



# NEWFOUNDLAND AND LABRADOR HYDRO GROUP OF COMPANIES

# CORPORATE MISSION STATEMENT

The mission of the Newfoundland and Labrador Hydro Group of Companies is to provide electrical power and energy, on behalf of the people of the Province, at the lowest cost consistent with reliable service, due consideration for the environment and the safety of our employees and the customers which we serve.

Hydro is planning, building and operating electrical generation, transmission and distribution facilities to fulfill this aim. All activities are performed under the overriding requirement that they be consistent with the financial, energy and development policies of the Government.

The Newfoundland and Labrador Hydro Group of Companies is committed to the maintenance of a corporate organization and managerial structure which operates effectively and efficiently and earns recognition for corporate leadership, productivity, financial responsibility and integrity.

Each of our employees contributes to achieving our mission. We seek to attract, retain and promote high quality employees in order to ensure maximum productivity and efficiency, by rewarding performance through competitive compensation and benefit programs, comprehensive management training and nondiscriminatory opportunities for career development.

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# **Management Committee**

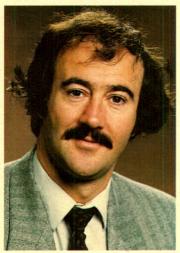


Seated L to R: John P. Henderson, Maureen P. Greene, Cyril J. Abery, David W. Mercer. Standing L to R: R. Andrew Grant, T. David Collett, Derek W. Osmond, Leo J. Cole, Stewart Dicks, and David W. Reeves.

## **Directors**



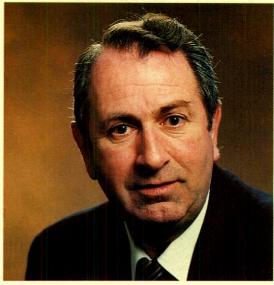
Janet C. Gardiner
Treasurer, Chester Dawe Limited,
St. John's



Edward M. Hearn Barrister and Solicitor, Miller & Hearn, Labrador City



David W. Mercer President, Newfoundland and Labrador Hydro, St. John's



Cyril J. Abery
Chairman and Chief Executive Officer
Newfoundland and Labrador Hydro, St. John's

# MESSAGE FROM THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Electricity is one of the major factors which has had a positive impact on the economic and social development of our Province. Moreover its role continues to expand. For over 30 years the Hydro Group of Companies has been at the center of the development of the Province's power potential, enabling growth in industrial centers and bringing the benefits of electricity to every corner of the Province.

During 1987 we shared in the excitement experienced by the residents of Norman Bay, a small community on the coast of Labrador, when electricity was brought to their homes for the first time. Christmas in Norman Bay in 1987 was a very special one as electricity arrived in the community shortly before the start of the festive season. The residents are now experiencing the conveniences of electricity which have been taken for granted in most of the Province for many years.

Virtually every community in the Province from the smallest to the largest now has the comforts and conveniences which a modern electrical supply provides. These benefits include individual and public safety, a continuous supply of relatively low cost energy and, thanks to satellite communication, the latest technology for business activity and home entertainment. Industry has also benefited from a continuous supply of energy at a reasonable rate. This

has enabled the continuation and growth of our resource based enterprises as the fishery, forestry and mining industries compete successfully in the world marketplace and many small individually owned businesses thrive within the Province.

The development of Newfoundland and Labrador's hydro-electric potential has been carried out in a planned and orderly manner, responding to the anticipated needs of a growing economy. Considerable attention has been given to the sensitivities of the environment by ensuring that unavoidable ecological disruptions are minimized and that, whenever practical, restorative measures are taken to leave the landscape in an attractive condition.

As the Province's economy and energy demand has grown throughout the years, Hydro's workforce has grown apace. Our current staff totals approximately 1300 permanent employees who are stationed throughout the Province. In addition to its permanent workers, Hydro engages several hundred temporary employees annually for major maintenance and new construction projects.

Hydro's employees have been able to share in the improving quality of life within the Province and have contributed greatly to their respective communities. Their dedication to getting the job done well is exemplified both in the high quality of Hydro's physical assets and the professionalism with which Hydro's production facilities are operated and maintained.

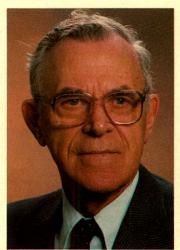
We are continually looking toward the future in planning to meet our energy needs. We remain optimistic about the development of the enormous hydro-electric potential in Labrador. There is little doubt that the Province's energy future is highly dependent on access to Labrador hydro-electric potential and we are confident that such access will be achieved in the near future. Regardless, electricity will continue to play a significant role in the development of the Province as it has in the past.

