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# ANNUAL REPORT 1986/87





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## Highlights

Lower oil prices had a dramatic impact upon revenues and expenses. Net income rose to \$29.3 million compared with \$23.9 million in the previous year.

Total in-province energy sales grew by 10.5%. Sales to industrial customers were up 14.2%.

The Point Lepreau Generating Station achieved a capacity factor of 94.4% for the fiscal period. It ranks as the best performing nuclear reactor in the world for the four year period 1983-86.

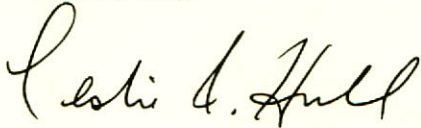
29 June 1987

To His Honour  
The Honourable G. F. Stanley  
*Lieutenant Governor of New Brunswick*

Sir:

The New Brunswick Electric Power Commission begs leave to submit, in accordance with the Electric Power Act, Chapter E-5, of the revised Statutes of New Brunswick 1973, the following report for the twelve month period ended 31 March 1987.

I am, Your Honour,  
Yours very truly,



Leslie I. Hull  
*Chairman*  
*The New Brunswick Electric Power Commission*

HOWARD ROSS LIBRARY OF MANA  
MCGILL UNIVERSITY  
1001 Sherbrooke St., W.  
Montreal, Quebec, Canada  
H3A 1G5

OCT 21 1987





Leslie I. Hull

## Comments

Lower oil prices were the major factor leading to a 22.5% increase in net income to \$29.3 million for 1986/87 and another year of rate stability.

Although total export sales were slightly lower than during the previous fiscal year, in-province sales were up by 10.5%. A record in-province peak demand was reached on January 26, 1987. Despite no increase in rates in the fiscal period, in-province revenue rose \$33.3 million due to the increased sales.

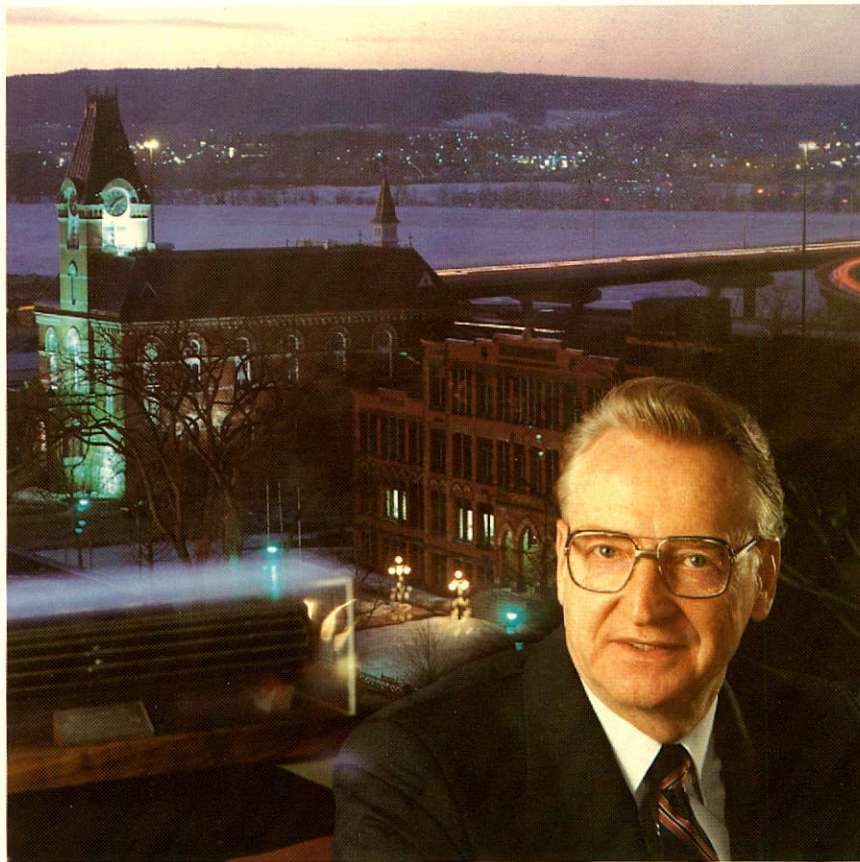
The Point Lepreau Generating Station once again had a very high capacity factor for the year and supplied nearly 30% of in-province requirements. Point Lepreau has performed exceptionally well during its first four years of commercial operation and has earned respect for the CANDU reactor system worldwide.

During the year NB Power intervened in the National Energy Board hearings concerning Hydro-Quebec's application for a licence to export firm electric energy to New England. NB Power supported the application provided the Board imposed terms and conditions to meet NB Power's concerns. Subsequent to the year end, on June 18, 1987, the National Energy Board denied the licence.

Significant progress was made on the construction of NB Power's new Energy Control Centre. The building is expected to be ready for occupancy in the autumn of 1987.

At the beginning of the fiscal year, the company acquired ownership of NB Coal Limited. NB Power buys NB Coal's total annual coal production for its Dalhousie and Grand Lake plants. A controversy over restrictions for sulphur dioxide emissions to be applied under federal/provincial guidelines arose during the year. The proposed guidelines could adversely affect the future of the local coal mining industry.





Arthur J. O'Connor

The first coal-firing in the new circulating fluidized bed boiler at the Chatham Generating Station was achieved in mid-December 1986. The test burning of coal and limestone, followed by coal and oil shale, will continue over the next fiscal year. The test burning will be carried out specifically to determine the merits of the technology in controlling acid gas emissions from New Brunswick coal which has a high sulphur content.

During the year, NB Power signed an agreement with Venezuela to test Orimulsion fuel at its Dalhousie Generating Station. Orimulsion is an emulsified fuel product which offers promise as a commercial fuel for use in existing and new plants as an alternative to Bunker C oil and imported coal.

Additional generating capacity will be required for in-province use by the early 1990's. NB Power is currently reviewing development and purchase options to meet a forecast load growth of 2.9% per year to the year 2000.

*Leslie I. Hull*

Leslie I. Hull  
Chairman

*A. J. O'Connor*

Arthur J. O'Connor  
President and General Manager



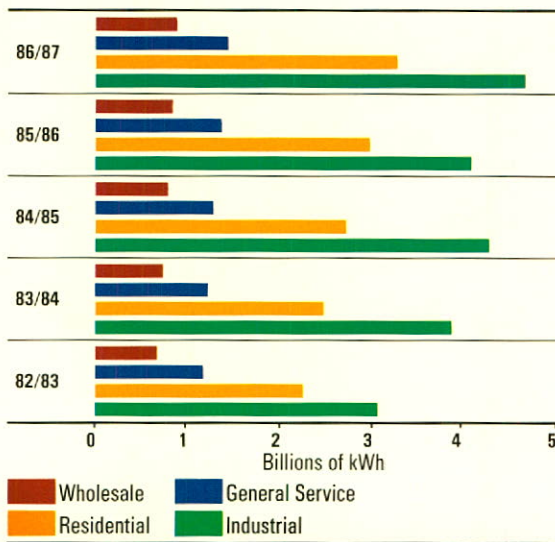
# The Year In Review

Electrical energy sales to NB Power's in-province customers were up 10.5% over the previous year reflecting increased energy use by all customer classifications. Energy sales to industrial customers accounted for more than half the total increase as the pulp and paper industry recovered from shutdowns in the previous year, and as sales increased to the mining industry and a new coated-paper mill in Newcastle went into production in July 1986.

Energy sales to residential customers were up by 9.2% due to 5 700 new customers and 5 300 oil-to-electric space heating conversions. Electricity now provides space heating for over 45% of New Brunswick residential customers compared with oil at 29% and wood at 25%.

Energy sales increased by 3.6% for wholesale customers and by 6.8% for general service customers reflecting economic growth, increased electric heating

**In-Province Energy Sales (By Classification)**



*The REPAP coated-paper mill on the Miramichi started operations in July 1986. Kraft and groundwood pulp for production of this new paper is supplied by two company-owned mills nearby. Sales to industrial customers increased 14.2% during the year.*



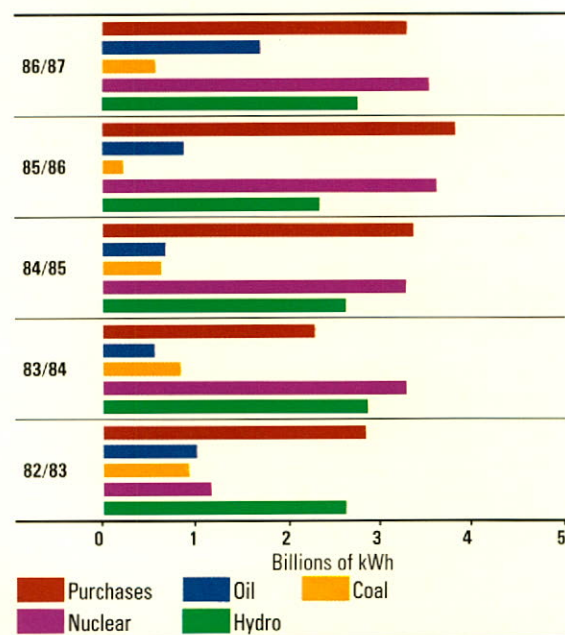
*NB Power works with its industrial customers to achieve energy savings and process improvements. For the third time, Brunswick Mining of Bathurst won the Canadian Electrical Association Double E Award for outstanding achievement in energy efficiency in industrial applications in New Brunswick.*

and business automation. Over 6 600 new customers were added to the system in all classifications. On March 31, 1987 NB Power was serving 290 922 customers including 38 436 indirect customers in the cities of Saint John and Edmundston. These cities buy electricity from NB Power and resell it to their customers. In-province energy loads for the year were supplied as follows: 29.7% by nuclear; 27.7% by purchased power as a replacement for oil and coal; 23.3% by hydro; 14.5% by oil and 4.8% by coal.

