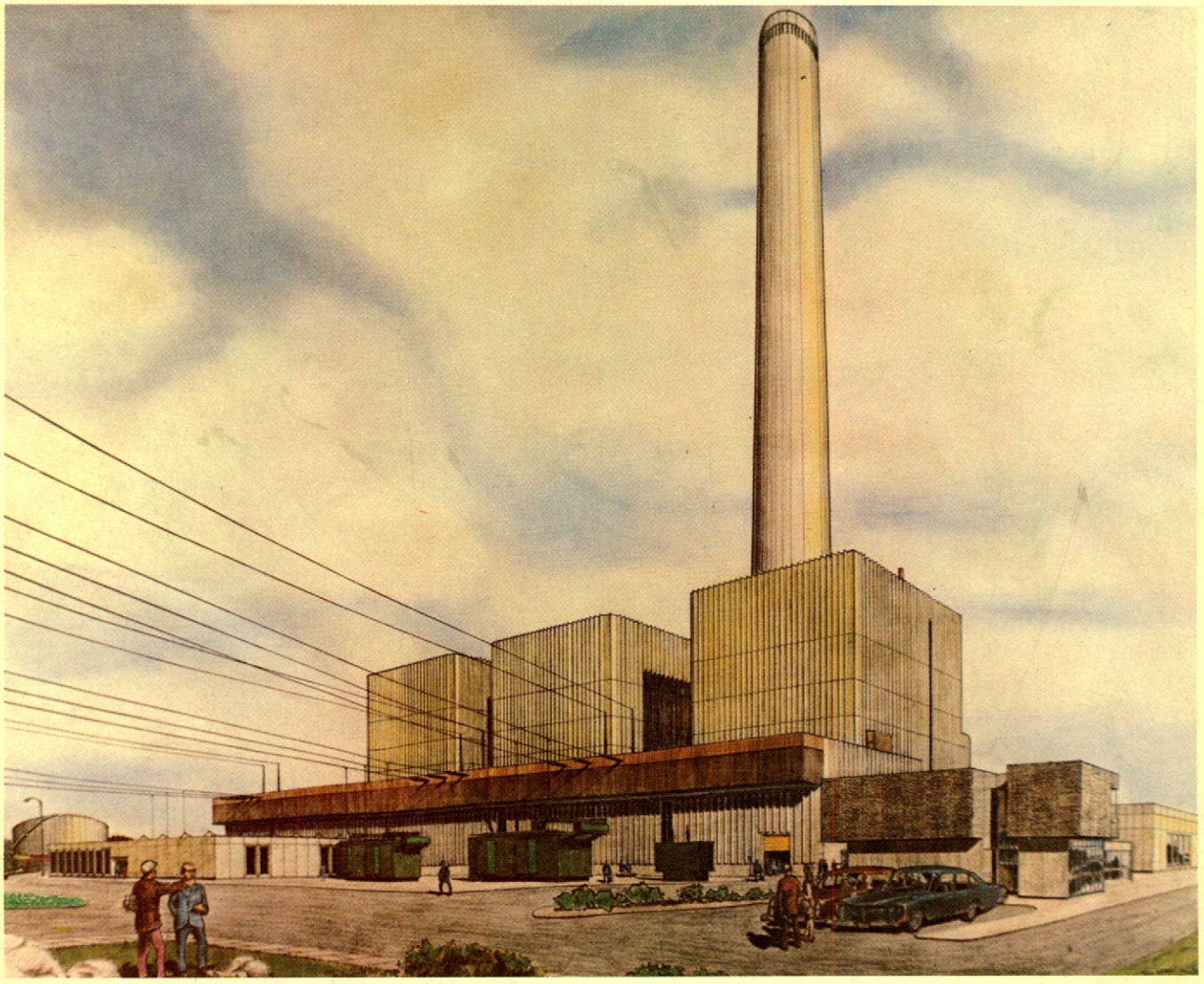
ANNUAL REPORT
1973



THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

THE COMMISSION

Chairman
HON. J. STEWART BROOKS

Vice-Chairman
LOUIS E. LANDRY

Commissioners
MRS. OWEN SMITH
EDMOND LANDRY
HUGH MORRIS
JACK P. ENSOR
WILSON WELDON

Secretary of the Commission
P. J. BURNS

EXECUTIVE OFFICERS

General Manager
A. J. O'CONNOR

Chief Engineer
L. J. WHALEN

DIVISIONS

Comptroller
L. M. TOTTEN

Design and Construction
G. H. D. GANONG

Distribution
R. A. TONER

Executive Assistant to the General Manager
L. D. CORBETT

Personnel
H. V. McINTYRE

Production and Planning
F. C. MacLOON

Purchasing and Supply
B. J. MacMILLAN

Solicitor
A. McF. LIMERICK

Treasurer
W. A. WILLIAMSON

AUDITORS
TOUCHE ROSS & CO.

OFFICES

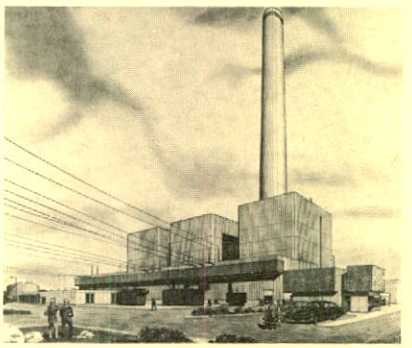
Head Office:
FREDERICTON, NEW BRUNSWICK

Distribution and Marketing Branches:

Northern	CHATHAM
Southern	SAINT JOHN
Eastern	MONCTON
Western	WOODSTOCK

Area Generation Headquarters:
MACTAQUAC
SAINT JOHN
GRAND LAKE / CHATHAM
GRAND FALLS
DALHOUSIE

OUR COVER



Artist's conception of Coleson Cove Thermal Generating Station located in the Greater Saint John area.

PRINTED IN NEW BRUNSWICK, CANADA, by UNIPRESS

ANNUAL REPORT

June 13, 1973

To His Honour H. J. Robichaud
Lieutenant Governor of New Brunswick

May it please your Honour:

The New Brunswick Electric Power Commission begs leave to submit, in accordance with the Electric Power Act, Chapter 41, of Statutes of New Brunswick 1961-62 the following report for the twelve month period ended March 31, 1973.

Your obedient Servant,

J. Stewart Brooks

J. Stewart Brooks, Chairman
The New Brunswick
Electric Power Commission

CONTENTS

THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

Si vous préférez une version française, nous nous ferons un plaisir de vous la faire tenir à votre demande—Service d'Informations, Commission d'Énergie Électrique du Nouveau-Brunswick.

The Hon. Richard B. Hatfield, Premier of New Brunswick, addressing public gathering at the opening of the High Voltage Direct Current Converter Station at Eel River in Northern New Brunswick.

CHAIRMAN'S FOREWORD

It is a pleasure to report on the affairs of The New Brunswick Electric Power Commission at this period in its history. Due to the progression of in-province power demands on the Commission and its expanded operations with large neighboring utilities, dynamic transformation is taking place in every facet of its progress.

This report gives further information on epoch-making developments, which in the next few years will approximately double the installed capacity of the Commission and will ensure that our customers will continue to have a reliable source of supply.

In general, the Commission has been able to hold the line on rate increases, despite continuing increases to the Commission in cost of money, labour, fuel and other materials. An exception occurred this fiscal year when an increase was made in commercial rates. In July the Commission replaced three commercial rates with two standard rates covering all commercial applications. The new commercial rate schedules are designed to be competitive with rates in our regional area and lend themselves to lower costs, e.g. demand meters are eliminated for services where the demand is less than 10 kilowatts.

During the year a fuel adjustment clause on all electricity bills was introduced. The clause is designed to protect the Commission from a loss position in the immediate future. The new clause will reflect future increases or decreases in the price of fuel burned in Commission thermal generating stations. The adjustment applies up or down only if the cost of fuel rises above the April 1, 1972 price or drops below that of April, 1970. To date of this report there has not been implementation of this clause.

On September 12, 1972, the Commission was host to the general public and representatives of Government, business and industry at an impressive ceremony marking the start of heavy construction of the Coleson Cove Generating Station. The following month, the high voltage direct current converter station at Eel River was officially opened in a joint ceremony by the Hon. Richard B. Hatfield, Premier of New Brunswick and Walter G. Ward, Chairman of the Board and Chief Executive Officer of Canadian General Electric Company.

It is appropriate to note here that a long time employee and Executive Officer of the Commission, Mr. P.O. Beaton, Assistant General Manager and former Comptroller, retired in July. Mr. Beaton served the Commission with great distinction over many years.