CYRIL J. ABERY
Chairman & Chief Executive
Officer

## **Directors**



Lawrence D. Fahey
President, Fahey Building Limited,
St. John's



Dr. Moses O. Morgan
President Emeritus, Memorial University
of Newfoundland, St. John's

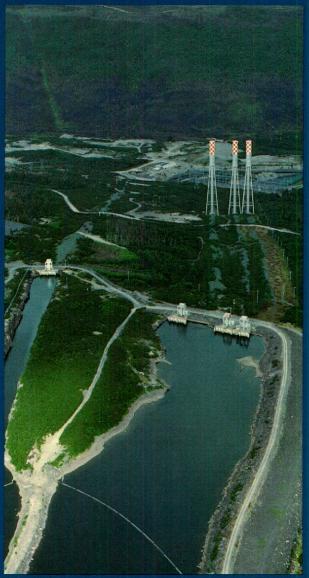


Roland T. Martin
President and Chief Operating Officer,
Keltic Incorporated, Halifax, Nova Scotia

# Review of Operations, Engineering and Construction



Diesel Plant Mechanic



Long Pond — Main forebay of Bay D'Espoir Hydro-electric Generating Plant

# ENERGY PRODUCTION AND SALES

Hydro's generating facilities on the Island of Newfoundland produced a total of 5.4 billion kilowatthours during 1987, compared to 5.2 billion kilowatthours during 1986. Power purchased increased the total electrical energy supply for 1987 to 5.5 billion kilowatthours, a 4.0% growth over 1986.

Of this total supply figure, 57% or 3.1 billion kilowatthours, was produced from four hydro-electric generating stations: 1.9 billion kilowatthours were generated at Bay D'Espoir, 0.2 billion kilowatthours at Hinds Lake, 0.4 billion kilowatthours at Upper Salmon, and 0.6 billion kilowatthours at Cat Arm. Hydro-electric production was 21% lower than in 1986, due primarily to near record low reservoir inflows during most of the year. In fact, for the 34 month period from June, 1984 to March, 1987 Hydro experienced the second lowest total inflow in the 38 years of our hydrological records.

Consequently, thermal energy production for 1987 was a record 2.3 billion kilowatthours, or 43% of our total supply. The oil-fired thermal generating station at Holyrood consumed over 3.5 million barrels of oil to produce its record output.

The system peak for the year, 1,065,000 kilowatts, occurred on March 11, 1987, down slightly from the 1986 figure of 1,084,000 kilowatts.

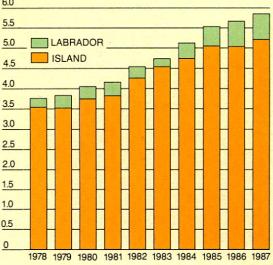
Energy sales to Island customers during 1987 increased to a record 5.2 billion kilowatthours, a 3.6% growth over 1986. Utility customer sales of 3.6 billion kilowatthours were 4.5% higher than in 1986. Industrial customer sales of 1.6 billion kilowatthours were 1.7% higher than in 1986.

Energy sales to customers in Labrador decreased by 3% during 1987 to 587 million kilowatthours. This was caused by a slight decrease in sales to industrial customers partly offset by utility sales which continued to grow during 1987, reaching 159 million kilowatthours, a 6.2% increase over 1986.

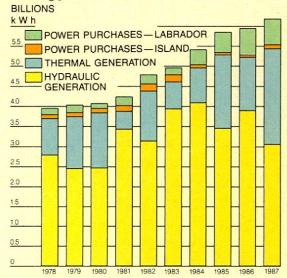
Hydro provides operational services to the Power Distribution District of Newfoundland and Labrador ("PDD") which is responsible for the Rural Electrification Program within the Province. PDD serves 75,000 people by distributing electricity to its 27,000 customers in approximately 200 rural communities. PDD's power is either purchased from the Island transmission grid or produced from local diesel generators. Revenue from PDD's customers is not sufficient to meet its high operating costs. Consequently, the Provincial Government provides an annual subsidy of approximately \$23 million to PDD to make up the shortfall.

## **Energy Sales**

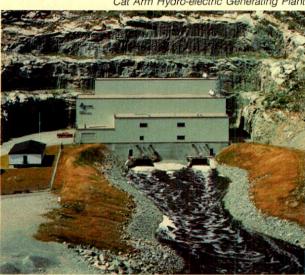
BILLIONS k W h 6.0



## System Generation and Energy Purchases



Cat Arm Hydro-electric Generating Plant





Interior view of Cat Arm Hydro-electric Generating Plant

During 1987 PDD purchased 77% of its energy requirements from Hydro and produced the remaining 23% from diesel generation.