A record peak demand of 2 110 000 kW by in-province customers occurred on January 26, 1987. This was 5% higher than the previous record set in fiscal year 1985/86 and about 2% higher than forecast. Record sales of energy to in-province customers were also recorded on January 26 with sales for the day totalling 45.4 million kW.h. Extremely cold weather



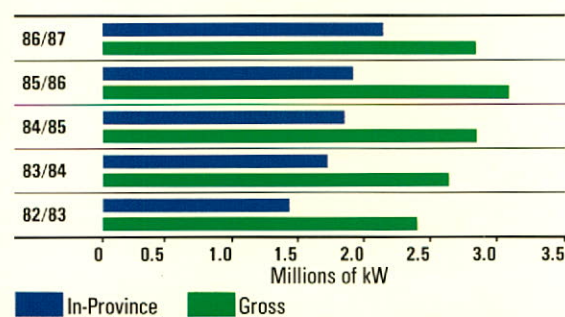
### In-Province Source of Supply



was a contributing factor to the record electricity use by in-province customers. Surplus energy normally purchased from Hydro-Quebec was not available to meet this demand because of similar peak conditions on their system, hence all NB Power's oil- and coal-fired thermal generating stations and the Point Lepreau nuclear station operated at full output to meet in-province and external sales.

Interconnection energy sales remained high at 6 918 million kW.h, although this level was 4.3% below the previous year's record volume. The year's gross peak demand including interconnection sales was 2 811 000 kW on December 9, 1986, 8% less than the previous fiscal year.

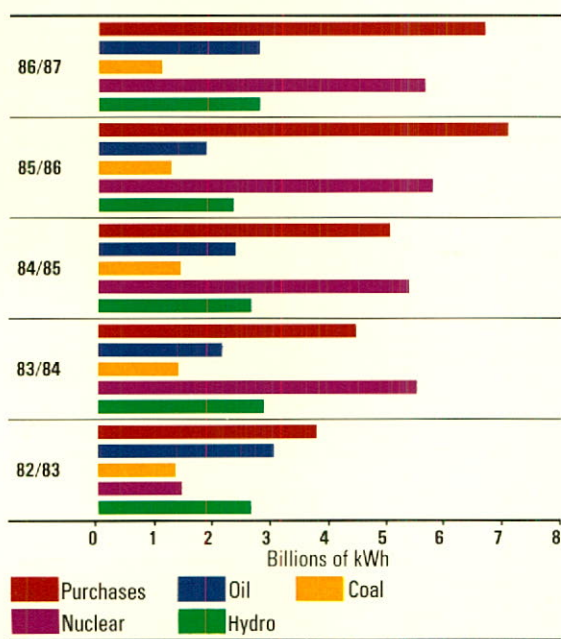
### In-Province and Gross Peak Demand



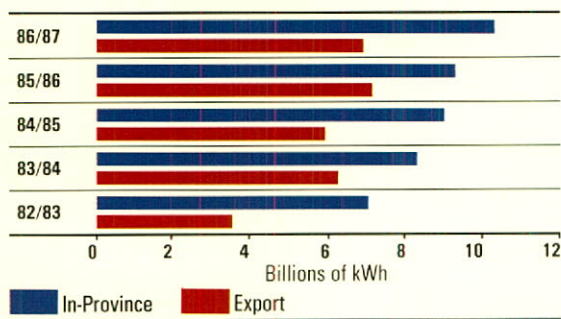


Purchases of energy, accounting for 6 660 million kW.h, were 5.6% lower as technical restrictions involving U.S. power systems affected NB Power's capacity to import energy. Point Lepreau generation was 5 625 million kW.h representing a fiscal year capacity factor of 94.4%, close to the record 96.8% set in the previous fiscal year. Hydro energy production of 2 756 million kW.h was approximately 4% higher than the long term average. Thermal generation was 3 862 million kW.h, an increase of 25.1% over last year.

### Energy Sources to Meet Total Loads



### In-Province and Export Energy Sales



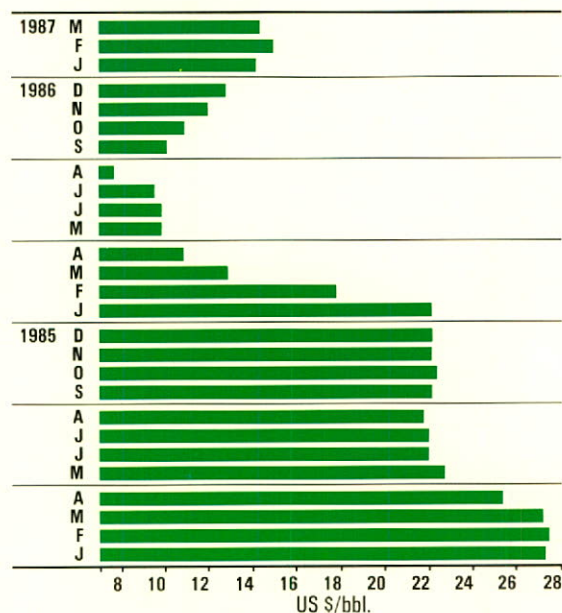
This significant increase was required to meet the increased in-province load, export sales and the reduction in energy purchases. Total Generation and Purchases grew by 3.7% to a record 18 904 million kW.h.

The deflationary impact of lower oil prices on economy energy sales to New England and Prince Edward Island was the principal factor behind the \$69.1 million or 7.7% decline in revenues to \$825.2 million. Despite no increase in rates for the fiscal period, 1986/87 in-province revenues rose \$33.3 million due to the 10.5% increase in energy sales.

Interconnection revenues declined \$101.0 million or 27.3% due to lower oil prices and the expiration of participation sales from the Coleson Cove thermal plant during the prior fiscal year.

Lower oil prices were also the primary cause of a \$98.3 million or 28.1% decline in fuel and purchased power costs to \$250.9 million in the fiscal period. Operations, maintenance and general expenses increased \$8.1 million to \$184.8 million. Depreciation expense increased \$5.6 million to \$81.3 million due in large measure to the consolidation of the Commission's 90% owned subsidiary NB Coal Limited in the fiscal 1986/87 results. Net financial expenses declined \$6.7 million or 2.5% due to increasing sinking fund earnings.

### NB Power Oil Prices





Point Lepreau's exceptional operating performance, as well as above average water flows, resulted in an addition of \$16.1 million to the Generation Equalization Reserve and a corresponding charge against net income.

Earnings from economy sales to neighbouring utilities were \$4.0 million above forecast levels. This amount, less scheduled amortization of higher than forecast earnings of previous years, resulted in a total transfer to the Economy Sales Stabilization Account from income of \$2.2 million.

Net income for the year rose to \$29.3 million from \$23.9 million in the previous year. Earnings invested in the Business increased to \$133.7 million after an appropriation of \$17.0 million to the Generation Equalization Reserve. Appropriations are made to ensure that the reserve is sufficient to cover the cost of replacement power in the event of unfavourable water flow conditions and below average nuclear unit operating performance for an extended period. Accumulated appropriations to the reserve now amount to \$152.0 million.

As noted, lower oil prices and resulting lower purchased power costs had a dramatic impact upon the Commission's revenues and expenses in fiscal 1986/87.

*For the second year in a row, NB Power trained 25 people in a federally-funded program called Job Entry/Re-Entry. Program co-ordinator Isabelle Boudreault (right) assists trainee Marie Resmer (centre) as consultant Bob Latimer teaches communications skills.*

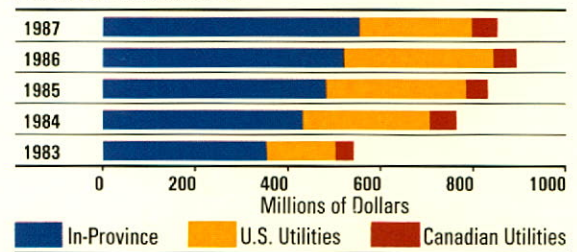


On balance, the effects were highly favourable as the savings from lower generation and purchased power costs more than offset the deflationary impact of lower prices on interconnection revenues and benefits.

