held by others (U.S. \$40,000,000)..... 43,076,562 97,098,000

CURRENT AND ACCRUED LIABILITIES:

Accounts payable (Note 2)..... 22,415,438

Taxes on income (Note 6)..... 3,737,587

Interest accrued on long term debt, parity development bonds and notes payable..... 10,447,144

Sinking fund payments due within one year (Note 3)..... 10,707,417 47,307,586

CONTRIBUTIONS IN AID OF CONSTRUCTION..... 4,628,515

ACCUMULATED EARNINGS AND RESERVES AS AT DATE OF AMALGAMATION,

less subsequent charges (Note 7)..... 34,346,617

EXCESS OF REVENUES OVER EXPENSES,

appropriated for plant renewals and expansion for load growth – per statement attached..... 13,959,937

\$971,059,063

COMMITMENTS (Note 8)

LITIGATION (Note 9)

*The accompanying notes are an integral part of the above balance sheet.*

## STATEMENT OF REVENUES AND EXPENSES FOR THE PERIOD 30 MARCH 1962 TO 31 MARCH 1963

Gross revenues.....			<u>\$137,712,515</u>
Expenses:			
Salaries, wages and employee benefits.....			28,627,898
Materials and services.....			23,095,381
School taxes, grants, etc.....			8,405,059
Provision for depreciation.....			22,836,974
Interest on long term debt, parity development bonds and notes payable.....	\$43,012,365		
Amortization of discount and expense on long term debt and parity development bonds.....	1,409,366		
		44,421,731	
Less -			
Income from sinking fund investments.....	\$ 964,205		
Interest charged to construction.....	2,670,260	3,634,465	40,787,266
			<u>123,752,578</u>
Excess of revenues over expenses for the period, appropriated for plant renewals and expansion for load growth.....			<u>\$ 13,959,937</u>

## NOTES TO BALANCE SHEET AS AT 31 MARCH 1963

## NOTE 1 - CONSTITUTION:

Effective 30 March 1962 the Legislature enacted the British Columbia Hydro and Power Authority Act which amalgamated British Columbia Electric Company Limited (the Company) with British Columbia Power Commission (the Commission) and provided that the two should continue as one corporation under the name of British Columbia Hydro and Power Authority (the Authority). The Act provides that the Authority is possessed of, among other things, all property, rights and obligations of the Company and the Commission. Previously, under the provisions, effective 1 August 1961, of the Power Development Act, 1961 (later amended by the Power Development Act, 1961, Amendment Act, 1962) all the shares of the Company had been vested in Her Majesty the Queen in right of the Province.

## NOTE 2 - INCENTIVE AGREEMENTS:

The accounts receivable include an amount of \$876,060 (which includes interest) recoverable from a Trustee under incentive agreements entered into by the Company with certain of its former employees; provision for \$850,171 payable under these agreements is included in accounts payable.

## NOTE 3 - LONG TERM DEBT:

*Issued by British Columbia Electric Company Limited -*

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

3¼% Series "A" due 2 January 1967.....	\$ 25,430,000
3¼% Series "B" due 1 October 1967.....	7,890,000
3¼% Series "C" due 1 April 1968.....	13,732,000
3¼% Series "D" due 1 February 1969.....	13,676,000
3½% Series "E" due 1 March 1975.....	16,258,000
4% Series "F" due 1 July 1991.....	3,136,000
3¼% Series "G" due 1 December 1976.....	17,209,000*
4¼% Series "H" due 1 December 1977.....	13,040,000
4¼% Series "I" due 1 February 1979.....	13,274,000
3¼% Series "J" due 1 June 1980.....	13,596,000
4¼% Series "K" due 1 February 1981.....	27,304,000
5% Series "L" due 1 February 1982.....	37,071,000
5½% Series "M" due 2 January 1988.....	47,043,000
5½% Series "N" due 1 March 1989.....	28,643,000
6½% Series "O" due 1 April 1990.....	29,381,000
5¾% Series "P" due 1 May 1991.....	14,850,000
Perpetual Callable Bonds:	
4%.....	688,950
4¼%.....	290,600
4½%.....	445,700
4¾%.....	1,073,000
5%.....	1,008,750
5½%.....	600,050
25-year Callable Bonds due 1 August 1986:	
4% Series AA.....	11,311,050
4¼% Series AB.....	10,709,400
4½% Series AC.....	14,554,300
4¾% Series AD.....	25,340,400
5% Series AE.....	23,991,250
5½% Series AF.....	14,399,950
carried forward.....	\$425,946,400

## BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

## NOTES TO BALANCE SHEET AS AT 31 MARCH 1963 (continued)

## NOTE 3 (continued)

brought forward.....	\$425,946,400
Sinking Fund Debentures:	
5¾% Series A due 1 April 1977, after deducting debentures redeemed in accordance with sinking fund requirements.....	37,600,000
<i>Issued by British Columbia Power Commission -</i>	
Bonds:	
3% Series A due 1 October 1967.....	7,000,000
3% Series B due 1 November 1968.....	6,000,000
3¼% Series C due 15 September 1991.....	3,000,000
4% Series D due 21 May 1992.....	1,000,000
4% Series E due 15 June 1992.....	1,000,000
4% Series F due 15 September 1992.....	1,500,000
4% Series G due 1 November 1988.....	10,000,000*
3¼% Series H due 15 July 1989.....	6,300,000*
3¼% Series J due 4 July 1975.....	10,000,000
5% Series MB due 15 September 1964.....	3,231,000
5% Series MC due 15 September 1982.....	5,149,000
5% Series MD due 15 September 1992.....	18,724,000
5% Series N due 15 September 1992.....	10,000,000
3% Series S due 1 April 1976.....	17,738,000
3½% Series T due 1 April 1977 (payable in Canadian or United States funds at option of holder).....	9,285,000
Debentures:	
3¼% Series K due 15 June 1986.....	20,000,000*
4¾% Series L due 15 April 1987.....	25,000,000*
3½% Series P due 1 February 1988.....	20,000,000*
4½% Series U due 15 July 1964.....	4,000,000*
<i>Issued by British Columbia Hydro and Power Authority -</i>	
Bonds:	
5¼% Series A due 1 May 1982.....	32,496,300
3¼% Series B due 1 October 1979.....	10,000,000
5% Series C due 1 March 1993.....	15,000,000
Less -	699,969,700
Exchange discount incurred on long term debt payable in United States funds.....	2,724,732
Less -	697,244,968
Sinking funds on deposit with Trustee, Minister of Finance of the Province of British Columbia - applicable to certain bonds and debentures issued by British Columbia Power Commission.....	23,469,543
	<u>\$673,775,425</u>
<i>Classification on balance sheet -</i>	
Long term debt.....	\$663,068,008
Sinking fund payments due within one year, included in current and accrued liabilities.....	10,707,417
	<u>\$673,775,425</u>

\*Payable in United States funds and carried at par of exchange.



NOTE 4 – NOTES PAYABLE:

Notes payable have not been included in current and accrued liabilities as it is intended to repay these from the proceeds of short or long term financing rather than from current assets. On 1 May 1963 \$25,000,000 of such notes were repaid from the proceeds of an issue of 5¼% Series D bonds due 1 May 1993.

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 – TAXES ON INCOME:

The Company and its principal subsidiary, British Columbia Electric Railway Company Limited, were subject to taxation under the Canadian Income Tax Act prior to becoming Crown corporations on 1 August 1961. Provisions were made in the accounts of the two companies for taxes on income estimated to be payable up to 31 July 1961. Provisions were also made for estimated deferred taxes on income; however, such provisions were not required after 1 August 1961 and they were transferred to stabilization of rates and contingency account (Note 7). Both the unrequired provisions for deferred taxes on income and the provisions for taxes payable on income are subject to change but no adjustment will be made until all final assessments have been received and agreed.

Although returns of the companies have been assessed up to and including the year 1960, appeals have been filed against the assessments for that year and several previous years.