The Commission was saddened last November at the untimely death, during his term of office, of the Honorable George E. McInerney, Q.C. Mr. McInerney served as Chairman of the Commission since 1970, having been a member of the Legislative Assembly from 1952 until his death. Mr. McInerney had vigorously pursued the affairs of the Commission and provided leadership during his tenure as Chairman.

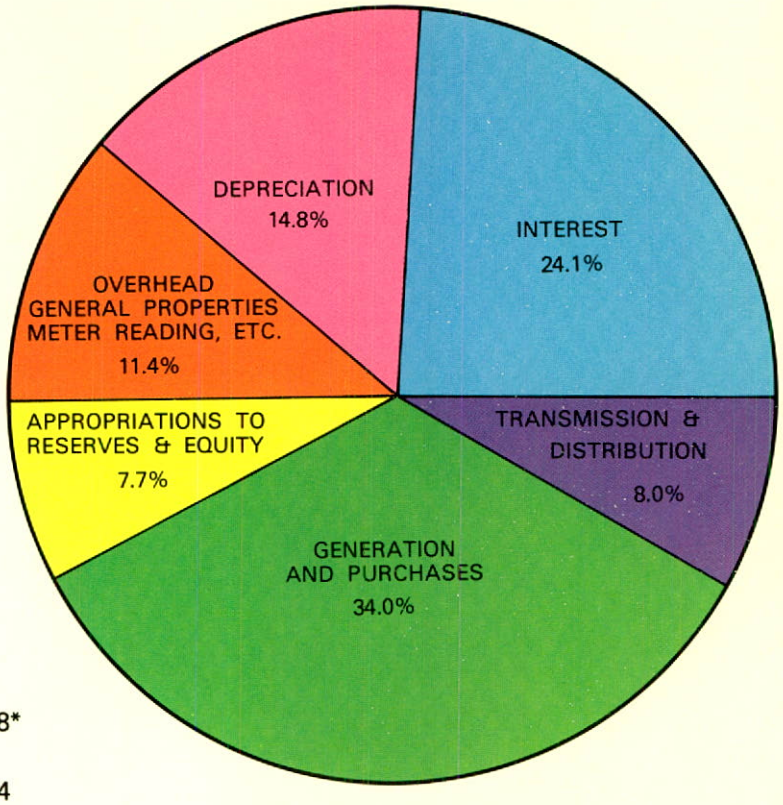
My thanks are extended to all members of the Commission and staff, who have worked energetically with me in the activities of the past months and have cooperated in planning and preparations for the coming year.

J. Stewart Brooks.

J.STEWART BROOKS,
Chairman

HIGHLIGHTS

TO MARCH 31,1973



DISTRIBUTION OF REVENUE

	1973	1972
Total Revenue	$ 78,990,893	$ 68,797,638*
Total expenditures & appropriations	78,268,439	68,190,854
Real property and business taxes	989,696	879,810
Provincial sales tax paid	589,727	523,609
Salaries and Wages paid	16,175,830	14,590,775
Fixed assets including work in progress.	483,264,042	452,397,516

*Includes $1,177,948 gain on sale of assets

FINANCE

The Commission's revenue had a very rapid growth of 16.8% during the year. The major contributions to this growth were large increases in export sales, and in sales to small industrial, residential, and commercial customers in the Province, accented particularly by a large number of all-electric installations, in shopping centre complexes as well as in office and apartment buildings.

Completion of a High Voltage Direct Current tie with Hydro Quebec enabled the Commission to purchase substantial quantities of economical power from that Utility. Combined with an excellent water year on the Saint John River, this resulted in a reduction in generation from thermal plants.

An amount of $2,871,000 was charged to operations and credited to the Water Equalization Reserve to be available whenever below average water flows occur in future years.

After making this adjustment, the Commission's net income amounted to $3,175,872 of which $2,453,418 was deducted as appropriations to reserves for water equalization, insurance and contingencies.

Earnings retained in the business at the end of the year amounted to $7,185,102 as opposed to $6,462,648 on March 31, 1971.

ERRATA last line centre column should read:
on March 31, 1972

During the year, protection against any further escalation of fuel prices was provided by the implementation of a Fuel Escalation Clause, which provides for commensurate increases in energy prices to the Commission's customers for any further increase in fuel prices.

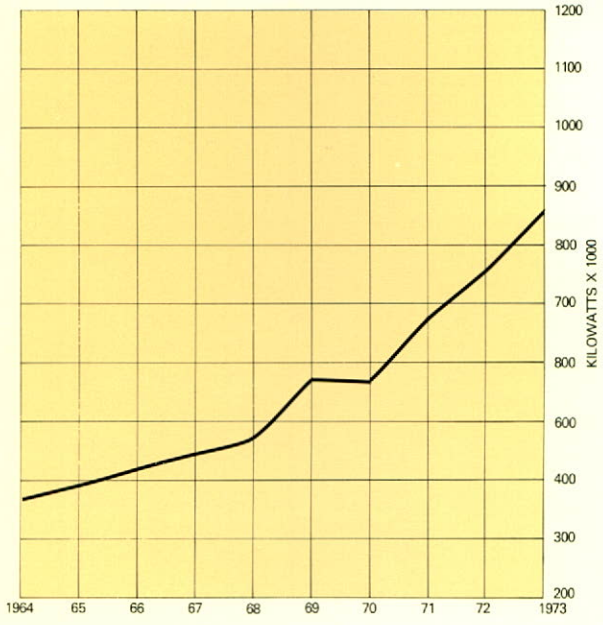
During October 1972 an issue of $20,000,000, 8-3/8% Debentures was sold in Canada with a term of 25 years, the proceeds to be used for the purchase of Capital Assets.

In addition, the increased revenues provided extra funds that met, in part, our Capital expenditures. The bank credits were increased in anticipation of heavier capital requirements in the ensuing year, and continued to permit a degree of flexibility which allows the Commission to plan and make best use of its cash flow.

OPERATIONS

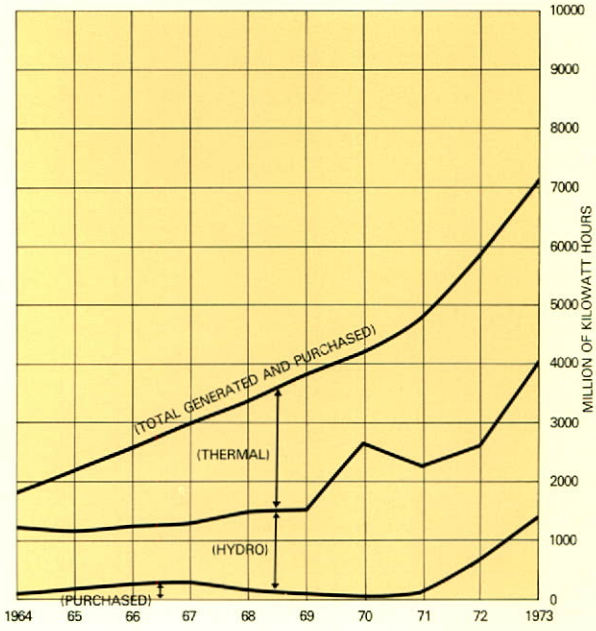
Figures are for fiscal years ending March 31.

GROSS PEAK DEMAND AND EQUIVALENT RATE OF GROWTH



RATE OF GROWTH 16.1%
compounded over period shown

KILOWATT HOURS GENERATED AND PURCHASED



A gross peak of 1,318,000 kilowatts was recorded on the Commission's system on December 12, 1972 followed by a peak system firm demand of 793,500 kilowatts for the fiscal year on December 18, 1972.

Generation from hydro plants totalled 3,130,003,300 kilowatthours, an increase of 61% over the previous year, due to the addition of the fourth unit at the Mactaquac Generating Station and the very favourable streamflow conditions for most of the year.

Generation from all thermal generating stations totalled 2,593,346,000 kilowatthours. During the year, approximately 3,500,000 barrels of oil and 270,000 tons of coal were consumed in the generation of power. A program of heavy turbo-generator maintenance was completed during the latter part of the year which included the three largest units in the thermal stations. That accelerated program fulfills the mandatory four-year inspections required on these units. Purchases of energy from all sources increased during the year by 121.3%, due mainly to a firm purchase contract with Hydro Quebec, with lesser amounts purchased over interconnections with Nova Scotia and New England.