Total capital expenditures during fiscal 1986/87 rose \$53.5 million to \$114.0 million, of which \$35.5 million was funded by the federal government for the Chatham circulating fluidized bed project. No new funds were borrowed during the fiscal year but two outstanding issues were called and refinanced at lower rates as follows: \$US 55 million 7.75% Notes due June 10, 1994 to replace \$US 52.9 million outstanding 9.75% Notes due March 1, 1994; and SFr 80 million 5% Notes due September 26, 1991 to replace SFr 76 million outstanding 6% Notes due September 28, 1991.

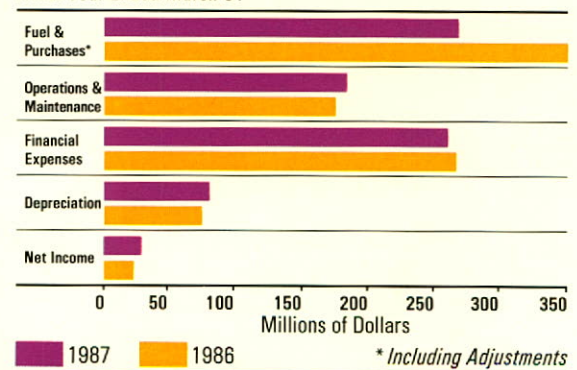
#### Sources of Revenue

*Fiscal Year Ended March 31*



#### Distribution of Revenue

*Fiscal Year Ended March 31*

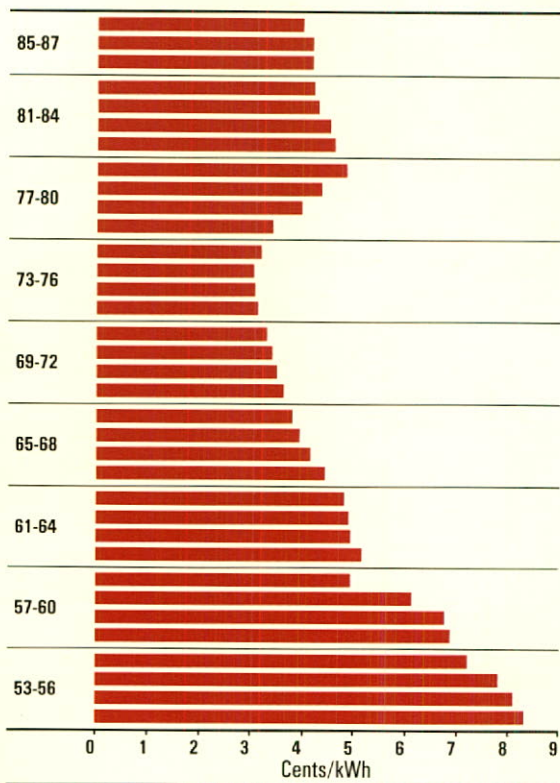




On February 1, 1987 the Point Lepreau Generating Station celebrated four years of commercial operation. The average gross capacity factor, or percent of maximum possible production, during the four years 1983-86 was 91.7% which is the best average performance record in the world among the 303 operating nuclear reactors which report results. This is a remarkable achievement for a single unit station and speaks well of CANDU technology and the competence of the station operating staff. In addition to supplying over 30% of in-province electrical energy requirements, electricity exports from Point Lepreau have earned over \$490 million of revenue from inter-connected sales to several New England utilities since commercial operation.

NB Power has one of the best records for Canadian utilities regarding rate increases in the 1980's. Over the past five years, increases have averaged 3.9% per year, well below both the rate of inflation and increases at other Canadian utilities. NB Power had no rate increase in fiscal 1986/87 and will hold its rates at their present level during 1987/88.

**NB Power Average Price of Electricity (In Constant 1981 \$)**



### Top 10 Nuclear Plants Worldwide 1983-86 by Gross Capacity Factor (GCF)

Rank	Plant	Type	Country	Rating MW	GCF%
1	Point Lepreau	C	Canada	680	91.70
2	Loviisa 2	P	Finland	465	91.23
3	TVO-2	B	Finland	735	90.28
4	Beznau 2	P	Switzerland	364	89.24
5	Loviisa 1	P	Finland	465	89.15
6	Bruce 3	C	Canada	904	89.10
7	TVO-1	B	Finland	735	88.57
8	Stade	P	Germany	672	87.89
9	Gösgen	P	Switzerland	970	87.68
10	Hunterston A2	G	Britain	169	87.47

*Don Sinclair, Fuel Handling Supervisor at Point Lepreau, inspects a natural uranium fuel bundle before it is loaded into the reactor. On-line refuelling of CANDU reactors like Point Lepreau contributes to their high capacity factors.*





*Transmission towers are reflected in the windows of the new Energy Control Centre.*



In connection with the operation of its interconnections with adjacent power utilities, NB Power intervened in the National Energy Board hearings regarding the planned 2000 MW phase-2 interconnection between Hydro-Quebec and the New England Power Pool, scheduled to be in service in the early 1990's. The basis of the intervention was that NB Power supported the application provided the Board imposed terms and conditions to meet two concerns: first, that the normal first offer for energy be made to neighbouring Canadian utilities; and second, that the new interconnection and associated power sales not have a detrimental technical impact on the existing interconnected network. Subsequent to the year end, on June 18, 1987, the National Energy Board denied the Hydro-Quebec licence.

The 1986 review of transmission requirements resulted in the decision to install a new 345 000 volt transmission line between Eel River and Bathurst, to operate initially at 230 000 volts, and a new terminating transformer to the 138 000 volt load level at Bathurst. These additions to the transmission system will not only improve reliability to the north-eastern area of the province, they will also lower costs by reducing transmission losses.

During the year significant progress was made on the construction of NB Power's new Energy Control Centre in Marysville, near Fredericton. The complex will house Energy Control Operations and Distribution Operations. Both groups work around the clock to ensure customers have a secure supply of electricity for their homes, businesses and industries. Interconnection purchases and sales are also managed from the Energy Control Centre. The building will be ready for occupancy in the autumn of 1987.

Investigation continued into appropriate remedial measures to be undertaken to the concrete structures at the Mactaquac Generating Station, specifically at the intake/spillway and the powerhouse, to counteract the affects of concrete expansion. This expansion is caused by residual thermal expansion and a reaction of the cement alkalis with the aggregate used in the concrete. Since 1979 the consulting firm of Acres International Limited has been investigating the expansion phenomenon at Mactaquac and a board of international experts has also been engaged to review the consultant's work and to advise NB Power. It has been determined that the expansion has not affected the safety of the Mactaquac structures nor the generating capability of the plant.



At the beginning of the fiscal year, NB Power acquired 90% of the outstanding common shares of NB Coal Limited. A short term business plan was implemented to deal with reduced tonnages required in the period of low oil prices. The plan included an early retirement and retraining program, advanced maintenance work on equipment, roadshifts to reduce hauling costs and increased exploration activity. The local coal, which has a high sulphur content, is used by NB Power in its Dalhousie and Grand Lake generating stations. The 1987/88 production budget has been set at approximately 500 000 tons.

During the year a controversy arose as to the emission restrictions on sulphur dioxide to be applied to New Brunswick by 1994 under federal/provincial agreements. NB Power's concern has been that the guidelines being used for the province were inadvertently low and disadvantageous to New Brunswick in comparison with other jurisdictions. This issue is of paramount importance to NB Power due to its necessary heavy reliance upon thermal generation.

New Brunswick's primary hydro generation sites have already been developed and the province's ability to aggressively pursue the nuclear option is limited by financial resources and relative system size in the near term. Buying firm power from neighbouring provinces to meet New Brunswick's requirements has not, to date, been an attractive long term alternative. The proposed guidelines may well represent a serious threat to the long term viability of the provincial coal industry.

NB Power is continuing to introduce new business technology into its operations. On the Service Restoration System, a customer's telephone number is all that is needed to access the customer's complete electric address — district, section of the line affected and pole number — so that in an emergency difficulties can be immediately pinpointed. A new Accounts Payable System allows on-line matching of invoiced items to purchase orders for payment, and maintains up-to-date information on the status of vendors' accounts. A computerized cost-estimating system for Distribution capital jobs was also implemented during the year.