NOTE 7 – ACCUMULATED EARNINGS AND RESERVES AS AT DATE OF AMALGAMATION, less subsequent charges:

British Columbia Electric Company Limited –

Stabilization of rates and contingency account.....	\$15,503,762	
Excess of revenues over expenses from 1 August 1961 (Note 1) to 29 March 1962.....	15,583,941	\$31,087,703

British Columbia Power Commission –

Contingency reserve.....	\$2,152,318	
General reserve.....	3,613,446	
Other reserves.....	721,163	6,486,927

Add –

Credit arising from re-statement, at the Canadian dollar proceeds at dates of issue, of liability in respect of bond and debenture issues payable in United States funds.....	527,015	
	<u>7,013,942</u>	

Deduct –

Engineering surveys on abandoned projects written off.....	274,804	6,739,138
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Adjusted balance as at 29 March 1962..... 37,826,841

Deduct –

Charges in respect of redemption of \$40,000,000 principal amount  
of Convertible Sinking Fund Debentures, 6% Series B (Note 9 (a)):

Premium paid on redemption.....	2,280,000	
Unamortized discount and issue expenses, and redemption expenses.....	1,200,224	3,480,224

Balance as at 31 March 1963..... \$34,346,617

**NOTES TO BALANCE SHEET AS AT 31 MARCH 1963** (continued)

**NOTE 8 - COMMITMENTS:**

Purchase commitments of the Authority for capital projects and inventories of materials and supplies aggregated approximately \$36,000,000 as at 31 March 1963.

Subsequent to 31 March 1963 the Authority entered into a contract of approximately \$73,000,000 for the construction of a dam at Portage Mountain on the Peace River.

**NOTE 9 - LITIGATION:**

*(a) Court action -*

The court action commenced on 13 November 1961 by British Columbia Power Corporation, Limited (the Power Corporation), former holder of all the common shares of the Company, against the Attorney-General of British Columbia, the Company and others, still continues. The Power Corporation seeks declarations, inter alia, that the three Acts of the Provincial Legislature referred to in Note 1 are ultra vires; alternatively, that the compensation fixed by legislation and paid for the common shares of the Company was insufficient; and clarifying the rights and obligations of the various parties involved in matters relating to \$40,000,000 principal amount of Convertible Sinking Fund Debentures, 6% Series B, of the Company. The Authority called all these debentures for redemption as of 18 June 1962, and payment of \$42,280,000 (including redemption premium of \$2,280,000) was made to the order of the Trustee under the Debenture Trust Agreement. Up to 31 March 1963, \$39,819,000 principal amount of debentures had been surrendered to the Trustee against payment of the redemption price.

The effect of the legislation referred to in Note 1, and of the litigation referred to above, in relation to the provisions of the Trust Deeds of the First Mortgage Bonds and the Sinking Fund Debentures of the Company, has not yet been determined.

Judgment has not yet been given in the court action.

*(b) Receiver -*

In the course of the court action, on 25 June 1962 the Supreme Court of Canada, on appeal from the Court of Appeal of British Columbia, restored the Order of the Supreme Court of British Columbia appointing a Receiver of the undertaking, property and interests of the Company for the purpose of preserving them pending the outcome of the court action. As at 31 March 1963 the assets involved in the receivership represented approximately three-quarters of the total assets of the Authority.

PRICE WATERHOUSE & CO.

MARINE BUILDING  
VANCOUVER 1, B.C.

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 1963 and the related statement of revenues and expenses for the period 30 March 1962 to 31 March 1963. 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.

Except for the possible effect of the final determination of the matters referred to in Notes 6 and 9 to the balance sheet, in our opinion the accompanying balance sheet and related statement of revenues and expenses present fairly the financial position of the Authority as at 31 March 1963 and the results of its operations for the period 30 March 1962 to 31 March 1963 in accordance with generally accepted accounting principles.

*Price Waterhouse & Co.*

Vancouver, B.C.  
May 24 1963

Chartered Accountants.  
Auditors.