In November 1987, the community of Burgeo on the south coast of Newfoundland, was connected to the Island transmission grid and its diesel generating station was closed. This connection was made economically attractive by the recent completion of a 147 kilometer, 138 kilovolt line from the Island transmission grid to serve the new Hope Brook Gold Mine, only 50 kilometers from Burgeo. Approximately 800 additional customers can now take advantage of the lower rate structure applicable to power supplied from the Island transmission grid.

In December 1987 an investor-owned generating company began operating a 175 kilowatt mini-hydro generating station in Mary's Harbour, Labrador. PDD has contracted to purchase all of the output of this plant. This is the first time that PDD has purchased energy from a private company and is seen as the forerunner of other such purchases under Hydro's new power purchase policy. This plant will reduce the fuel consumed by the Mary's Harbour diesel generating station by approximately 50%.

# ENERGY PLANNING, ENGINEERING AND CONSTRUCTION FOR HYDRO'S CUSTOMERS

In addition to constructing and operating its generating, transmission and distribution facilities, the Hydro Group continues to assess growth and plan for new energy sources so that future demand for electricity will be met.

There are a limited number of environmentally acceptable hydro-electric sites remaining on the Island portion of the Province. During the year final engineering and environmental studies were undertaken to establish the basic design parameters, cost estimates and construction schedules for several of these potential developments. In addition, prefeasibility studies commenced on three small hydroelectric sites which are close to existing transmission facilities. Several other potential hydro-electric projects were registered with the Provincial Department of Environment during the year. These registrations are in accordance with provincial regulations which require the preparation of appropriate environmental impact statements or environmental preview reports for each project. Environmental monitoring programs were also implemented for each of the major construction projects during 1987.

The highlights of the 1987 construction program included:

- Completion of the 147 kilometer, 138 kilovolt transmission line to the Hope Brook gold mine and to Burgeo and Grand Bruit.
- Completion of a gated spillway at the West Salmon Dam of the Upper Salmon hydro-electric development.
- Commencement of upgrading of Units 1 and 2 at the Holyrood generating station from 150 megawatts each to 175 megawatts each.
- Commencement of the 8 megawatt Paradise River hydro-electric development on the Burin Peninsula.
- Project release on the 5 megawatt wood chip fired generating station at Roddickton.
- Completion of engineering design for the 25 kilovolt submarine cable connection to Fogo and Change Islands.

The transmission line to the Hope Brook Gold Mine was completed in December and was available for the supply of power and energy on schedule and within budget. This line was extended to permit connection of Burgeo and Grand Bruit to the Island transmission grid.

The completion of the gated spillway at the West Salmon Dam will improve the operating regime of the Upper Salmon generating station and the flood handling capabilities of the entire Bay D'Espoir system.

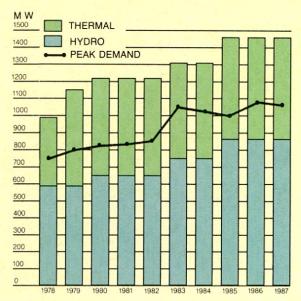
Engineering work associated with the modification of Units 1 and 2 at the Holyrood Generating Station commenced during 1987. Engineering design requirements were completed and major equipment placed on order. The completion of this project is scheduled for October 1988 and October 1989 for units 1 and 2 respectively, and will result in the capacity of these units being increased from 150 megawatts to 175 megawatts each at a total cost of approximately \$20 million.

The 8 megawatt Paradise River hydro-electric project is scheduled for completion in January 1989 at an estimated capital cost of \$21.6 million. When completed, this facility, which is designed to operate at a 53% load factor, will add approximately 37 million kilowatthours annually to the overall generating system capability.



Forebay of the Upper Salmon Hydro-electric Generating Plant

## **Generating Capacity and Demand**



NOTE: EXCLUDES DEMAND IN LABRADOR SUPPLIED BY PURCHASED POWER

In 1987, it was decided to construct a 5 megawatt wood chip fired generating station near Roddickton on the northeast coast of the Great Northern Peninsula. This station will be connected to the St. Anthony and Main Brook diesel systems by a 69 kilovolt transmission line. Construction of this project will begin in 1988 and will be completed early in 1989. When this plant begins operation, the Main Brook diesel generating station will be closed and there will be a significant reduction in production at St. Anthony and Roddickton as output from these diesel plants is displaced by wood chip generated electricity.

Engineering design was completed for the 25 kilovolt submarine cable connection to Fogo and Change Islands. The route for a 33 kilometer section of the 66 kilovolt transmission line for the project was finalized and appropriate surveys completed. The overall project is scheduled for completion in October 1988 at an estimated cost of \$13.7 million. This project will connect Fogo and Change Islands to the Island transmission grid and result in lower electricity rates to the approximately 1,650 customers in the area.