*Every day coal is trucked to the Grand Lake Generating Station from the Minto coalfields nearby. At the plant the coal is pushed into a hopper by tractor.*



*From the hopper the coal goes by conveyor belt to be crushed. Winston Sypher, Coal Handler, inspects coal as it travels from the crusher to the pulverizer hopper.*

*Kenneth Branscombe, Coal Handling Supervisor, sprays steam onto the coal as it passes on the conveyor belt between crusher and pulverizer hopper. The steam suppresses coal dust.*







*NB Power works closely with the provincial telephone company. Here, in Lower Caraquet in northern New Brunswick, linemen from both utilities work together. NB Power opened a new joint sub-office with NB Tel in Caraquet during the fiscal year.*

*At the Coleson Cove Generating Station, Paul Thom, Mechanical Maintenance Supervisor, discusses planned maintenance on the number 1 turbine with Fitter Bill Wallace.*



*During the year more than 600 NB Power vehicles were marked with the Eyes and Ears Friendly Fox symbol. The Friendly Fox lets the public know that these vehicles are emergency reporting stations for accidents, medical emergencies and crime prevention.*

This is the first phase of a work planning and scheduling system which will be on-line in fiscal year 1987/88. Also in place is an integrated office information system which includes electronic messaging, word processing, spread sheets, business graphics and access to management and project information through a link to the company's mainframe computer.

The impact of new business technology on traditional work methods was felt for the first time several years ago in the district offices. It was immediately apparent that these offices should be renovated to accommodate the different workflow patterns produced by the new computers. Over the intervening years four district offices were remodeled and, for the convenience of customers, two new sub-offices were opened during the fiscal year as joint offices with the provincial telephone company.

An accelerated retirement program offered by NB Power was highly successful. Acceptance of the program was voluntary and allowed for staff reduction on an acceptable basis. Even with less staff the company is still capable of meeting all requirements due mainly to the continued advancement of technological change throughout the organization.

The year marked the signing of two three-year agreements between NB Power and the International Brotherhood of Electrical Workers. Negotiations were again within the provincial wage restraint guidelines and were aided by the good relations that exist at NB Power between union and management. New directions were taken in areas such as job sharing, summer leave and supplementary maternity benefits. One agreement remains to be concluded.





## Directions

NB Power will be undertaking various capital projects across the province amounting to \$120 million in fiscal year 1987/88. Nearly \$35 million will be spent at the customer level on Distribution networks to meet new requirements and to improve service throughout the province. A major element of the transmission-substation requirements is a new power distribution facility to serve the rapidly growing load in the city of Moncton. Capital additions will be made to existing power plants primarily to enhance environmental control and improve plant performance.

NB Power is currently reviewing a number of development options to meet a forecast average load growth of 2.9% per year projected to the year 2000. Additional generating capacity will be required for in-province use by the early 1990's to take care of an increased use of electricity in all sectors. In the shorter term, NB Power will continue to examine the option of purchasing capacity and assured energy from neighbouring systems whenever it is economically advantageous to do so. The company is looking primarily to multi-fuelled thermal generating units of 400 MW size to meet the longer term forecast growth, to be built at the existing coastal sites of either Coleson Cove or Dalhousie.

Negotiations are continuing with the Federal government on the option of substituting a second nuclear unit for one of the planned multi-fuelled units. Such a unit could be an attractive option provided NB Power customers are not exposed to any greater cost or financial risk than from a thermal unit burning imported, low-sulphur fuels.

Preliminary engineering work has begun on a possible addition to the Grand Lake Generating Station. This would be a smaller unit designed to burn local coal. However, much depends on the emission level limitations to be imposed on the province, as the high sulphur content of the indigenous coal may require emission control processes that, in the absence of financial incentives, could make the fuel uncompetitive.

Tests will continue at the Chatham Generating Station to demonstrate circulating fluidized bed combustion technology. The testing is expected to determine the merits of the technology for controlling sulphur dioxide emissions when using a blend of high sulphur New Brunswick coal, oil shale and limestone.

*1987 was the Centennial of Engineering in Canada. The Association of Professional Engineers New Brunswick sponsored a mobile exhibit. Electrical developments in the province over the past 100 years were among the highlights displayed in the exhibit.*

*Mary Northrup, a fourth year chemical engineering student working at NB Power for the summer, measures particulate emissions from the Chatham circulating fluidized bed boiler.*







*Cathy Cornfield, Chemical Technologist at the Coleson Cove Generating Station laboratory, analyses an effluent sample. Laboratory personnel also carry out environmental checks on the atmosphere for The Department of Municipal Affairs and Environment.*

The demonstration phase is scheduled to continue to April 1988. This is the first such project of this scope in North America and it is hoped that the new combustion technology will, over time, provide an effective way of overcoming acid gas emission problems. Success of the Chatham project, coupled with federal support for the increased cost and technological uncertainties of commercial-sized units compared with conventional coal-burning units, could lead to the use of this technology in future generating stations.

The utility is continuing with its long term goal to get off oil as a single fuel source for thermal power stations. An environmental assessment for a unit-by-unit conversion of the Coleson Cove Generating Station has been submitted for approval. Environmental hearings are expected to be held this year and, pending results, a decision will then be made on the start of conversion including the construction of a new wharf at Musquash Harbour.

Under contract from Venezuela, NB Power is undertaking a program to test Orimulsion fuel at the Dalhousie Generating Station. Orimulsion is an emulsified fuel product which results from mixing Orinoco natural bitumen with water and a surfactant. The large commercial test of Orimulsion using the Dalhousie No. 1 unit is the first of four or more such tests planned by Venezuela to demonstrate the commercial use of the fuel in various regions of the world. The Dalhousie test being the first, and taking place in a severe climate, will be very important as a demonstration of the handling and storing properties of the fuel. The test will also explore the use of limestone injection as a method of limiting sulphur dioxide in the stack emissions. Orimulsion offers excellent prospects as a commercial fuel for use in existing and new plants as an alternative to Bunker C oil and imported coal. Engineering and environmental studies for the conversion of the Coleson Cove Generating Station will address both the use of Orimulsion fuel and imported coal before a decision is made.

NB Power is fortunate in having several development options. Strategic planning efforts will continue to incorporate the need for new generation with environmental concerns and assessment processes, labour agreements and legislation, and government support. The long term prospects for New Brunswick energy consumers should be viewed with optimism.



## Corporate Information



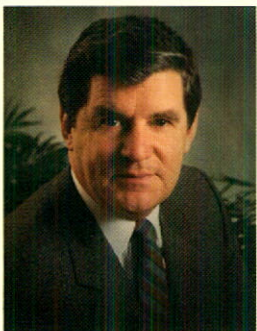
*Leslie I. Hull  
Chairman*



*Louis E. Landry  
Vice-Chairman*



*Donna K. Young*



*Eric C. Garland*



*William K. Cleghorn*



*Gaétan Bossé*

### **Commission**

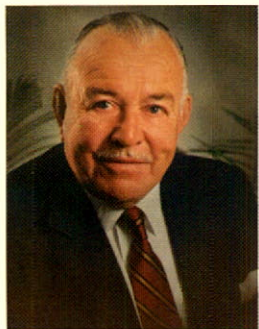
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Eric C. Garland  
William K. Cleghorn  
Gaétan Bossé  
Harry Williston  
George W. Sparks  
William T. McRae  
Bélonie Mallet

### **Managing Officers**

Arthur J. O'Connor  
*President and  
General Manager*  
Frank C. MacLoon  
*Senior Vice-President*  
Richard A. Toner  
*Vice-President  
Administration*  
G. Linwood Titus  
*Vice-President  
Planning and Development*  
Peter J. Dykeman, Q.C.  
*Secretary and  
General Counsel*  
Kenneth B. Little  
*Director of Finance  
and Treasurer*  
Terrence S. Thompson  
*Director, Public Affairs  
and Marketing*  
Frank H. Ryder  
*Director,  
Corporate Economic Studies*



*Harry Williston*



*George W. Sparks*



*William T. McRae*



*Bélonie Mallet*



# Financial Statements

## Management Report

The financial statements of The New Brunswick Electric Power Commission have been prepared by management in accordance with generally accepted accounting principles as established in Canada. These financial statements are the responsibility of management and have been approved by the Commissioners. In management's opinion, the financial statements have been properly prepared in accordance with the accounting policies set out in notes to the financial statements. Financial information presented elsewhere in this annual report is consistent with that in the financial statements.

Management depends upon a system of internal controls in order to ensure that financial information is reliable and accurate and that assets are properly safeguarded. The controls and related systems are periodically reviewed by internal auditors.

The financial statements have been examined by the external auditors, Touche Ross & Co. Their responsibility is to express a professional opinion on the fairness of management's financial statements. The Auditors' Report outlines the scope of their examination and their opinion.