## FINANCIAL STATISTICS

(in millions of dollars)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
<b>SOURCES OF REVENUE</b>										
Electric - residential.....	18.0	20.3	23.3	26.3	28.7	33.0	36.4	38.2	40.0	37.4
- other.....	21.6	23.7	25.9	29.0	33.1	39.1	44.1	46.6	50.3	55.1
Gas.....	4.7	4.9	5.3	5.9	8.1	12.2	17.0	19.7	22.5	24.6
Passenger transportation.....	15.0	14.9	13.4	13.7	13.9	14.3	14.6	13.9	13.4	13.9
Rail freight.....	3.4	3.5	4.5	5.2	4.9	5.1	4.9	4.8	5.0	5.3
Miscellaneous.....	1.2	1.2	1.5	1.5	2.3	1.8	2.2	3.0	2.1	1.4
Total.....	63.9	68.5	73.9	81.6	91.0	105.5	119.2	126.2	133.3	137.7
<b>DISPOSITION OF REVENUE</b>										
Employment costs, materials and services.....	32.0	31.5	32.0	35.1	39.0	40.4	45.6	46.1	47.9	51.7
School taxes, grants, etc. (including general property taxes prior to 1 January 1962).....	3.0	3.3	3.5	3.9	4.6	5.5	6.2	6.8	7.1	8.4
Provision for depreciation.....	8.7	9.3	10.2	11.1	13.6	17.0	18.9	20.7	21.8	22.8
Taxes on income.....	6.3	7.7	8.8	9.3	7.6	9.2	11.8	12.0	2.8	—
Interest and other costs on debt.....	7.0	7.9	8.8	11.1	17.8	21.7	25.0	28.4	35.8	43.5
Interest charged to construction (deduct).....	.6	.8	1.7	3.5	4.6	4.9	4.7	3.1	3.3	2.7
Dividends on preferred shares.....	2.2	2.8	3.5	3.8	4.4	5.0	5.0	5.0	1.7	—
Dividends on common shares.....	2.6	3.2	4.2	5.3	5.8	6.3	7.2	8.1	1.9	—
Employed in the business.....	2.7	3.6	4.6	5.5	2.8	5.3	4.2	2.2	17.6	14.0
<b>EXPENDITURES ON PLANT.....</b>										
	38.1	45.3	65.8	151.3	157.1	98.8	81.0	64.3	57.1	54.2

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

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
<b>ELECTRIC</b>										
Generating capacity at year-end (rated kw in thousands) (1)										
Hydro.....	618	663	692	799	987	1,023	1,172	1,296	1,295	1,295
Thermal.....	36	40	46	57	84	110	253	268	268	570
Total.....	654	703	738	856	1,071	1,133	1,425	1,564	1,563	1,865
Integrated system peak one-hour demand (kw in thousands).....	547	624	709	815	885	1,020	1,064	1,083	1,154	1,169
Customers at year-end (in thousands).....	310	326	344	366	385	403	420	432	443	459
Electricity sold (kwh in millions).....	2,426	2,715	2,984	3,261	3,769	4,471	4,934	5,149	5,540	6,059
Proportionate sales by class of customer (percentages)										
Residential.....	32	33	36	38	36	33	33	33	33	32
Other systems (largely residential).....	2	2	2	2	2	2	2	2	1	2
Commercial, industrial, etc.....	56	58	60	60	62	65	65	65	66	66
Export (2).....	10	7	2	—	—	—	—	—	—	—
Residential service										
Average annual kwh use per customer.....	3,008	3,359	3,798	4,092	4,240	4,455	4,658	4,723	4,829	5,029
Average revenue per kwh (in cents).....	2.3	2.3	2.2	2.1	2.1	2.2	2.2	2.2	2.2	1.9
(1) Excludes electricity available from other systems. Rated capacity has been exceeded on occasion.										
(2) Less than ½ of 1% 1957 through 1963.										
<b>GAS</b>										
One-day capacity at year-end (therms in thousands)										
Mainland – firm pipeline contracts (3).....	—	—	—	400	575	575	1,000	1,540	1,780	1,780
– plant.....	96	96	101	160	190	190	320	320	250	250
Greater Victoria – plant.....	29	18	18	18	27	27	27	27	27	27
Peak one-day demand (therms in thousands)										
Mainland system – including interruptible.....	74	85	90	185	330	728	828	934	1,287	1,580
– excluding interruptible.....	74	85	90	180	288	663	690	733	1,081	1,342
Greater Victoria system.....	13	12	13	14	13	15	16	13	21	18
Customers at year-end (in thousands).....	63	61	60	63	79	96	111	120	129	137
Gas sold (therms in millions).....	18	19	21	30	62	103	157	186	217	240
Average revenue per therm (in cents).....	25.8	25.5	25.1	19.4	13.0	11.8	10.8	10.6	10.2	10.3
(3) For the purpose of this table, quantities converted to therms on basis of 100 cu. ft. to one therm.										
<b>PASSENGER TRANSPORTATION</b>										
Vehicles at year-end										
Urban – street cars.....	57	36	—	—	—	—	—	—	—	—
– buses.....	350	338	325	323	340	346	341	342	332	334
– trolley coaches.....	327	327	327	351	351	351	351	327	327	317
– total.....	734	701	652	674	691	697	692	669	659	651
Interurban rail passenger cars.....	32	21	17	11	—	—	—	—	—	—
Interurban buses.....	88	84	71	69	69	69	67	71	75	81
Passengers carried (in millions)										
Urban.....	109.4	103.6	99.8	100.9	102.9	98.4	89.3	82.4	78.3	77.3
Interurban rail.....	3.4	1.4	1.1	1.0	.8	—	—	—	—	—
Interurban bus.....	4.2	3.8	3.4	3.4	3.3	3.1	2.7	2.6	2.5	2.5
Revenue miles run – urban (in millions).....	24.0	24.2	23.6	23.1	23.3	23.6	22.6	21.7	20.6	20.5
Passenger revenue per mile – urban (in cents).....	52.6	53.1	48.8	50.5	51.1	52.4	56.5	54.3	54.2	54.0
<b>RAIL FREIGHT</b> (tons in thousands).....	1,093	1,161	1,431	1,617	1,314	1,276	1,359	1,427	1,527	1,567
<b>EMPLOYEES AT YEAR-END</b> .....	5,826	5,634	5,936	6,933	7,340	6,750	6,393	6,197	6,095	5,969