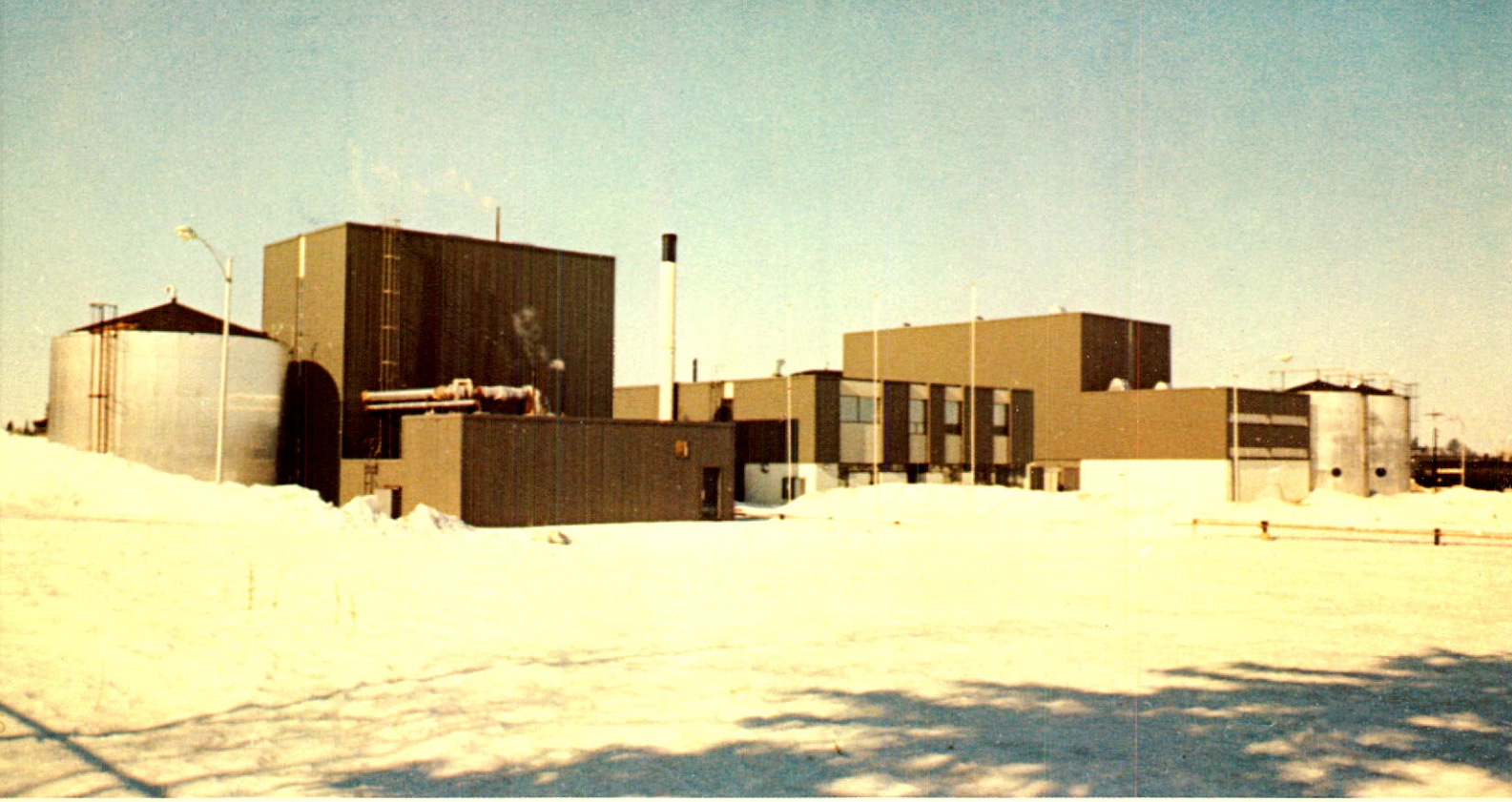
The high voltage direct current converter station at Eel River was put in service on July 28, 1972, linking the New Brunswick and Quebec power systems. Firm contract purchases began with Hydro Quebec at 265,000 kilowatts in November, 1972 and within a year will be increased to over 300,000 kilowatts.

Supplemental energy is also being purchased in substantial quantities.

Sales to other systems continued at a high level, increasing 53.4% to 1,995,008,807 kilowatthours.

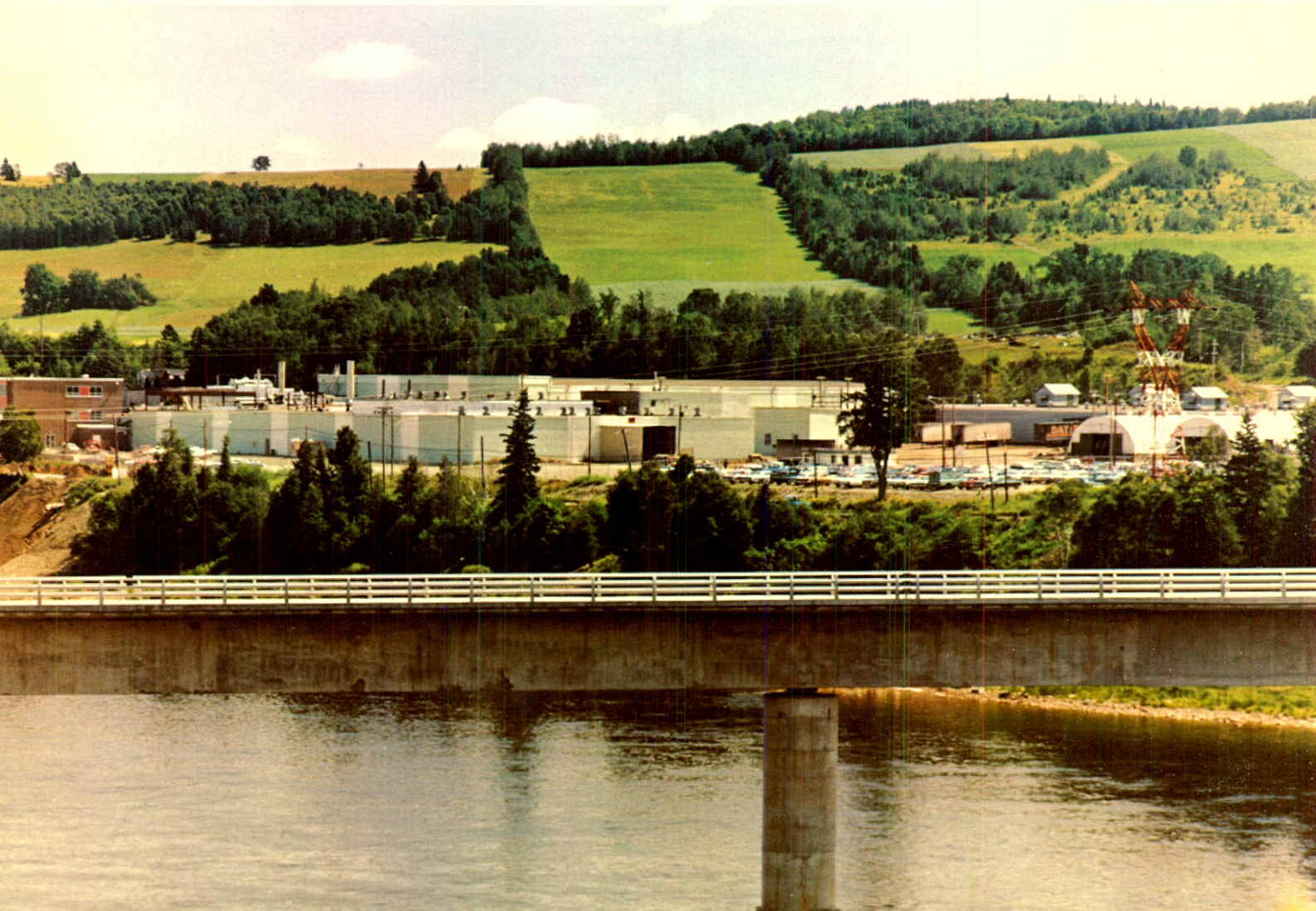
Energy distributed from the distribution system (excluding losses, wholesale sales and transmission line sales but including Commission use in Branches) increased by 14.2% to 1,726,372,400 kilowatthours.

Major industrial sales during the year continued to be affected by world conditions, particularly a poor market in the pulp and paper industry, and a shutdown of some base-metal mining operation. These conditions are now changing rapidly for the better. No new major industrial customers were added during the year. This was counteracted, however, by a good year in chemicals, oil refining and general industry.



CIBA—a world-renowned chemical producer, manufactures adhesives that form binder for a flake-board plant situated nearby.

McCain's Potato-Processing Plant at Florenceville, N.B. This company is one of the largest potato processors in the world with products shipped internationally.