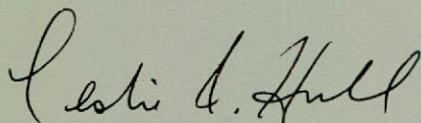
# Consolidated Balance Sheet

as at March 31, 1987

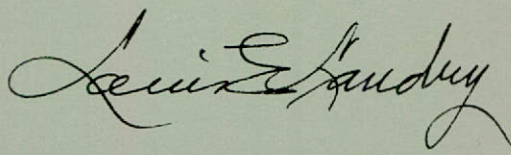
## Assets

	1987	1986
		(Restated) (Note 2)
<b>Fixed assets</b>		
Land, buildings, plant and equipment, at cost, less accumulated depreciation, and construction-in-progress (Note 3)	\$2,378,025,436	\$2,352,678,398
<b>Current assets</b>		
Cash and short-term investments	24,079,920	17,868,928
Accounts receivable	111,271,448	117,931,311
Material, supplies and fuel	72,963,969	67,069,700
Prepaid expenses	2,833,799	2,588,358
	211,149,136	205,458,297
<b>Deferred charges</b>		
Unrealized foreign exchange differences, less amounts amortized (Note 4)	154,171,578	217,318,551
Nuclear unit decommissioning	55,675,272	57,816,636
Debenture and note discount and issue expenses, less amounts amortized	20,292,122	19,595,802
Economy sales stabilization account	—	1,911,650
Other deferred charges	2,870,949	1,325,852
	233,009,921	297,968,491
<b>Funds held for specified purposes</b>		
Insurance fund (Note 5)	7,527,823	7,648,108
	\$2,829,712,316	\$2,863,753,294

On behalf of The New Brunswick Electric Power Commission



Leslie I. Hull, Chairman



Louis E. Landry, Vice-Chairman



# Consolidated Balance Sheet

as at March 31, 1987

## Liabilities

	1987	1986
		(Restated) (Note 2)
<b>Long-term debt (Note 6)</b>		
Guaranteed by the Province of New Brunswick		
Debentures and notes issued by the Commission	\$1,728,689,431	\$1,837,491,444
Note payable to Atomic Energy of Canada Limited	337,724,486	342,200,680
Loans from Northern Canada Power Commission	41,877,604	43,708,603
Other long-term debt	11,674,792	7,043,701
Obligations under capital lease	28,997,820	—
	2,148,964,133	2,230,444,428
Less payments due within one year	60,509,348	67,812,443
	2,088,454,785	2,162,631,985
<b>Current liabilities</b>		
Short-term indebtedness (Note 7)	6,468,959	23,051,923
Accounts payable and accruals	64,342,897	56,678,269
Accrued interest	104,908,528	103,153,235
Current portion of long-term debt	60,509,348	67,812,443
Holdbacks on contracts in progress	2,382,151	3,414,675
Service deposits	1,315,798	1,242,419
	239,927,681	255,352,964
<b>Deferred liabilities</b>		
Economy sales stabilization account (Note 8)	267,780	—
Irradiated fuel management and nuclear unit decommissioning (Note 9)	97,349,090	87,503,826
	97,616,870	87,503,826
<b>Minority interest in subsidiary company</b>	9,025	—
<b>Reserves (Note 10)</b>	270,035,974	236,900,974
<b>Earnings invested in the business</b>	133,667,981	121,363,545
	\$2,829,712,316	\$2,863,753,294



# Consolidated Statement of Income

for the year ended March 31, 1987

	1987	1986
<b>Revenue</b>		
Sales of power		
In-province	\$542,030,089	\$508,733,601
Out-of-province (Note 11)	268,502,369	369,514,427
Sales of steam	4,796,952	8,054,182
Miscellaneous	9,900,726	8,047,473
	<b>\$825,230,136</b>	<b>\$894,349,683</b>
<b>Expenditure</b>		
Purchased power	120,424,919	193,264,439
Generated power		
Fuel	130,511,569	155,980,954
Other	93,270,976	85,850,334
Operations, maintenance, administration and general	91,091,269	90,787,070
Depreciation	81,250,152	75,629,440
	<b>516,548,885</b>	<b>601,512,237</b>
Income before interest and exchange	<b>308,681,251</b>	<b>292,837,446</b>
Interest and exchange	267,492,690	270,206,778
Amortization of debenture discount and expense	2,946,638	2,722,535
Amortization of unrealized foreign exchange	34,160,483	30,466,774
	<b>304,599,811</b>	<b>303,396,087</b>
<b>Less</b>		
Income from sinking funds and other investments (Note 6)	41,390,513	33,394,841
Interest capitalized	2,569,354	2,666,599
	<b>43,959,867</b>	<b>36,061,440</b>
	<b>260,639,944</b>	<b>267,334,647</b>
Net operating income for the year before the following items	<b>48,041,307</b>	<b>25,502,799</b>
Generation equalization adjustment	16,135,000	9,691,000
Transfer to (from) economy sales stabilization account (Note 8)	2,179,430	(8,116,195)
	<b>18,314,430</b>	<b>1,574,805</b>
Net income for the year before the following items	<b>29,726,877</b>	<b>23,927,994</b>
Goodwill written off (Note 12)	580,692	—
Less minority interest in net losses of subsidiary company	158,251	—
	<b>422,441</b>	<b>—</b>
Net income for the year	<b>\$29,304,436</b>	<b>\$23,927,994</b>



## Consolidated Statement of Earnings Invested in the Business

for the year ended March 31, 1987

	1987	1986
		(Restated) (Note 2)
Balance at beginning of year	\$121,363,545	\$ 94,570,807
Adjustment for accounting policy change	—	12,864,744
Net income for the year	29,304,436	23,927,994
	150,667,981	131,363,545
Appropriation to generation equalization reserve	17,000,000	10,000,000
Balance at end of year	\$133,667,981	\$121,363,545



# Consolidated Statement of Changes in Financial Position

for the year ended March 31, 1987

	1987	1986
<b>Operating activities</b>		
Net income for the year	\$ 29,304,436	\$ 23,927,994
Amounts charged or credited to operations not requiring a current cash payment	149,892,941	122,817,159
Cash earned from operating activities	179,197,377	146,745,153
<b>Financing activities</b>		
Debt retirements and sinking fund payments	(95,467,654)	(162,389,362)
Assumption of liabilities of subsidiary company acquired (Note 12)	40,496,061	—
Long-term debt obligations acquired	2,631,102	73,666,297
Cash provided by (used in) financing activities	(52,340,491)	(88,723,065)
<b>Investment activities</b>		
Expenditure on fixed assets	(114,002,697)	(60,522,292)
Increase in deferred charges	(755,010)	(917,925)
Investment in assets of subsidiary company (Note 12)	(41,504,592)	—
Amounts financed by customer contributions, government grants and proceeds on disposal of fixed assets	40,617,329	3,852,668
Cash provided by (used in) investment activities	(115,644,970)	(57,587,549)
<b>Net change in non-cash working capital balances</b>	<b>11,582,040</b>	<b>995,937</b>
Net increase in cash during the year	22,793,956	1,430,476
Cash position at beginning of the year	(5,182,995)	(6,613,471)
<b>Cash position at end of the year</b>	<b>\$ 17,610,961</b>	<b>\$ (5,182,995)</b>
<b>Represented by</b>		
Cash and short-term investments	\$ 24,079,920	\$ 17,868,928
Short-term indebtedness	(6,468,959)	(23,051,923)
	<b>\$ 17,610,961</b>	<b>\$ (5,182,995)</b>



# Notes to Consolidated Financial Statements

March 31, 1987

## 1. Summary of significant accounting policies

The financial statements, which have been prepared in conformity with generally accepted accounting principles as established in Canada, give effect to the Commission's mandate to set power rates. The financial statements include the accounts of the Commission and, subsequent to the acquisition date of April 3, 1986, those of its 90% owned subsidiary, N.B. Coal Limited.

### a. Fixed asset additions and retirements

The cost of additions to fixed assets is the original cost of contracted services, direct labour and material, interest on funds used during construction and indirect charges for administration and other expenses, less credits for the value of power generated during commissioning. Administration and other expenses are capitalized during construction by applying a portion of such overheads to direct construction costs incurred each month.

Interest during construction is capitalized monthly based on the cost of long-term borrowings.

Contributions in aid of construction include amounts received from customers as well as government grants in respect of new facilities and are netted against the cost of plant financed thereby. Amounts received from customers are being amortized over the estimated service lives of the related assets, and the resulting credit is offset against the corresponding provision for depreciation.

Depreciation is provided for all assets sufficient to amortize the cost of such assets, less estimated salvage value where applicable, over their estimated service lives. The nuclear generating station is depreciated using an escalating charge method with annual increases based upon a 3% factor. Depreciation is provided on mining equipment under capital lease on an increasing charge basis, the depreciation amount being equal to the principal debt retirement required under the lease obligation, such that the annual depreciation and interest charge to income is the same as the annual lease payments over the life of the lease. All other assets are depreciated on a straight-line basis. Depreciation is provided on the net cost of fixed assets in respect of which government grants have been provided. The estimated service lives of the main categories of fixed assets, which are reviewed periodically, are currently as follows:

<i>Assets</i>	<i>Years</i>
Hydro Generating Stations	68
Thermal Generating Stations	30
Nuclear Generating Stations	30
Gas Turbine Generating Station	25
Diesel Generating Station	20
Terminals and Substations	30
Transmission System	40
Distribution System	28
Buildings	
— General	40
— Head Office	50
Mining equipment	20

### b. Inventories

Inventories of materials and supplies are valued at average cost. Oil and nuclear fuel inventory is valued at cost using the first-in, first-out method. Coal inventory is valued at the lower of average cost, which includes the costs of direct labour and overhead, and net realizable value.