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.



C  
S  
*British Columbia Power Corporation, Limited*

*970 Burrard Street  
Vancouver 1, Canada*

August 10, 1961.

Dear Shareholder:

You are aware of the sad death of our Chairman, Mr. A. E. Grauer, on 28th July, 1961. Your Directors have appointed me to fill the vacancy.

On 1st August the Government of British Columbia introduced in the Legislative Assembly a Bill for the expropriation by the Crown of all the issued shares in the capital of British Columbia Electric Company Limited, of which your Corporation owned all the common shares. The Bill became law on 3rd August.

The Act of expropriation appears to provide, in effect, for payment for the common shares in the B. C. Electric and for all the other assets of your Corporation (if it elects to sell them) of a sum equal to the product of the number of issued shares in the capital stock of the Corporation as of 1st August (4, 726, 261) multiplied by \$38, a total of \$179, 597, 918. Of this, \$110, 985, 045 was paid on 4th August; it has been placed temporarily in short-term investments. The remainder will carry interest at 5 per cent per annum from 1st August, 1961 until the date of payment or 31st July, 1963, whichever is earlier.

Your Directors are not satisfied that the compensation offered is adequate and they propose to urge the Government to give favourable consideration to an increase.

You may be interested in the annexed copy of a telegram sent by the President of the Investment Dealers Association of Canada to the Hon. W. A. C. Bennett, Premier of British Columbia.

The possibilities of the Corporation embarking on new lines of business that are included among its objects are under consideration. If attractive proposals are developed, in due course shareholders will be given the opportunity to decide whether they wish to withdraw their interests from the capital or to continue with the Corporation in its new enterprises.

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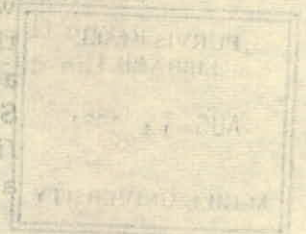
As soon as I have anything concrete to report I shall write you again.

By arrangement with your Board, Mr. H. L. Purdy, President of the Corporation, has resigned that office in order to continue as President of the B. C. Electric.

Yours very truly,

*A. Bruce Robertson*

A. Bruce Robertson,  
Chairman and President.





TELEGRAM SENT TO HON. W.A.C. BENNETT, PREMIER OF BRITISH COLUMBIA:

As President of the Investment Dealers Association of Canada, I propose to release the following statement to the press on Monday, August 7th, at 8:00 P.M. (E.D.T.) -

"The expropriation of the British Columbia Electric Company Limited by the Government of the Province of British Columbia, without provision for appeal by investors who were arbitrarily deprived of their securities strikes at the very foundation of Canadian justice. The Investment Dealers Association of Canada believes that the principles of the Bill of Rights have been grossly violated, and that the Government of the Province of British Columbia should enter into the negotiations in accordance with the provisions of the Power Act 1955 of that Province.

"The Power Act 1955 of the Province of British Columbia provides ways and means of expropriating a utility. West Canadian Hydro Electric Corporation was taken over by the British Columbia Power Commission under the provisions of the Power Act after legal procedures provided therein had been fully utilized by the shareholders. In this case the value was based on three main factors set out by Mr. Justice Wilson, of the Supreme Court of British Columbia.