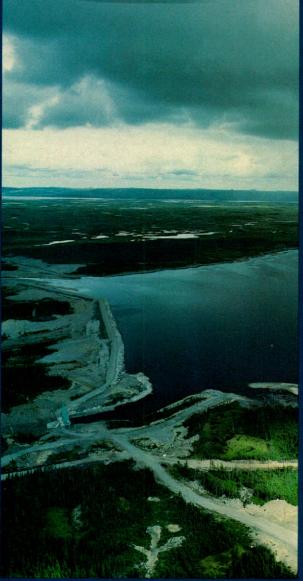
A milestone during 1987 was the decision to proceed with the construction of a head office complex to house the corporate headquarters of the Hydro Group of Companies as well as its energy control centre. The new building will be constructed on a 14 acre site in St. John's. The building will contain about 150,000 square feet and will be designed to facilitate future expansion. Construction will begin during the spring of 1988 and will be completed early in 1990. The cost of the facility is expected to be approximately \$40 million, about half of which is related to the energy control centre.

PDD capital expenditures for 1987 were \$7.2 million, compared with \$6.3 million in 1986. Of this, \$1.6 million was spent on generating facilities and \$5.6 million on upgrading and extending the distribution systems to meet the increasing power demands of customers.

# **Employee Relations**



Office Services Supervisor



Hinds Lake reservoir

Accounting Clerk





General Maintenance Man

A key element in the performance of the Hydro Group of Companies in 1987 was the contribution of employees. As a major employer providing essential electrical service to the Province, it is encouraging that labour relations continued to be satisfactory throughout 1987. Collective agreements between the International Brotherhood of Electrical Workers, Local 2351, and Churchill Falls (Labrador) Corporation Limited expired in November for members of the Operations unit and in December for members of the Office and Clerical Workers unit. Negotiations for contract renewal commenced in December 1987.

The Loss Control program, initiated within the Hydro Group during 1985, continued to be a significant part of the training activity during the year. Approximately eighty-five percent of our total work force had completed the initial phase of the program by the end of the year. This program uses an internationally agreed upon set of standards in promoting the control of losses by identifying factors that could result in personal injury or property damage.

An essential element in the program is a performance audit conducted by specially trained auditors in accordance with the international rating standards established by the International Loss Control Institute. Hydro received three Two Star Awards and two Three Star Awards covering certain areas of our operating system after they were audited this year.

Hydro is very proud that Mr. John Butler, one of its Loss Control auditors, was awarded the distinction of Auditor of the Year by the International Loss Control Institute. He earned this award by competing with 450 other auditors from around the world.

Accident prevention continued to receive high priority during the year. As a result of a high level of employee response only 2800 employee hours, out of a total of 2.1 million employee hours, were lost due to accidents during the year. This compares with 4000 employee hours out of a total of 2.2 million employee hours in 1986. There were approximately 600 safety meetings held throughout the year.

The Corporation received special recognition from the Canadian Electrical Association for having the lowest incidence in the All Injury Frequency Rate category.

Other aspects of training included supervisory and management development. During the year there were approximately 180 separate classroom sessions which provided technical, managerial and safety training.

During 1987, as in previous years, Hydro's employees continued to give freely of their time and talents as they participated in numerous volunteer activities in communities throughout the Province. Hydro is pleased to have been involved for the first time in the Junior Achievement Program. Hydro again supported the Shad Valley Summer Program which provides a unique opportunity for exceptionally talented students to deepen and broaden their interest in high technology. Hydro's program of scholarships to qualified students attending post-secondary educational institutions in the Province was also expanded in 1987 in recognition of a continuing community need.

A special committee of employees was set up to consider the issue of smoking in the work place. A survey was conducted which showed a large percentage of the work force favouring a restrictive smoking program. Such a program will be the first phase of a plan leading to a total ban on smoking.

A performance improvement program was introduced during the year which will be implemented throughout the Hydro Group of Companies. The program will help Hydro build on the principles of the Loss Control program by assisting employees in self-development and self-improvement.

#### Senior Secretary







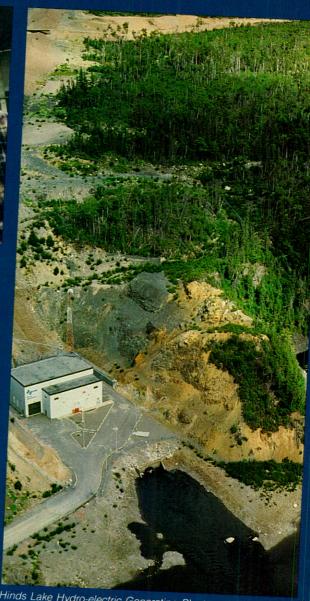


Senior Financial Analyst

# Rates and Corporate Services



Telecontrol Supervisory Technologist at Hinds Lake Hydro-electric Generating Plant



Hinds Lake Hydro-electric Generating Plant

The rates Hydro charges to its retail customers are regulated by the Public Utilities Board. All other rates are established annually by the Board of Directors of Hydro.