SALES

Energy demand has shown a marked increase over the last reporting period. During this fiscal year, firm sales of electrical energy increased over 500 million kilowatt hours or 12.8%. The number of single residence all-electric dwellings at March 31, 1973 stood at well over 5,000 compared to 2,520 at last reporting period, denoting over a 100% increase. The number of all-electric residential installations, including single, duplex, triplex, row-housing, cottages, mobile homes and apartment units, is 6,095 compared to 3,609 units last year. Total residential energy sales showed an increase of 10.0% bringing the annual consumption per customer to 5,960 kilowatt hours.

Industrial demand maintained a modest increase during the year with several new plants starting operations. These additions were mainly in the light industrial area and included textiles and die-casting operations.

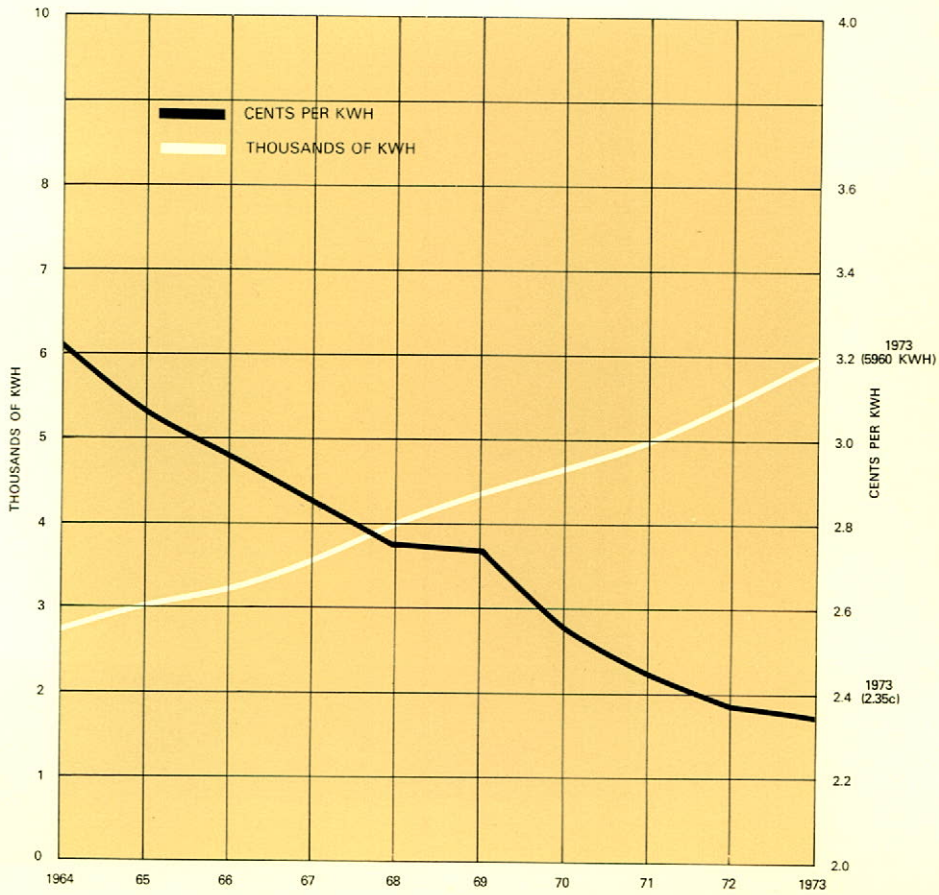
Commercial energy sales and street lighting showed increases of 15.0% and 9.6% respectively. The largest all-electric office-hotel complex in the Province, Assumption Place in Moncton, is now fully operational.

Rentals of "Cascade" water heaters have shown a healthy growth. Last year's figure stood at 5,070 compared to 5,797 this year, denoting a 14.3% increase. The total number of Cascade water heaters on the Commission system now stands at 38,007 units. Included in this figure are 414 of the newly introduced 60 and 100 gallon Cascades for commercial use.

Dusk-to-Dawn light rentals increased by 1,512 units bringing the total number of units on the Commission system to 10,313.

Electrical Showcase '73—the first national electric products exhibition made its debut in Moncton, New Brunswick. NB Power's exhibit stressed the utility's interconnections and reliability of power.

AVERAGE ANNUAL KWH USED AND
AVERAGE ANNUAL REVENUE PER RESIDENTIAL CUSTOMER



Work at Coleson Cove Generating Station is progressing very favourably. Photo shows concrete and steel work going on.

The Mactaquac Hydro Electric Generating Station had its capacity brought up to 400,000 kilowatts, with Unit No. 4 coming on line in April 1972. Penstocks for future units 5 and 6 may be seen in the photo.

CAPITAL ADDITIONS

The fourth 100,000 kilowatt unit at the Mactaquac Generating Station went on line on April 16, 1972 in time to benefit from spring water flows on the Saint John River. A further two units will be installed at this plant when appropriate load and system conditions are reached in the future.

The Commission's 320,000 kilowatt high voltage direct current converter station at Eel River began operating on July 28, 1972, some three months ahead of its scheduled completion date and has since performed exceedingly well.

Since the announcement by the Commission in June 1971 of the construction of its new thermal generating station at Coleson Cove in Saint John, considerable progress has been made and orders have been placed for all major components.

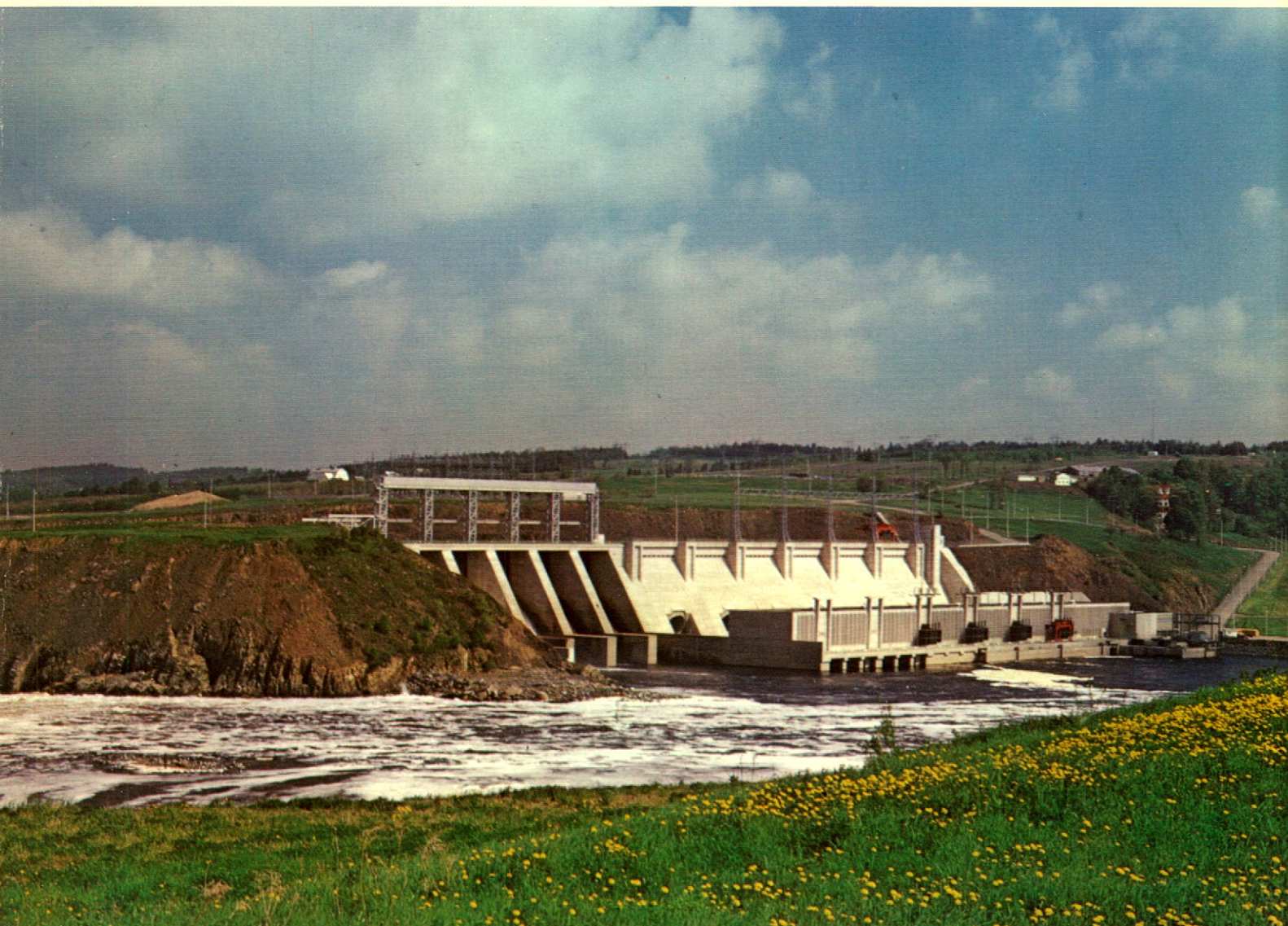
Construction of the Coleson Cove Station will be a major step in meeting the power needs of the Province. A 10 year participation contract which provides for the sale to Maine Electric Power Company of 400,000 kilowatts of the station's initial capacity of 945,000 kilowatts has allowed NB Power to construct units of this size in advance of need. These larger units are far more efficient and economical than several smaller units.