- (1) Future earnings prospects of the company.
- (2) Historic cost and replacement cost of the physical structures and lands.
- (3) Prices paid for similar utility properties in recent years.

"These considerations are fair and equitable. However, the expropriation of the British Columbia Electric Company Limited provides no right of appeal. It seems inconceivable in a democratic society that any Government can expropriate the properties of others on its own terms, without provision for appeal.

"The British Columbia Electric Company Limited has issued large amounts of debt and preferred shares under legal and binding terms. Some of the company's bonds carry the privilege of conversion into British Columbia Power Corporation common shares, for which no consideration has been given in this take-over.

"The company's preferred shares provided the many citizens who bought them with a dividend tax credit of 20% under Federal law, which was a significant consideration in their decision to purchase these shares. Dividends received by Canadian corporate shareholders are totally exempt from tax, the corporation tax being already paid. Since the Government of the Province of British Columbia is exchanging fixed interest bearing debentures for these shares, these advantages are lost and the shares have declined precipitously.

"The price set by the Government does not recognize the fact that many residents of British Columbia paid as high as \$46.00 per share for treasury stock of the British Columbia Power Corporation, a price which was approved by the British Columbia Government's own agents, the Public Utilities Commission.

"In the interests of justice, provision should be made for arbitration and independent appraisal of expropriated assets. If the Government of the Province of British Columbia were to provide the machinery for arbitration, as we suggest, it would greatly help to restore the shaken confidence of Canadian and foreign investors in the integrity of this Government and for the conditions of investment in private industry in British Columbia."

The Investment Dealers Association of Canada views the action of the Province of British Columbia as arbitrary, unfair, and inconsistent with the Canadian tradition of equity and legal recourse.

I earnestly hope that after considering this release you will wish to discuss the matter with me.

ARTHUR J. MILNER

Toronto, Ontario.  
August 4th, 1961.



*Water of the Peace River will be diverted in fall of 1963 around a 3,000 foot section of riverbed to make way for construction of Portage Mountain Dam. Water will be diverted through 800 foot channel to three 48-foot diameter tunnels separated by tall rock "noses" shown in top photo. Flowing 2500 feet through the right bank, river water will rejoin the existing course downstream from damsite as shown in the large color picture. Downstream from damsite (left photo) the river continues its winding journey past the towering walls of the historic old Canyon.*