Hydro did not require a revision to its retail rate structure during the year and, based on our most recent projections, it appears that it will not be necessary to alter these rates until 1989 although there will be a small industrial rate increase in 1988.

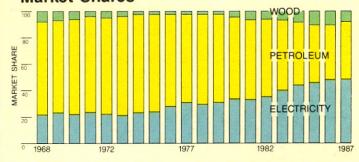
The Rate Stabilization Plan, which is designed to smooth the variances between anticipated production costs and actual results, has been working exactly as contemplated. Rate adjustments, which are designed to amortize the balance in the Plan over three years, are automatically implemented on July 1st of each year. The adjustment to Hydro's retail customers on July 1st 1987 was an insignificant increase of only .04 mills per kilowatthour.

State of the art computer technology continued to be brought to the Hydro Group both at corporate headquarters and in all the Area offices through the installation of personal computers and terminals. This technology enables our employees to be creative and innovative in using and designing computer applications that are unique to their own area of activity.

The construction of the Bay D'Espoir hydro-electric plant and Island transmission grid in the late 1960's, initiated a period of sustained growth in the use of electricity. As indicated in Figure 1, over the last two decades the increase in the use of electricity in Newfoundland has been dramatic. The annual consumption per residential customer in 1965 was 35% below the national average whereas now it is 12% above. Furthermore, industrial consumption per unit of production has grown significantly. For example, in 1970 approximately 2,500 kilowatthours were consumed by the pulp and paper industry per tonne of newsprint whereas today the consumption is in the order of 3,200 kilowatthours per tonne.

Electrical energy has been available to meet the increasing demand arising from an expanding economic base and a higher standard of living. The acceptance of electric heat in both residential and commercial buildings has been another important reason behind rising demand for electricity in this Province. The high rate of installation of electric heat in new construction, coupled with conversions from existing oil-based systems, has been responsible for a 35 percent decline in market share of petroleum fuels over the last twenty years. Recently, wood has reemerged as an important space heating fuel in residences. Table 1 highlights statistics on electricity demand in the Province since 1967.

Figure 1
Total Provincial Energy Consumption
Market Shares



Data exclude transportation sector and represent secondary demand. Source: Statistics Canada and Data Resources.

# TABLE 1 Electricity Use in Newfoundland and Labrador

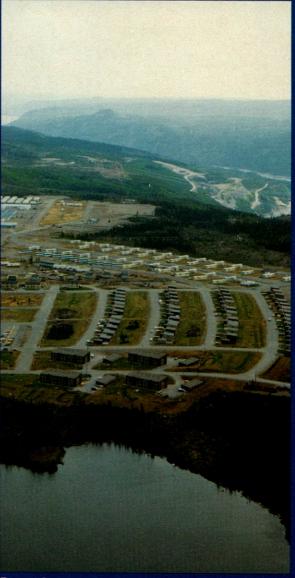
Compound Annual Growth Sector 1977 1987p 1967 - 1987Residential - Market Share 24% 38% - Energy Demand (GWH) 315 1,560 2,404 10.7% Commercial 22% 36% 58% Market Share - Energy Demand (GWH) 247 904 1,638 9.9% Industrial - Market Share 32% 48% - Energy Demand (GWH) 2,410 3.9% 4,147 5,145

P = Preliminary

# Review of Churchill Falls Operations



Aircraft Engineer



Town of Churchill Falls

The year was a successful one for Churchill Falls (Labrador) Corporation Limited (CF(L)Co) as our objectives both in the production of power and in the community life at Churchill Falls were achieved.

The Corporation produced 33.4 billion kilowatthours which was 92.6% of an average production year. Sales to Hydro-Quebec were 30.4 billion kilowatthours, a decline of 1% from 1986, while sales to customers in Labrador declined by 3.5% to 2.4 billion kilowatthours. A record peak of 5765.0 megawatts was established on December 7 during a plant load test. Water inflows into our reservoirs were 91% of normal for the year making 1987 the fourth consecutive year of below average inflows.

The rewind on Unit No. 6 was completed and the unit was returned to service, bringing the plant back to its full generating capability. Having experienced failures over the years on some of the 735 kilovolt bushings in the switchyard, all similar bushings were replaced during the year. Major inspections were done on one gate each at Lobstick and Whitefish as part of our preventive maintenance program.