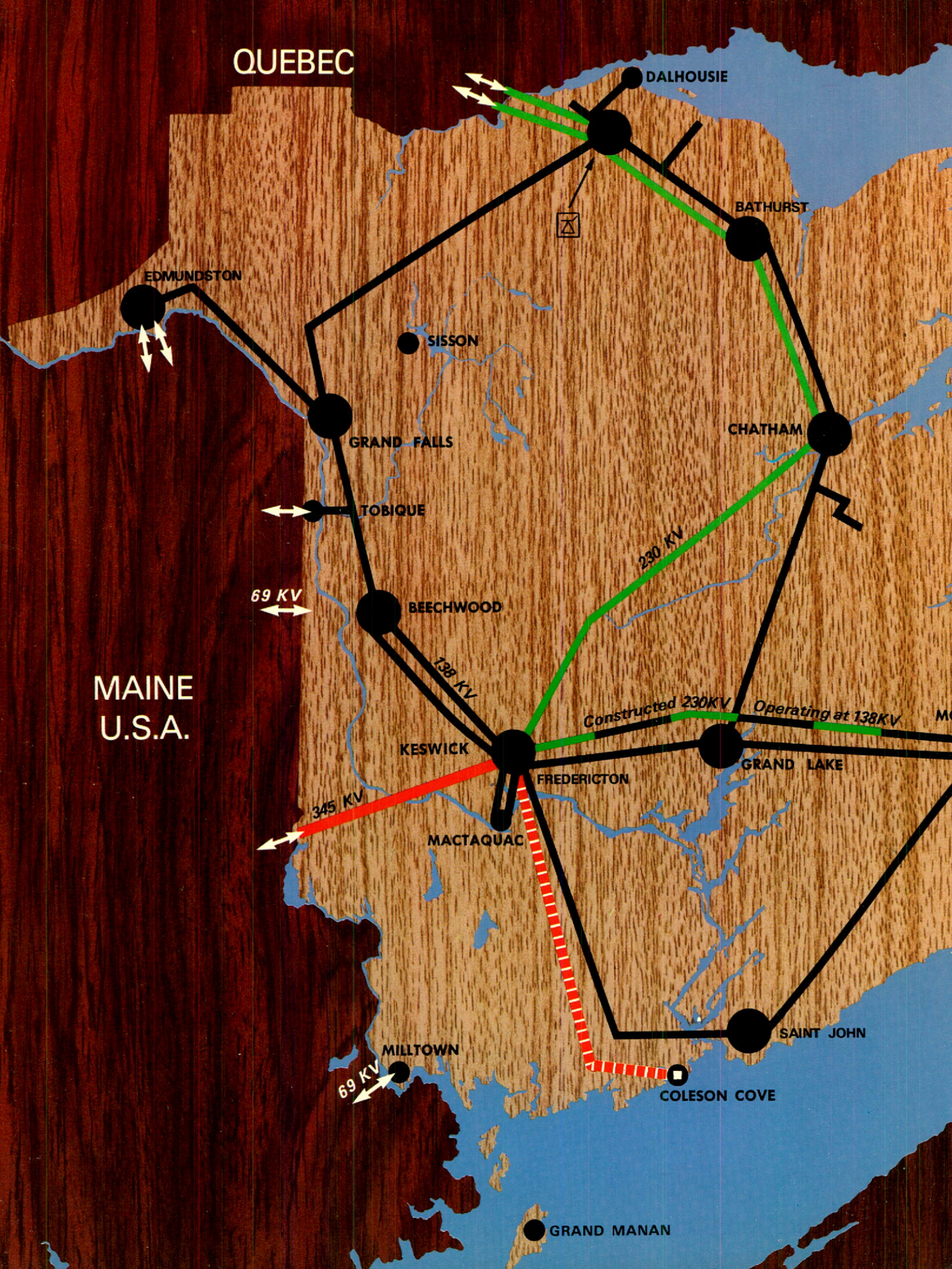
The 400,000 kilowatt portion will be recaptured with substantial economy for use in New Brunswick, at the end of the 10 year agreement.

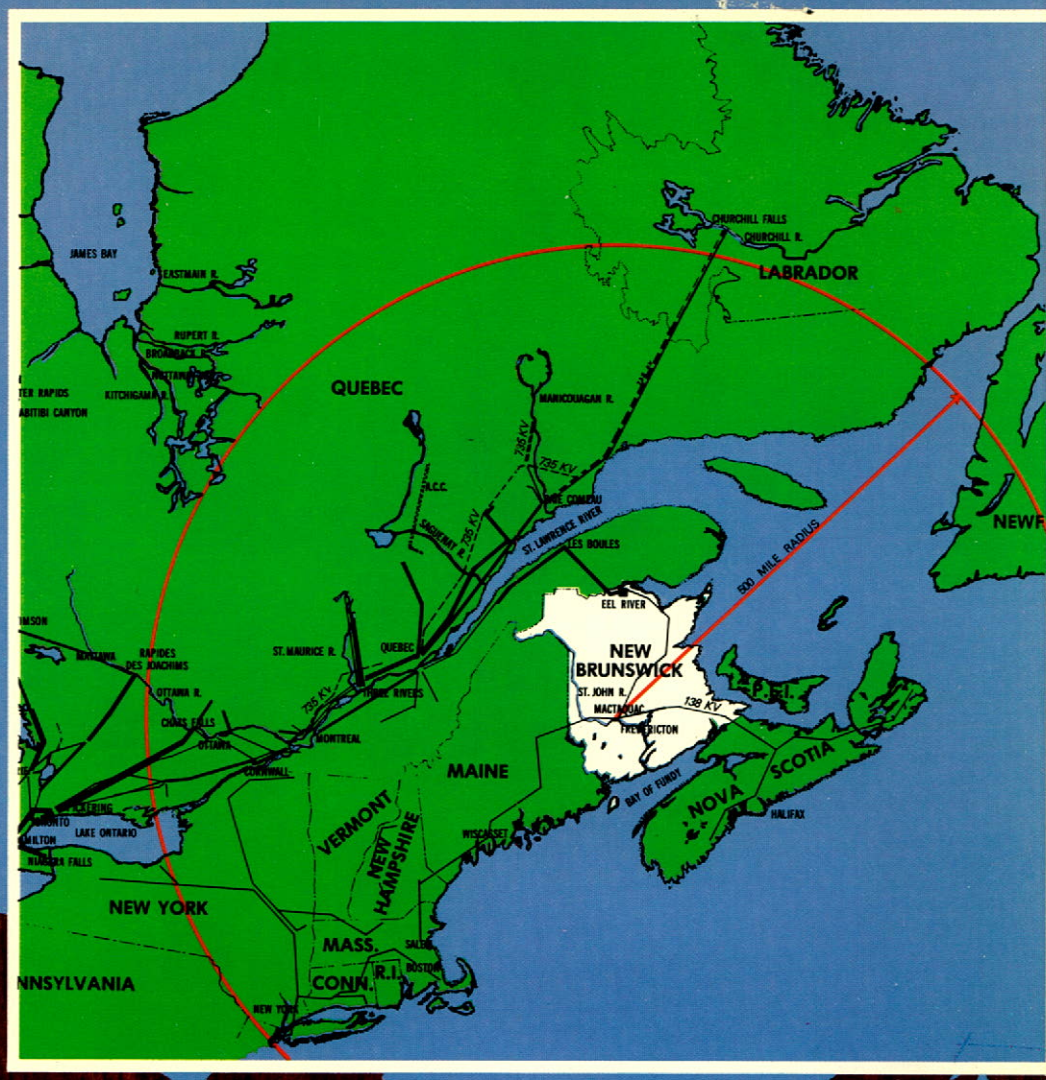
The Coleson Cove station will be equipped with all modern environmental controls, including a 600 foot concrete chimney shell, enclosing flues from each of the three boilers. In addition to having firing equipment to burn diverse fuels to suit environmental conditions, each boiler will have two electrostatic precipitators to remove solid particles from the flue gas before its entering the chimney. All liquid effluent from the generating station's process and protective areas will be collected in a special lagoon for disposal.