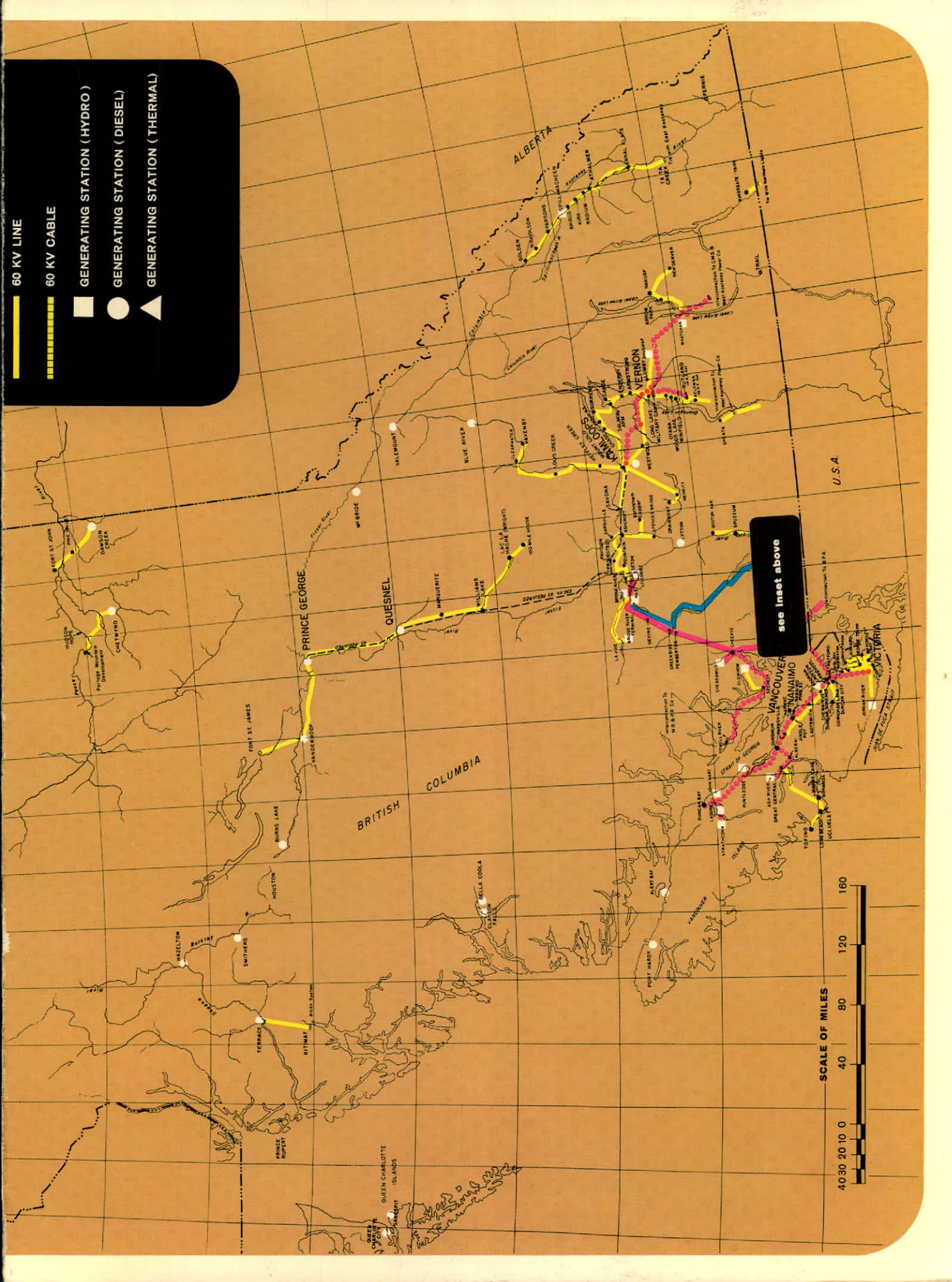
60 KV LINE

60 KV CABLE

GENERATING STATION (HYDRO)

GENERATING STATION (DIESEL)

GENERATING STATION (THERMAL)



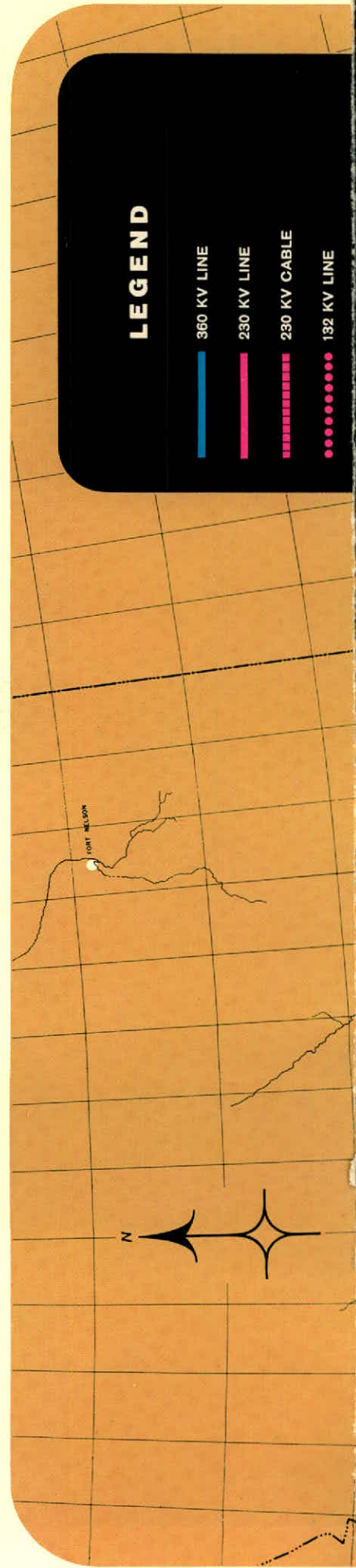
see inset above



( INSET )



**BRITISH COLUMBIA HYDRO AND POWER AUTHORITY**  
ELECTRIC SYSTEM MAP



**LEGEND**

- 360 KV LINE
- 230 KV LINE
- 230 KV CABLE
- 132 KV LINE