To increase the overall reliability of our power generation system, two improvements were commenced during the year:

- Three 735 kilovolt Breakers were replaced as Part 1 of a two year program.
- One-third of the PCB filled powerhouse transformers were replaced with non-PCB units as the initial step in the replacement program of all underground PCB filled transformers.

These major jobs, along with the other non-recurring and preventive maintenance jobs, were made possible due to the concerted effort of our employees.

During the year there was a reduction of 31% in the number of accidents compared to 1986 and the Corporation was successful in being awarded a Two Star Rating in the baseline audit of the Loss Control program.

The Community had a successful year and sponsored the Provincial Nancy Green downhill ski competition as well as the regional Labrador figure skating championship. Our teams did extremely well in both events. The drama club was very active and presented many enjoyable evenings of entertainment.

While CF(L)Co exports most of its power out of the Province, the remainder of its generated electricity is used by industrial and domestic customers in Labrador. This electricity has enabled the mining industry in Labrador West to remain competitive in the world market.

230 kilovolt Transmission Line Serving Western





Warehouseman



Protection and Control Supervisor and Technologist

During the year two major outstanding issues were resolved to the benefit of the Corporation. One was a settlement with a major supplier regarding a claim by the Corporation for damages as a result of the failure of equipment in the powerhouse. The other involved the resolution of various financial matters with the Corporation's major customer, Hydro-Quebec.

Of major significance is the settlement of the Final Capital Cost of the Plant at \$900 million, the maximum permissible under the Power Contract. The agreement also covered a revision to the method of calculating the sharing of foreign exchange losses and overall results in an initial payment to the company of approximately \$1,000,000 and annual payments of approximately \$100,000.

# Financial Review

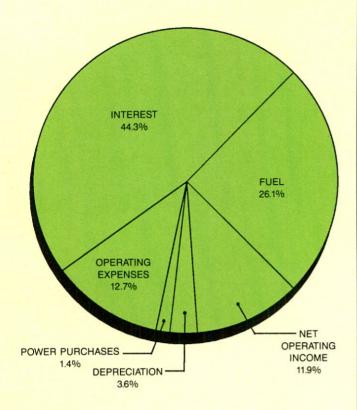


Plant Chemist

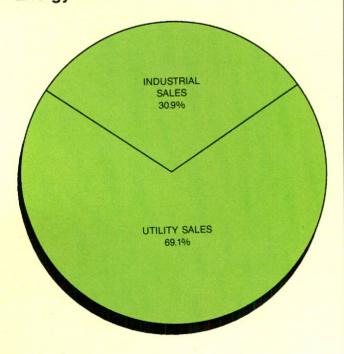


Main Service Depot at Bishop's Falls showing Exploits River and the Town of Bishop's Falls

## Application of Hydro's Revenues 1987



## **Energy Sales 1987**



# CONSOLIDATED FINANCIAL PERFORMANCE

#### **Net Income**

Hydro's net income in 1987 was \$27.9 million and its share of CF(L)Co's net income was \$15.5 million for a total consolidated net income of \$43.4 million. Consolidated net income is up \$6.9 million from 1986 mainly because of an increase in sales volume and lower interest costs. These favourable changes resulted in Hydro earning in excess of its approved rate of return on its sales to retail customers. A refund of \$1.7 million will be made to Hydro's retail customers early in 1988.

#### Revenue

Gross revenue in 1987 was \$332.3 million of which \$325.4 million represented energy sales which increased by \$11.4 million, or 3.6% from 1986.

Revenue from utility customers increased 3.8% or \$5.9 million over 1986 due to an increase in the volume of sales. Sales volume to industrial customers was virtually unchanged from 1986; however, revenue increased by \$4.7 million or 7% due to increased sales of emergency and interruptible power. Export sales revenue of \$89.9 million was virtually unchanged from 1986.

#### **Expenses**

Total expenses in 1987 amounted to \$279.7 million, compared to \$274.9 million in 1986, an increase of 1.7%.

The total cost of fuel and purchased power was \$61.8 million in 1987, up \$7.2 million from 1986. This increase was primarily due to increased volume of firm energy sales and higher costs associated with providing emergency and interruptible power sales from gasturbines.

Operations and administration costs amounted to \$54.9 million in 1987, an increase of \$1.7 million from 1986. This increase of 3.3% is primarily related to placing new facilities in service, and cost increases due to inflation.

Net interest expense charged to operations in 1987 was \$140.1 million, down \$4.1 million from 1986. The decrease in interest expense is due to improved capital market conditions and more favorable foreign exchange rates.

#### **Capital Expenditures**

Capital expenditures in 1987 amounted to \$36.9 million for the Hydro Group and were mainly associated with generation, transmission and distribution facilities.