### c. Debenture and note discounts and premiums, and issue expenses

The Commission amortizes debenture and note discounts or premiums and the expenses of issues over the lives of the issues to which they pertain.

### d. Other deferred charges

Survey and engineering expenses relating to construction projects being considered are deferred until a project is authorized for construction by the Commission. Such costs, together with preproduction and net development costs relating to mining operations, and certain training costs are then amortized against future income either directly or by annual depreciation charges resulting from certain of the items being capitalized. The costs of major geological studies undertaken to establish the location and quality of coal deposits are deferred and amortized on a straight-line basis over five years, commencing in the year subsequent to the year in which the exploration costs were incurred.



#### **e. Foreign exchange transactions**

Monetary assets and liabilities denominated in foreign currencies are translated to Canadian dollars at rates of exchange prevailing at the balance sheet date except where such items have been hedged by the acquisition of a forward exchange contract, in which case the rate established by the terms of the contract is used in the translation. Unrealized losses or gains arising on translation of long-term items are amortized to income on a straight-line basis over the remaining life of the related monetary assets or liabilities, except that amounts associated with the financing of major construction projects still in progress are deferred until the project is completed before being amortized over the then remaining life of the related monetary liabilities. The unamortized balance of the deferred exchange gains or losses are accumulated in an unrealized foreign exchange account which is shown on the balance sheet under deferred charges.

Exchange gains or losses resulting from transactions affecting current operations are reflected in income as realized.

#### **f. Revenue**

Billings to residential and general service customers are rendered monthly on a cyclical basis. All other customers are billed at the end of each month. Revenue in respect of items not billed at the end of a fiscal period is estimated and accrued.

#### **g. Deferred costs or revenues**

The Commission's power rates are established annually to recover its operating costs and a return on its investment consistent with prudent financial management. Each year certain factors, relating to water flow conditions, nuclear operating performance and economy sales transactions, which are largely outside the control of the Commission, may result in costs or revenues which vary from those originally included in the calculation of revenue requirements. The Commission accounts for such variations through a Generation Equalization Adjustment and an Economy Sales Stabilization Account.

##### *Generation Equalization Adjustment*

In order to equalize the fluctuations in generating costs caused by variations from average water flow conditions and nuclear operating performance, the Commission annually charges or credits income with an amount calculated to adjust such costs to an average value. The offsetting debit or credit is included in the generation equalization reserve account. The calculation of the adjustment is based on historical water flow data compiled over a period of 35 years and on the performance expectations of the nuclear generating station developed from comparable industry statistics and the operating experience of the nuclear unit itself.

##### *Economy Sales Stabilization Account*

The Commission annually charges or credits income with the difference between actual and forecast earnings on economy sales transactions with neighbouring utilities. The offsetting debit or credit is included in the Economy Sales Stabilization Account. Amounts so deferred are brought into the calculation of future revenue requirements in equal amounts over a period of three years and are amortized to the income statement on this basis.

#### **h. Irradiated fuel management and nuclear unit decommissioning**

In order to provide for the estimated future costs of permanently disposing of irradiated nuclear fuel and decommissioning the nuclear generating station to return the site to a state of unrestricted use, the Commission annually charges income with amounts calculated to be adequate, when accumulated with interest, to cover the total costs of these future activities as they occur. The calculations of the anticipated future costs are based on a detailed study which takes into account various assumptions regarding the method and timing of dismantlement of the nuclear facility, the cost of transportation of nuclear material to permanent disposal facilities, and estimates of interest and inflation rates in the future. With respect to irradiated nuclear fuel, the annual charge is related to the amount of nuclear fuel consumed while the decommissioning requirements are on the basis of equal annual amounts over the life of the unit.

The Commission is accounting for these transactions through means of deferred asset and deferred liability accounts. The total amount required to be collected over the life of the unit to cover decommissioning activities was recorded in these accounts as of the date the nuclear unit was placed in service. The deferred asset account is reduced annually by the amount collected from customers for decommissioning. The deferred liability account is increased each year by the amount collected from customers to cover disposal of irradiated nuclear fuel consumed during the year and by interest, compounded annually, on the accumulated amounts collected. Interest is calculated at the Commission's long-term borrowing rate and is charged to income annually.

In view of potential developments in the technology of decommissioning and irradiated fuel management, and because of the various assumptions and estimates inherent in the calculations, the Commission reviews such calculations periodically, making adjustments as necessary on a prospective basis.



#### i. Pension plans

Commission employees belong to the Province of New Brunswick Public Service Superannuation Plan. This multi-employer plan provides pensions based on length of service and final average earnings. The Commission and its employees make contributions to the plan as prescribed in the Public Service Superannuation Act, and the Commission's share is reflected as a charge against income.

The Commission's subsidiary, N.B. Coal Limited, maintains a pension plan wherein its employees contribute a percentage of earnings and the company pays all other costs. Pension benefits are based on the employees' contributions to the plan. The latest actuarial review carried out in January 1986 indicated that all vested benefits were fully funded. Pension costs associated with current service are charged to income and funded in the period in which the service is rendered. Special retirement benefits for early retirement and severance allowances are charged to income and funded as incurred.

## 2. Comparative financial statements

#### Cycle billing revenue

During the year, the Commission refined the accuracy of the methodology adopted in the previous fiscal year to estimate unbilled revenue at the end of each fiscal period. This resulted in the adjustment for accounting policy change in the statement of earnings invested in the business as at March 31, 1986 being restated to \$12,864,744, and a corresponding adjustment to accounts receivable on the balance sheet. No adjustment was required to the statement of income for the year ended March 31, 1986.

## 3. Fixed assets

	1987	1986
Land, buildings, plant and equipment, at cost		
Power generating stations	\$2,224,664,146	\$2 206 165 921
Transmission system	163,382,523	159,023,888
Substations	205,761,100	195,784,856
Distribution system	321,134,000	290,079,737
Other properties	28,296,292	28,198,042
Communications equipment	6,698,060	6,635,350
Mining equipment and related assets	49,763,766*	—
Motor vehicles and miscellaneous equipment	35,385,216	28,289,808
	3,035,085,103	2,914,177,602
Less		
Contributions in aid of construction	14,656,376	13,113,290
Government grants	57,993,313	22,500,000
	72,649,689	35,613,290
	2,962,435,414	2,878,564,312
Less accumulated depreciation	642,875,907	550,568,272
	2,319,559,507	2,327,996,040
Construction-in-progress	58,465,929	24,682,358
	\$2,378,025,436	\$2,352,678,398

\* Includes \$34,792,241 being the gross amount of assets under capital lease.  
Accumulated depreciation includes \$7,428,858 with respect to these assets.



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**4. Unrealized foreign exchange differences, less amounts amortized**

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	1987	1986
Exchange adjustment at balance sheet date on debentures and notes issued by the Commission		
Payable in Swiss francs	\$ 89,216,640	\$ 55,859,443
Payable in United States dollars	183,521,963	264,343,362
Exchange premium on assets denominated in foreign currencies held in sinking funds maintained by the Province of New Brunswick	(13,128,152)	(26,853,500)
Exchange premium on assets held in the insurance fund	(27,823)	(148,108)
	259,582,628	293,201,197
Less accumulated amortization	105,411,050	75,882,646
	\$154,171,578	\$217,318,551

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**5. Subsequent event**

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On April 3, 1987, the Commission liquidated its Insurance Fund and transferred the balance in the insurance reserve to earnings invested in the business. Due to the growth in size of the utility, it is the Commission's opinion that a funded reserve against such losses is no longer required. The gain on sale of the fund securities amounted to \$390,458.