Preliminary on-line dates for the three 315,000 kilowatt units have been set for October 1975, April 1976 and October 1976 respectively.

The design and construction management of this huge project is under the direct supervision of NB Power engineering personnel.




QUEBEC
DALHOUSIE
BATHURST
EDMUNDSTON
SISSON
GRAND FALLS
CHATHAM
TOBIQUE
230 KV
69 KV
BEECHWOOD
138 KV
MAINE
U.S.A.
Constructed 230KV
Operating at 138KV
KESWICK
GRAND LAKE
FREDERICTON
345 KV
MACTAQUAC
SAINT JOHN
MILLTOWN
69 KV
COLESON COVE
GRAND MANAN



THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

SYSTEM MAP

LEGEND

GENERATING STATIONS

- IN SERVICE
- UNDER CONSTRUCTION
- TIE TO EASTERN CANADA AND U.S. GRID

TRANSMISSION LINES

- 138 KV
- 230 KV
- 345 KV

UNDER CONSTRUCTION

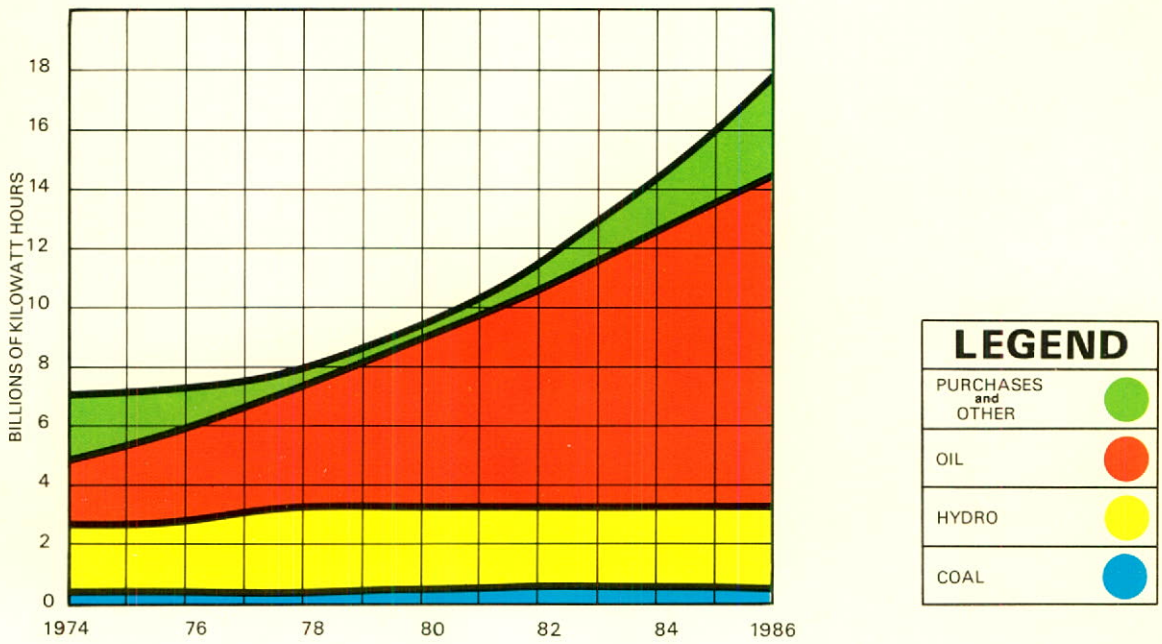
HVDC CONVERTER STATION

GENERATING STATION DATA

	NO. OF UNITS	NAME PLATE CAPACITY K.W.
HYDRO		
Tobique	2	20,000
Beechwood	3	115,000
Milltown	7	3,900
Grand Falls	4	63,000
Sisson	1	10,000
Mactaquac	4	400,000
TOTAL HYDRO		611,900
THERMAL		
Grand Lake 1	2	13,750
Grand Lake 2	4	85,000
Chatham	2	32,500
Dock Street	2	16,000
Courtenay Bay	4	263,365
Dalhousie	1	100,000
Moncton Gas Turbine / sync. Cond.	1	25,000
TOTAL THERMAL		535,615
DIESEL		
Grand Manan		2,811
TOTAL DIESEL		2,811
GRAND TOTAL		1,150,326

N.B. Power

ESTIMATED ANNUAL GENERATION
BY PRIMARY ENERGY SOURCES



During the fiscal year, hydraulic development investigations centered around redevelopment of the Grand Falls Generating Station and a potential storage and generating facility on the Green River, a tributary of the Saint John River emptying into the Grand Falls headpond.

The feasibility study of redevelopment of the Grand Falls Generating Station is being carried on concurrently with and complementary to the study of raising the Grand Falls headpond.

The first part of a two phase program to determine the practical and economical feasibility of constructing a storage-generating facility on the Green River site has been completed. This project appears feasible, but needs more detailed analysis of the foundations and downstream river conditions before a final decision can be made.

The expansion of the NB Power system in the next few years will relate primarily to the reinforcement of the internal transmission system and possible enlargement of present interconnecting facilities with other systems. The Coleson Cove Generating Station, with three units of 315,000 kilowatts under construction, is scheduled to meet deficiencies that will occur following the termination of the purchase contract with Hydro Quebec and the recapture of its present surplus Churchill Falls power to their system. It is planned that 400,000 kilowatts of the generation from Coleson Cove will be exported to the Maine Electric Power Company for a period of 10 years under the contract completed with this group of utilities. The power remaining will be utilized within the Province with the 400,000 kilowatts also reverting to NB Power after the ten year period.

A contract for the supply of oil fuel for the new Coleson Cove Generating Station, covering a major part of the fuel requirements over the first twelve years, has been negotiated. The contract will assure the Commission of a secure supply of oil fuel for an extended period of time at competitive prices.

Uncertainties in the world's oil supply and the present dependence of our region on foreign fuel production has necessitated consideration of alternate energy sources. Nuclear power is being studied very seriously for the next decade.

STATEMENT OF GENERATION AND SALES

FOR THE FISCAL YEAR ENDED 31 MARCH 1973

	1973 Kilowatt Hours	1972 Kilowatt Hours	Difference Kilowatt Hours	%
GENERATION				
Hydro	3,130,003,300	1,944,734,900	+1,185,268,400	+ 60.9
Thermal	2,593,346,000	3,273,227,600	− 679,881,600	− 20.8
Diesel	8,269,700	7,513,900	+ 755,800	+ 10.1
Purchases	1,475,082,925	668,754,458	+ 806,328,467	+121.0
Gross Gen. and Purchases	7,206,701,925	5,894,230,858	+1,312,471,067	+ 22.3
Station Service	203,520,427	190,802,066	+ 12,718,361	+ 6.7
Net Gen. and Purchases	7,003,181,498	5,703,428,792	+1,299,752,706	+ 23.0
Losses—Transformer and Transmission	292,188,794	221,668,266	− 70,520,528	− 32.0
Losses—% of Net Gen. and Purchases	4%	4%		
Total Energy Distribution	6,710,992,704	5,481,760,526	+1,229,232,178	+ 22.4
SALES				
Wholesale	387,569,772	362,272,076	+ 25,297,696	+ 7
Interconnections	1,995,008,807	1,300,236,585	+ 694,772,222	+ 53.4
Industrial Power	2,653,367,480	2,365,241,090	+ 288,126,390	+ 12.2
Commercial (11,768)	586,560,034	509,884,840	+ 76,675,194	+ 15.0
Residential (152,870)	911,084,654	785,458,370	+ 125,626,284	+ 16.0
Residential KWH	2.35c	2.37c		
KWH per Residential Customer	5,960	5,417	+ 543	10.0
Street Lights	27,352,813	24,961,506	+ 2,391,307	+ 9.6
TOTAL SALES	6,560,943,560	5,348,054,467	+1,212,889,093	+ 22,7
Station and Internal Use	206,173,140	193,375,425	+ 12,797,715	+ 6.6
TOTAL LOSSES	439,585,225	352,800,966	+ 86,784,259	+ 24.6
Gross Gen. and Purchases	7,206,701,925	5,894,230,858	+1,312,471,067	+ 22.3