#### CF(L)Co

Hydro's income from CF(L)Co was as follows:

|  | 1987<br>(\$ Milli   | 1986<br>ions)       |
|--|---------------------|---------------------|
| Share of earnings<br>Rental and royalty                            | 21.7<br>5.0<br>26.7 | 22.6<br>5.1<br>27.7 |
| Less: Interest on debt financing the investment  Net income effect | 11.2<br>15.5        | 13.3                |

During 1987 CF(L)Co paid dividends of \$21.1 million to Hydro and \$8.2 million to Hydro-Quebec.

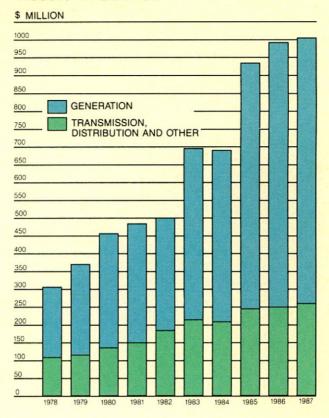
## Financial Information — 1987

|                                 |       | CF(L)Co                                 | Total |
|---------------------------------|-------|---|-------|
|                                 | (     | \$ Millions)                            |       |
| Revenue                         | 235.0 | 94.9                                    | 329.9 |
| Expenses:                       |       |   |       |
| Operations & Administration     | 29.7  | 25.2                                    | 54.9  |
| Fuels                           | 61.4  | _                                       | 61.4  |
| Power Purchased                 | 3.3   | _                                       | 3.3   |
| Depreciation                    | 8.5   | 13.3                                    | 21.8  |
| Interest                        | 104.2 | 24.4                                    | 128.6 |
|                                 | 207.1 | 62.9                                    | 270.0 |
| Net Operating Income            | 27.9  | 32.0                                    | 59.9  |
| Interest on CF(L)Co Acquisition |       | 32.0                                    | 39.9  |
| & Other Dedicated Costs         | _     | (7.4)                                   | (7.4) |
| Minority Interest               | _     | (9.1)                                   | (9.1) |
| Net Income to Hydro             | 279   | 15.5                                    | 43.4  |
| The moone to riyare             |       | ======================================= |       |

# HYDRO'S FINANCIAL PERFORMANCE

Hydro's financial performance continued to improve in 1987 with the debt/equity ratio reaching 86/14. Overall interest coverage remained within the range which has been accepted as appropriate to satisfy the requirements of The Electrical Power Control Act.

## Net Book Value of Hydro's Assets in Service

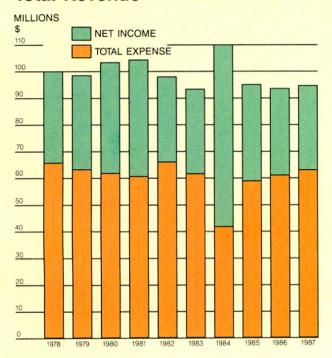


# FINANCIAL MEASUREMENTS

#### Capital Structure (%)

| Year | Interest<br>Coverage | Debt | Equity |
|------|----------------------|------|--------|
| 1983 | 1.16                 | 92   | 8      |
| 1984 | 1.19                 | 91   | 9      |
| 1985 | 1.13                 | 90   | 10     |
| 1986 | 1.19                 | 88   | 12     |
| 1987 | 1.24                 | 86   | 14     |

## Composition of CF(L)Co Total Revenue



Hydro's interest coverage from its unconsolidated operations, which include both industrial and utility sales, was 1.24 in 1987 compared to 1.19 in 1986. This increase in interest coverage is primarily due to increased sales volumes and lower interest costs. This level of coverage is within the approved range of 1.15 to 1.25 notwithstanding Hydro's overearning on its sales to retail customers only. It is expected that Hydro's earnings will keep its interest coverage ratio within this range without seeking adjustment of its rates until 1989.

# CF(L)CO FINANCIAL PERFORMANCE

Revenue from energy sales in 1987 amounted to \$93.4 million of which 96.2% represents revenue from energy sales to Hydro-Quebec with the remainder for sales to Newfoundland and Labrador Hydro and Twin Falls Power Corporation Limited. Sales volume decreased 1% primarily due to a reduction in the volume of sales to Hydro-Quebec; however, revenue increased by \$1.3 million from 1986 because of an agreement, retroactive to January 1, 1984, to increase the Final Capital Cost of the Project to \$900 million. The price of power sales is based on the Final Capital Cost of the Project.

Operating expenses for the year, excluding rental and royalties, interest and depreciation, amounted to \$20.2 million compared with \$19.0 million in 1986.

Net interest and exchange expense in 1987 amounted to \$24.4 million compared to \$23.1 million in 1986. This increase is primarily due to agreement with Hydro-Quebec on the method to be used in calculating the amount of foreign exchange losses to be shared retroactive to December 1985.