## 6. Long-term debt

### Debentures and notes issued by the Commission

<i>Date of maturity</i>	<i>Interest rate %</i>	<b>1987</b>	<b>1986</b>
Payable in Canadian dollars			
1987 March 15	5½	\$ —	\$ 2,650,000
1988 November 1	5½	2,000,000	2,000,000
1989 October 15	8½	228,000	228,000
1990 January 10	11¼	50,000,000	50,000,000
1990 May 15	13¾	73,117,000	73,117,000
1990 August 1	9	293,000	293,000
1991 July 1	5¾	5,000,000	5,000,000
1992 March 15	5½	7,350,000	7,350,000
1993 February 8	11¼	100,000,000	100,000,000
1993 November 1	5½	6,000,000	6,000,000
1994 June 15	5½	10,000,000	10,000,000
1994 December 31	5½	3,790,000	3,790,000
1995 May 1	6¼	15,000,000	15,000,000
1995 May 15	10¾	20,000,000	20,000,000
1995 October 15	5¾	7,500,000	7,500,000
1996 January 1	6	13,800,000	13,800,000
1996 March 1	6	4,000,000	4,000,000
1996 October 1	6½	6,100,000	6,100,000
1996 November 15	7⅞	20,000,000	20,000,000
1997 October 15	8¾	20,000,000	20,000,000
1998 November 15	8½	25,000,000	25,000,000
1999 October 1	11	24,674,000	24,674,000
1999 December 31	5½	8,210,000	8,210,000
2000 March 1	10	50,000,000	50,000,000
2000 August 25	11⅞	35,000,000	35,000,000
2003 December 21	10¼	75,000,000	75,000,000
2004 November 1	13¼	100,000,000	100,000,000
2005 January 10	11¼	50,000,000	50,000,000
2005 May 1	12½	75,000,000	75,000,000
		<b>807,062,000</b>	<b>809,712,000</b>
Payable in Swiss francs			
*1991 September 26 (SFr80,000,000)	5	33,111,200	29,761,600
1992 August 30 (SFr73,770,000)	5¼	33,203,877	33,203,877
1993 March 30 (SFr75,000,000)	3¾	42,834,750	45,690,400
Canadian dollars at date of issue		<b>109,149,827</b>	<b>108,655,877</b>
Exchange adjustment at balance sheet date		<b>89,216,640</b>	<b>55,859,443</b>
		<b>198,366,467</b>	<b>164,515,320</b>

\*Refinancing SFr76,000,000, originally due September 28, 1991, bearing interest at 6%.



<i>Date of maturity</i>	<i>Interest rate %</i>	<b>1987</b>	<b>1986</b>
Payable in United States dollars			
1986 November 1	5¼	US\$ —	US\$ 443,000
1987 September 1	5¼	624,000	1,216,000
1988 October 1	17	60,000,000	60,000,000
1989 March 1	16¼	75,000,000	75,000,000
1990 April 15	5	5,705,000	6,522,000
1991 May 1	5½	7,148,000	7,890,000
1991 May 1	15	100,000,000	100,000,000
1991 November 15	6	17,500,000	17,500,000
1992 October 15	6½	15,000,000	15,000,000
1993 February 15	6⅞	15,000,000	15,000,000
1994 February 1	7¾	10,000,000	10,000,000
*1994 June 10	7¾	55,000,000	52,900,000
1995 October 1	10½	75,000,000	75,000,000
1997 February 15	9	68,750,000	75,000,000
1998 April 1	7⅞	32,400,000	33,975,000
2001 May 1	9⅞	100,000,000	100,000,000
2004 April 1	8¾	50,000,000	50,000,000
2005 January 15	10	75,000,000	75,000,000
2007 August 1	8¾	75,000,000	75,000,000
United States dollars		837,127,000	845,446,000
Exchange premium at date of issue		CDN\$ 71,942,342	CDN\$ 71,552,334
Exchange adjustment at balance sheet date		183,521,963	264,343,362
		1,092,591,305	1,181,341,696
		2,098,019,772	2,155,569,016
Less sinking fund assets held in trust by the Province of New Brunswick			
Book value		356,202,189	291,224,072
Exchange premium on assets denominated in foreign currencies		13,128,152	26,853,500
		369,330,341	318,077,572
		\$1,728,689,431	\$1,837,491,444

\* Refinancing US \$52,900,000, originally due March 1, 1994, bearing interest at 9¾%.



	1987	1986
<b>Atomic Energy of Canada Limited</b>		
Note payable in equal annual instalments of principal and interest at 9.7064% per annum to the year 2008	\$337,724,486	\$342,200,680
<b>Northern Canada Power Commission</b>		
Loans repayable in annual instalments of principal and interest at rates varying from 4½% to 8½% per annum to the year 2011	\$ 41,877,604	\$ 43,708,603
<b>Other long-term debt</b>		
City of Campbellton — in respect of the purchase of distribution system; payable in equal annual instalments of principal and interest at 9¼% per annum to the year 1993	\$ 756,632	\$ 848,131
Government of Canada — in respect of the construction of a transmission line from Coleson Cove to Salisbury; payable in equal annual instalments of principal and interest at rates varying from 9¼% to 9½% per annum to the year 2011	6,126,160	6,195,570
Term demand loans of subsidiary company, at interest rates which approximate the banks' prime lending rate, payable under term repayment provisions to the year 1992	4,792,000	—
	\$ 11,674,792	\$ 7,043,701
<b>Obligations under capital lease</b>		
Capital lease obligations on mining equipment are comprised of the following:		
Scotia Leasing Limited, payable together with interest at 7.35% per annum, in equal semi-annual installments to the year 1999	\$28,290,570	\$ —
Other	707,250	—
	\$28,997,820	\$ —
<b>Minimum lease payments in each fiscal year are expected to be as follows:</b>		
1988	\$ 3,906,566	
1989	3,906,566	
1990	3,803,566	
1991	3,481,621	
1992	3,375,621	
1993-1999	27,724,614	
Total minimum lease payments	46,198,554	
Less amount representing implicit interest	17,200,734	
	\$28,997,820	



### Long-term debt payments

Long-term debt maturities (after deducting sinking funds estimated to be available at maturity inclusive of actual earnings to March 31, 1987 and future earnings calculated at 8%) and sinking fund requirements in respect of debt outstanding at March 31, 1987 are as follows for the five years ending March 31, 1992, using exchange rates in effect at March 31, 1987 for debt denominated in foreign currencies:

Year ending March 31, 1988	\$ 60,509,000
Year ending March 31, 1989	235,205,000
Year ending March 31, 1990	105,279,000
Year ending March 31, 1991	136,010,000
Year ending March 31, 1992	192,278,000

### Sinking funds

The Minister of Finance of the Province of New Brunswick, as Trustee for the Commission, maintains a sinking fund for all debenture issues requiring same. Sinking fund earnings are reflected in the Commission's income. Commission debentures held in the fund are not cancelled until maturity.

Prior to the current fiscal year, the Trustee included as earnings accrued interest on foreign investments held at year end without adjusting for foreign exchange. The inclusion of foreign exchange on accrued interest at March 31, 1987 resulted in an additional \$1,579,802 being added to the Commission's income.

## 7. Short-term indebtedness

Short-term borrowings from banks are payable on demand and are reflected on the balance sheet, together with outstanding cheques, under the caption "Short-term indebtedness". The Commission has bank lines of credit, guaranteed by the Province of New Brunswick, for short-term borrowings totalling \$130,000,000. The Commission also borrows funds for temporary purposes from other sources from time to time including the Province of New Brunswick.

N. B. Coal has bank lines of credit which, together with the term demand loans referred to in Note 6, are secured by a general assignment of book debts, assignment of inventory under Section 178 of the Bank Act, and a chattel mortgage on certain assets.

The total of all short-term borrowings was \$1,123,937 at March 31, 1987 (1986 — \$662,174).

## 8. Economy Sales Stabilization Account

	1987	1986
Balance at beginning of year	\$(1,911,650)	\$ 6,204,545
Excess (deficiency) of actual over forecast earnings from economy sales for year	4,044,015	(2,529,458)
Amount amortized	(1,864,585)	(5,586,737)
	2,179,430	(8,116,195)
Balance at end of year	\$ 267,780	\$(1,911,650)



**9. Irradiated fuel management and nuclear unit decommissioning**

	1987	1986
Balance at beginning of year	\$ 87,503,826	\$86,996,886
Adjustment to deferred liability for cost of decommissioning	—	(8,142,000)
Amounts collected from customers to cover cost of disposal of nuclear fuel consumed during the year	6,200,312	5,717,707
Interest	3,644,952	2,931,233
Balance at end of year	\$ 97,349,090	\$ 87,503,826

Charges for irradiated fuel management and nuclear unit decommissioning, including interest, are brought into the calculation of revenue requirements each year and collected from in-province and interconnected customers through sales of power. The total amount so collected is represented by the net of the liability account and the deferred asset account for nuclear unit decommissioning. This amount is currently being utilized by the Commission as a source of funds.

	1987	1986
Deferred liability account for irradiated fuel management and nuclear unit decommissioning	\$ 97,349,090	\$ 87,503,826
Less deferred asset account for nuclear unit decommissioning	55,675,272	57,816,636
Cumulative amount collected from customers	\$ 41,673,818	\$ 29,687,190

**10. Reserves**

	1987	1986
Generation equalization	\$262,535,974	\$229,400,974
Insurance	7,500,000	7,500,000
	\$270,035,974	\$236,900,974

**Generation equalization reserve**

In addition to the annual adjustment to generation cost described in Note I.g., the Commission, as it deems advisable, increases the generation equalization reserve by appropriations from earnings invested in the business. Total appropriations to the reserve amounted to \$152,000,000 at March 31, 1987 (1986 - \$135,000,000). Appropriations are made to ensure that the reserve is sufficient to cover the cost of replacement power in the event of unfavourable water flow conditions and nuclear operating performance for an extended period.