COMPARATIVE STATEMENT OF OPERATING AND PHYSICAL STATISTICS

	31 March 1963	31 March 1965	31 March 1968	31 March 1972	31 March 1973
Plant Name Plate Capacity KW	348,736	419,761	828,461	1,050,326	1,150,326
Gross Generation—Purchases KWH	1,644,740,890	2,207,165,360	3,356,151,990	5,894,230,858	7.206,701.925
Total Energy Distributed	1,527,463,130	2,039,430,030	3,055,253,140	5,481,760,526	6,710,992,704
Total Revenue	$ 22,591,554	$ 29,244,088	$ 40,565,894	$ 68,797,638	$ 78,990,893
Total Expenditure and Appropriations	$ 22,264,129	$ 28,775,898	$ 39,616,471	$ 68,190,854	$ 78,268,439
Fixed Assets, including Work in Progress	$ 170,859,403	$ 205,192,238	$ 343,927,953	$ 452,397,516	$ 483,264,042
Current Assets	$ 13,997,570	$ 11,964,264	$ 31,296,198	$ 21,015,284	$ 19,558,043
Current Liabilities	$ 6,057,956	$ 6,806,726	$ 20,986,844	$ 20,159,798	$ 25,824,373
Inventories	$ 1,596,262	$ 1,859,171	$ 2,652,887	$ 3,113,785	$ 4,412,034
Long Term Debt—Net	$ 144,442,899	$ 162,272,843	$ 277,734,765	$ 340,728,100	$ 351,826,572
Sinking Fund Assets	$ 15,699,798	$ 15,610,822	$ 19,708,119	$ 23,466,748	$ 25,017,768
Accumulated Depreciation	$ 30,720,448	$ 38,935,154	$ 54,955,433	$ 85,889,983	$ 96,086,034
Other Reserves	$ 8,693,469	$ 11,670,834	$ 24,266,418	$ 29,757,961	$ 35,008,279
Reserves and Accumulated Depreciation	$ 39,413,917	$ 50,605,988	$ 79,221,851	$ 115,647,944	$ 131,094,313
Total Reserves—Percentage Fixed Assets	23.1	24.7	23.0	25.5	27.1
Circuit Miles Transmission Lines	1.845	2,093	2,440	2,766	2,842
Miles Distribution Circuits	8,390	8,528	8,671	8,967	9,988
Number Retail Customers	114,436	107,765	116,373	144,974	152,870
Number Industrial Customers	2,637	2,833	658	801	851
Number Commercial Customers	—	10,438	10,161	11,786	11,768
Number Street Light Customers	—	—	1,265	1,547	1,620

In 1964 a Commercial Rate was established and transfer to and from the other classifications have since been made following an analysis of each service. Manufacturing and processing Industries are now included as Industrial Customers.

THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

BALANCE SHEET AS AT 31 MARCH 1973

ASSETS

	1973		1972	
FIXED ASSETS				
Land, buildings, plant and equipment at cost, less accumulated depreciation (Schedule 1)		$387,178,008		$366,507,533
CURRENT ASSETS				
Cash and short-term investments	$5,290,548		$8,946,126	
Accounts receivable	9,749,262		8,805,303	
Material, supplies and fuel—at cost	4,412,034		3,113,785	
Prepaid expenses	106,199		150,070	
		19,558,043		21,015,284
MORTGAGES AND DEFERRED ACCOUNTS RECEIVABLE		379,531		455,880
DEFERRED CHARGES				
Debenture discount and issue expenses, less amounts amortized	4,491,299		4,487,288	
Survey and engineering expenses in connection with expansion of facilities	679,992		801,251	
Other	165,811		141,810	
		5,337,102		5,430,349
FUNDS HELD FOR SPECIAL PURPOSES				
Retirement of Loan re H.V.D.C. facilities	5,189,820		2,667,093	
Insurance fund	2,628,737		1,575,319	
		7,818,557		4,242,412
		$420,271,241		$397,651,458

ON BEHALF OF THE NEW BRUNSWICK ELECTRIC POWER COMMISSION:
J. STEWART BROOKS, Chairman
LOUIS E. LANDRY, Vice-Chairman

LIABILITIES

		1973		1972
FUNDED DEBT				
Debentures issued by the Commission guaranteed by the Province of New Brunswick (Schedule 2)		$245,252,818		$230,612,472
Loans from the Province of New Brunswick (Schedule 3)		21,495,914		26,191,280
Loans from Northern Canada Power Commission repayable in annual instalments of principal and interest at rates from 4½% to 8½% to the year 2011		60,088,503		60,921,288
Other Loans		24,989,337		23,003,060
		351,826,572		340,728,100
CURRENT LIABILITIES				
Accounts payable and accruals	$18,023,113		$13,563,960	
Accrued interest on debentures issued by the Commission	5,556,985		4,810,054	
Province of New Brunswick—Accrued interest	343,150		392,280	
Other	4,634		5,383	
Holdbacks on contracts in progress	1,436,263		964,537	
Service deposits	460,228		423,584	
		25,824,373		20,159,798
DEFERRED LIABILITY—customers advances in aid of construction		426,915		542,951
RESERVES (Schedule 4)		35,008,279		29,757,961
EARNINGS RETAINED IN THE BUSINESS		7,185,102		6,462,648
		$420,271,241		$397,651,458

NOTES TO FINANCIAL STATEMENTS

As at 31 March 1973

1. The Commission received a claim in February 1968 from Mactaquac Constructors (a joint venture) for additional costs in the provisional total of $8,315,026 in connection with the Mactaquac Hydro Electric Development project. The amount was subsequently increased on 8 April 1969 to $10,276,844 after submission of the claim by the Contractor to arbitration under the contract. The hearings before the arbitrators were commenced on 21 April, 1969 and are still continuing. On 8 May, 1969 a further amendment to the claim was received which increased the amount to $16,871,548. After detailed studies by engineering consultants to the Commission and the Engineer under the contract, it appears that some part of the original claim may be valid but the Commission is of opinion that a major part of the claim and particularly the latter revision upward in the quantum of claim is not only inflated, but has little or no merit. An amount has been recorded in the accounts which the Commission considers will be sufficient to provide for any settlement resulting from arbitration.

2. The Commission is constructing an oil-fuelled generating station on deep tidal water at Coleson's Cove in Saint John. The generating station, comprising three units totalling 945,000 kilowatts, is estimated to cost approximately $195,000,000. To 31 March 1973 $14,581,653 had been expended on the project. It is expected that the first unit will become operational in late 1975. An agreement for the sale of 400,000 kilowatts from this station for a period of ten years has been completed with the Maine Electric Power Company.

   The unexpended balance of other approved capital expenditures at 31 March, 1973 amounted to approximately $8,867,706.

THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

STATEMENT OF INCOME AND EARNINGS RETAINED IN THE BUSINESS

For the Year Ended 31 March 1973

	1973		1972	
Sales of power, less discounts				
Wholesale	$ 5,216,431		$ 4,890,645	
Industrial	22,028,996		20,364,837	
Interconnections	13,820,696		9,063,304	
Street lighting	1,874,808		1,660,594	
Commercial	12,845,171		10,521,665	
Retail	21,126,158		18,819,692	
	76,912,260		65,320,737	
Sales of steam	1,177,329		1,566,022	
Miscellaneous Income	901,304		732,931	
		$78,990,893		$67,619,690
Expenditure				
Purchased power	$ 6,165,053		$ 6,157,584	
Operating and maintenance expenses				
Generation	20,720,069		21,154,611	
Transmission	969,590		668,106	
Distribution	5,379,007		4,772,092	
		33,233,719		32,750,393
Administrative and other expenses, less amounts capitalized		8,990,911		7,675,825
Interest, exchange and amortization of debenture discount and expenses	22,551,146		20,434,332	
Less income from sinking funds and other investments	2,580,447		2,273,421	
	19,970,699		18,160,911	
Less amounts capitalized	906,567		2,285,022	
		19,065,132		15,875,889
Provision for depreciation of buildings, plant and equipment		11,654,259		10,090,989
		72,944,021		66,393,096
Net income for the year before adjustment for water equalization		6,046,872		1,226,594
Adjustment to equalize generation costs due to fluctuation in water flows		(2,871,000)		2,019,600
		3,175,872		3,246,194
Gain on sale of Musquash plant		—		1,177,948
Net income for the year		3,175,872		4,424,142
Earnings retained in the business at beginning of year		6,462,648		5,855,864
		9,638,620		10,280,006
Deduct appropriations to reserves for				
Water equalization	100,000		3,194,600	
Insurance	853,418		322,758	
Contingencies	1,500,000		300,000	
		2,453,418		3,817,358
Earnings retained in the business at end of year		$ 7,185,102		$ 6,462,648

THE NEW BRUNSWICK ELECTRIC POWER COMMISSION

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

For the Year Ended 31 March 1973

	1973	1972
SOURCE OF FUNDS		
From operations		
Net income for the year	$ 3,175,872	$ 4,424,142
Amounts charged against operations but not requiring outlay of funds:		
Provision for		
Depreciation of buildings, plant and equipment	11,654,259	10,090,989
Vehicle depreciation	588,322	536,910
Amortization of debenture discount and expenses	384,335	391,451
Adjustment to equalize generation costs due to fluctuation in water storage levels	2,871,000	(2,019,600)
Survey and engineering expenses written off	325,542	108,516
Gain on disposal of Musquash plant	—	(1,177,948)
	18,999,330	12,354,460
Proceeds from debentures issued less discount and expenses	19,611,655	19,561,525
Contributions in aid of construction	1,022,669	—
Other loans	1,986,277	23,003,060
Proceeds from sale of Musquash plant	—	1,900,000
Repayment of mortgages and deferred accounts receivable—net	76,349	68,563
Decrease in working capital	7,121,816	4,338,070
	$48,818,096	$61,225,678
APPLICATION OF FUNDS		
Expenditure on fixed assets	$33,935,726	$51,284,537
Redemption of N.B.E.P.C. Debentures	1,880,000	1,472,000
Net change in Sinking Funds	1,551,020	1,840,502
Reduction in loans from		
Province of New Brunswick	6,624,000	2,942,000
Northern Canada Power Commission	832,785	787,852
Deferred survey and engineering expenses	204,283	68,819
Increase in insurance fund	1,053,418	122,758
Customers advances in aid of construction—net	116,036	(36,510)
Increase in fund for retirement of loan re H.V.D.C. facilities	2,522,727	2,667,093
Increase in other deferred charges	24,001	56,107
Expenditures charged to reserves		
Settlements—Tobique fishing claims	74,100	—
Premium on debentures redeemed in United States dollars	—	20,520
	$48,818,096	$61,225,678

BALANCE SHEET SCHEDULES

As at 31 March 1973

SCHEDULE 1 — FIXED ASSETS — AT COST

	1973	1972
Land, buildings, plant and equipment		
Power generating stations	$272,254,404	$263,222,046
Transmission system	54,854,379	51,204,747
Substations	72,908,661	34,565,001
Distribution system	70,925,391	65,271,649
Other properties	4,683,812	4,507,523
Communications equipment	635,000	647,236
Motor vehicles and miscellaneous equipment	6,174,589	5,503,986
	482,436,236	424,922,188
Construction in progress	24,350,475	49,975,328
	506,786,711	474,897,516
Less contributions in aid of construction	23,522,669	22,500,000
	483,264,042	452,397,516
Less accumulated depreciation	96,086,034	85,889,983
	$387,178,008	$366,507,533

SCHEDULE 2 — SINKING FUND DEBENTURES ISSUED BY THE COMMISSION

	1973	1972
Principal and interest payable in Canadian funds		
8½% maturing 15 October 1974 (exchangeable at the option of the holder to 15 April 1974 for 8½% debentures maturing 15 October 1989)	$ 8,000,000	$ 8,000,000
9 % maturing 1 August 1975 (exchangeable at the option of the holder to 1 February 1975 for 9% debentures maturing 1 August 1990)	10,000,000	10,000,000
5½% maturing 15 March 1987	2,650,000	2,650,000
5½% maturing 1 November 1988	2,000,000	2,000,000
5¾% maturing 1 July 1991	5,000,000	5,000,000
5½% maturing 15 March 1992	7,350,000	7,350,000
5½% maturing 1 November 1993	6,000,000	6,000,000
5½% maturing 15 June 1994	10,000,000	10,000,000
5½% maturing 31 December 1994	3,790,000	3,790,000
6¼% maturing 1 May 1995	15,000,000	15,000,000
5¾% maturing 15 October 1995	7,500,000	7,500,000
6 % maturing 1 January 1996	13,800,000	13,800,000
6 % maturing 1 March 1996	4,000,000	4,000,000
6½% maturing 1 October 1996	6,100,000	6,100,000
7⅞% maturing 15 November 1996	20,000,000	20,000,000
8⅜% maturing 15 October 1997	20,000,000	—
5½% maturing 31 December 1999	8,210,000	8,210,000
	149,400,000	129,400,000
Less sinking fund assets held in trust by the Province of New Brunswick	16,149,182	12,669,528
	133,250,818	116,730,472
Principal and interest payable in United States funds		
7¾% maturing 1 February 1974	5,000,000	5,000,000
5¼% maturing 2 January 1986	9,950,000	10,535,000
5¼% maturing 1 November 1986	4,319,000	4,547,000
5¼% maturing 1 September 1987	6,388,000	6,692,000
5 % maturing 15 April 1990	14,195,000	14,608,000
5½% maturing 1 May 1991	14,650,000	15,000,000
6 % maturing 15 November 1991	17,500,000	17,500,000
6½% maturing 15 October 1992	15,000,000	15,000,000
6⅞% maturing 15 February 1993	15,000,000	15,000,000
7¾% maturing 1 February 1994	10,000,000	10,000,000
	112,002,000	113,882,000
	$245,252,818	$230,612,472

SCHEDULE 3 — LOANS FROM THE PROVINCE OF NEW BRUNSWICK

	1973	1972
For which debentures have been issued by the Province to provide funds for the Commission (payable in United States funds 1973—$12,466,000; 1972—$13,240,000)	$30,364,500	$36,988,500
Less sinking fund assets held by the Province relating to such debentures	8,868,586	10,797,220
	$21,495,914	$26,191,280

SCHEDULE 4 — RESERVES

Water equalization	$ 9,046,000	$ 6,075,000
Insurance	2,628,737	1,775,319
Contingencies	23,333,542	21,907,642
	$35,008,279	$29,757,961

TOUCHE, ROSS & CO.

Brunswick House,
44 Prince William St.,
Saint John, N.B.

AUDITORS REPORT

The Honourable Richard B. Hatfield,
Premier of the Province of New Brunswick,
Fredericton, N.B.

Sir:

We have examined the balance sheet of The New Brunswick Electric Power Commission as at 31 March 1973 and the related statements of income and earnings retained in the business and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Commission as at 31 March 1973 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Saint John, N.B.
June 13, 1973.

Touche Ross & Co.

Touche, Ross & Co.
Chartered Accountants

STAFF

Negotiations between the Commission and Local 1733, Operating Non-Supervisory Group, International Brotherhood of Electrical Workers were opened on November 21, 1972. Although no agreement was reached at fiscal year-end, a Conciliation Board was appointed to hear submissions.

In advance of anticipated manpower requirements, the Commission has embarked on a computerized Manpower Planning Program to assist Management in forecasting manpower needs and determine training requirements.

Staff development, vocational upgrading, trades training, management training and career planning continued to play a major role in the development of employees to meet expanding requirements.

Regular and temporary staff of the Commission totalled 1,599 compared to 1,550 on March 31, 1972.

Construction of 345 KV line between Keswick and Coleson Cove. NB Power staff devised unique method of ground assembly of towers and hoist erection.

Engineering staff on site at Coleson Cove shown discussing plans. Left to right—Allison MacPhail, Schedules and Quantities Engineer; John Goddard, Resident Engineer; and Allison Wark, Project Engineer.

KING'S LANDING

King's Landing, some twenty miles above the capital city of Fredericton, is a tourist attraction on the Mactaquac headpond. It hearkens back to this area's mode of living in the mid 19th century. Costumes, furniture and equipment are replicas of that period.

THE ENVIRONMENT

New Brunswick, called the Picture Province of Canada, remains largely unspoiled for man in search of nature.

Protection of the environment is one of the major concerns of our society. NB Power shares this concern and views it as a part of a much broader overall objective which is the improvement of the human condition in the Province.

Little is gained, if in overzealously reacting to changing needs, development so urgently needed by a large portion of our population is stifled or halted.

Electric power can play a unique role in reaching the dual objective of a clean environment and economic growth. It is a vital ingredient in practically all human and industrial activity. Maintaining low power costs will promote the growth of this activity. On the other hand, of all forms of energy, electricity is the least damaging to the environment.

NB Power's goal, then, is to provide for the supply of low cost energy vital to economic development, in a manner that results in the least damage to the fine natural environment of our Province. We believe this goal can be attained.

J. Stewart Brooks.

J.STEWART BROOKS,
Chairman

A. J. O'Connor

A. J. O'CONNOR
General Manager

The New Brunswick Electric Power Commission

NB Power is proud to salute The Royal Canadian Mounted Police in this, their Centennial Year.