**Insurance reserve (See Note 5)**

This reserve was established by appropriations from earnings invested in the business and served as a self-insurance fund to complement the insurance coverage maintained with insurance companies.

**11. Sales of power**

Out-of-province sales of power include \$242,251,795 (1986 — \$316,669,779) to utilities in the United States.

The price of these sales includes incremental fuel and operating costs plus a margin of net benefit to the Commission.



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## 12. Acquisition of subsidiary company

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On April 3, 1986, the Commission acquired 90% of the common shares of N.B. Coal Limited, a corporation previously controlled by the Crown in right of the Province. Under a coal supply agreement previously entered into between the Commission and N.B. Coal, the Commission is entitled to the total of N.B. Coal's production at cost. N.B. Coal was purchased for \$1 and the acquisition can be summarized as follows:

### Assets acquired

Fixed	\$33,114,626
Current	6,109,822
Deferred charges	1,699,452
Goodwill	580,692
	<hr/>
	41,504,592

### Liabilities assumed

Long-term debt	6,163,450
Obligations under capital lease	30,656,623
Current, excluding bank indebtedness	3,508,712
Minority interest	167,276
	<hr/>
	40,496,061

Bank indebtedness assumed	<hr/>
	\$ 1,008,531

The creation of goodwill resulted from the fact that total liabilities assumed exceeded total assets acquired. The Commission wrote off the total amount of goodwill to income as of the date of acquisition.

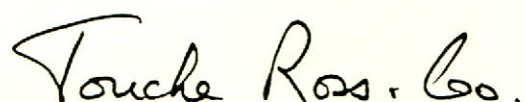


The Honourable Richard B. Hatfield,  
Premier of the Province of New Brunswick,  
Fredericton, New Brunswick.

Sir:

We have examined the consolidated balance sheet of The New Brunswick Electric Power Commission as at March 31, 1987 and the consolidated statements of income, earnings invested in the business, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Commission as at March 31, 1987 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



Chartered Accountants

Fredericton, N.B.

June 29, 1987

Touche Ross & Co.  
Chartered Accountants  
860 Carleton Place  
520 King Street  
Fredericton  
New Brunswick  
E3B 6G3  
Telephone: 506 458-8105



# Statement of Generation and Sales For Fiscal Year Ended 31 March 1987

	1987 Kilowatt Hours	1986 Kilowatt Hours	Difference Kilowatt Hours	
Generation				
Hydro	2 756 020 200	2 333 204 400	422 815 800	18.1%
Thermal	3 862 215 000*	3 088 330 000*	773 885 000	25.1%
Nuclear	5 625 467 000	5 764 937 000	- 139 470 000	- 2.4%
Diesel	31 100	75 800	- 44 700	- 59.0%
Purchases	6 659 879 000	7 051 931 400	- 392 052 400	- 5.6%
Gross Gen. & Purchases	18 903 612 300	18 238 478 600	665 133 700	3.7%
Station Service	776 920 000	755 276 400	21 643 600	2.9%
Net Generation & Purchases	18 126 692 300	17 483 202 200	643 490 100	3.7%
Losses-Transformer & Transmission	625 254 492	615 022 548	10 231 944	1.7%
Losses % of Net Gen. & Purchases	3.5%	3.5%		
<b>Total Energy Distribution</b>	<b>17 501 437 808</b>	<b>16 868 179 652</b>	<b>633 258 156</b>	<b>3.8%</b>
* (P.E.I. Portion of Dalhousie #2 Not Included)				
Sales				
Wholesale	876 888 309	846 350 345	30 537 964	3.6%
Industrial Power	4 666 341 126	4 087 941 171	578 399 955	14.2%
General Service	1 443 659 482	1 351 851 226	91 808 256	6.8%
Residential	3 256 193 095	2 981 291 891	274 901 204	9.2%
Average Annual kW.h per Residential Customer	14 201	13 334		
Street Lights	57 950 901	56 197 865	1 753 036	3.1%
Total In-Province Sales	10 301 032 913	9 323 632 498	977 400 415	10.5%
Interconnections	6 917 621 000	7 230 525 000	- 312 904 000	- 4.3%
Grand Total	17 218 653 913	16 554 157 498	664 496 415	4.0%
Station & Internal Use	777 325 559	755 696 026	21 629 533	2.9%
Total Losses	907 632 828	928 625 076	- 20 992 248	- 2.3%
<b>Gross Generation &amp; Purchases</b>	<b>18 903 612 300</b>	<b>18 238 478 600</b>	<b>665 133 700</b>	<b>3.7%</b>

## Statement of Operating and Physical Statistics

	31 March 1987	31 March 1986	31 March 1985	31 March 1984	31 March 1983
Plant Nameplate Capacity-kW	3 189 976	3 189 976	3 189 976	3 136 576	3 136 576
Gross Generation — Purchases kW.h	18 903 612 300	18 238 478 600	16 767 216 300	16 299 213 045	12 161 686 535
Total Energy Distributed - kW.h	17 501 437 808	16 868 179 652	15 373 362 256	14 878 818 986	10 995 271 349
Total Revenue	\$ 825 230 136	\$ 894 349 683	\$ 834 207 263	\$ 768 678 286	\$ 545 636 447
Total Expenditures and Appropriations	\$ 812 925 700	\$ 880 421 689	\$ 828 600 337	\$ 767 725 791	\$ 534 257 771
Fixed Assets, Including Work In Process	\$3 020 901 343	\$2 903 246 670	\$2 857 840 021	\$2 774 479 060	\$2 705 614 539
Current Assets	\$ 211 149 136	\$ 205 458 297**	\$ 190 109 633	\$ 177 891 920	\$ 161 419 544
Current Liabilities	\$ 239 927 681	\$ 255 352 964	\$ 308 998 965	\$ 283 747 745	\$ 190 535 732
Inventories	\$ 72 963 969	\$ 67 069 700	\$ 78 457 920	\$ 64 455 755	\$ 68 584 572
Long Term Debt-Net	\$2 088 454 785	\$2 162 631 985	\$2 127 953 404**	\$2 123 004 783**	\$2 224 434 080**
Sinking Funds Assets	\$ 369 330 341	\$ 318 077 572	\$ 253 682 054**	\$ 191 820 714**	\$ 147 548 192**
Accumulated Depreciation	\$ 642 875 907	\$ 550 568 272	\$ 484 942 575	\$ 415 100 166	\$ 346 407 214
Other Reserves, Earnings Retained In The Business & Minority Interest in Subsidiary	\$ 403 712 980	\$ 358 264 519**	\$ 311 780 781	\$ 274 414 855	\$ 239 461 621
Reserves, Earnings Retained In The Business, Minority Interest in Subsidiary & Accumulated Depreciation	\$1 046 588 887	\$ 908 832 791**	\$ 796 723 356	\$ 689 515 021	\$ 585 868 835
Total Reserves, Earnings Retained In The Business As Percentage of Fixed Assets	34.6%	31.3%	27.9%	24.9%	21.7%
Kilometres Transmission Lines	6 160	6 105	6 033	5 805	5 721
Kilometres Distribution Circuits	23 861	23 494	23 255	22 986	22 236
Number Residential Customers	229 293	223 579	218 837	214 478	209 731
Number Industrial Customers	1 574	1 540	1 478	1 450	1 413
Number General Service Customers	19 232	18 756	18 283	17 804	17 506
Number Street Light Customers	2 387	2 234	2 199	2 145	2 099
Direct Customers	252 486	246 109	240 797	235 877	230 749
Indirect Customers	38 436	38 169	37 641	37 644	37 136
Total Customers	290 922	284 278	278 438	273 521	267 885

\*\* Restated



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## Generating Station Data

	No. of Units	Nameplate Capacity kW
<b>Hydro</b>		
Mactaquac	6	653 400
Beechwood	3	115 000
Grand Falls	4	63 000
Tobique	2	20 000
Sisson	1	10 000
Milltown	7	3 900
<i>Total Hydro</i>	23	865 300
<b>Nuclear</b>		
Point Lepreau	1	630 000
<i>Total Nuclear</i>	1	630 000
<b>Oil/Coal</b>		
Coleson Cove (Oil)	3	1 005 000
Courtenay Bay (Oil)	4	263 365
Dalhousie (Oil/Coal)	2	280 000
Grand Lake 2 (Coal)	4	85 000
Chatham (Coal/Oil)	2	32 500
<i>Total Oil/Coal</i>	15	1 665 865
<b>Gas Turbine</b>		
Moncton	1	25 000
<i>Total Gas Turbine</i>	1	25 000
<b>Diesel</b>		
Grand Manan	5	3 811
<i>Total Diesel</i>	5	3 811
<b>Grand Total</b>	45	3 189 976

## Legend

### Transmission lines

345 kV	
230 kV	
138 kV	



## System Map