## MANAGEMENT REPORT

The consolidated financial statements of Newfoundland and Labrador Hydro and all information in the Annual Report are the responsibility of management and have been approved by the Board of Directors. The financial statements have been prepared by management in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. Management is also responsible for the integrity and objectivity of the data in these financial statements including estimates and judgments, particularly when transactions affecting a current period are dependent upon future events. The financial statements have been prepared within reasonable limits of materiality and in light of information up to March 14, 1988. The financial information contained elsewhere in this Annual Report is consistent with the consolidated financial statements. To assist management in the discharge of these responsibilities, a system of internal controls is maintained which is designed to provide reasonable assurance at reasonable cost that its assets are safeguarded from loss or unauthorized use, that transactions are executed in accordance with management's authorization and that the financial records are reliable for preparing timely financial information. The system includes formal policies and procedures and an organizational structure that provides for appropriate delegation of authority and segregation of responsibilities. The Internal Audit Department independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and to the Audit Committee of the Board of Directors.

The consolidated financial statements have been examined independently by the external auditors, Peat Marwick, whose responsibility it is to express an opinion on whether the financial statements are fairly presented in accordance with generally accepted accounting principles. The Auditor's Report, attached to the financial statements, outlines the scope of their examination of the company and contains their opinion on the financial statements.

The Board of Directors carries out its responsibilities for the financial statements primarily through its Audit Committee which is comprised solely of outside directors. The Audit Committee meets periodically with management as well as with the internal and external auditors to satisfy itself that each group is properly discharging its responsibilities, and to review the financial statements before recommending approval by the Board of Directors. The internal and external auditors have full and free access to the Audit Committee, with and without the presence of management, to discuss auditing, internal control, accounting policy and financial reporting matters.

CYRIL J. ABERY Chairman and Chief Executive Officer

DAVID W. MERCER

President

R. ANDREW GRANT Vice-President, Finance and Chief Financial Officer Distribution Engineering





Thermal Plant Operator

# NEWFOUNDLAND AND CONSOLIDATED

# **Assets**

|  | December 31                                    |  |
|--|--|--|
|  | 1987<br>(\$000)                                | 1986<br>(\$000)                                |
| Fixed assets (Note 2) Property, plant and equipment  | 1,913,362                                      | 1,901,800                                      |
| Current assets Cash and term deposits Receivables Fuel and supplies at average cost Prepaid expenses | 45,199<br>60,136<br>30,540<br>2,786<br>138,661 | 45,116<br>52,470<br>27,076<br>2,061<br>126,723 |
| Long-term receivable (Note 3)  | 16,613   | 20,997   |
| Rate stabilization plan  | 15,349   | _  |
| Investment in Twin Falls Power Corporation Limited (Note 4)  | 3,733  | 3,761  |
| Lower Churchill option (Note 5)  | 5,200  | 5,200  |
| Deferred charges (Note 6)  | 53,602   | 36,847   |
|  |  |  |
|  | 2,146,520                                      | 2,095,328                                      |

# LABRADOR HYDRO BALANCE SHEET

# **Liabilities and Shareholder's Equity**

|  | December 31                                    |   |
|--|--|---|
|  | 1987<br>(\$000)                                | 1986<br>(\$000)                               |
| Long-term debt (Notes 8 and 9)   | 1,346,698                                      | 1,421,714                                     |
| Accounts payable and accrued liabilities  Water equalization refundable (Note 10)  Accrued interest  Long-term debt due within one year  Promissory notes (Note 9) | 23,538<br>5,642<br>30,169<br>78,173<br>126,100 | 21,868<br>8,391<br>34,891<br>77,936<br>30,955 |
|  | 263,622  | 174,041                                       |
| Water equalization refundable (Note 10)  | _  | 5,642   |
| Rate stabilization plan  | _  | 2,107   |
| Minority interest in Churchill Falls (Labrador) Corporation Limited  | 103,572  | 102,605                                       |
| Minority interest in Lower Churchill Development Corporation Limited   | 14,750   | 14,750  |
| Shareholder's equity Share capital Common shares of par value of \$1 each. Authorized 25,000,000 shares; issued 22,503,942 shares.                                 | 22,504   | 22,504  |
| Contributed capital (Note 5) Lower Churchill Development Muskrat Falls Project Gull Island Project   | 15,400<br>2,165<br>100,000                     | 15,400<br>2,165<br>100,000                    |
| Retained earnings  | 277,809  | 234,400                                       |
|  | 417,878  | 374,469                                       |
|  | 2,146,520                                      | 2,095,328                                     |

See accompanying notes

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Director

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# NEWFOUNDLAND AND LABRADOR HYDRO CONSOLIDATED STATEMENTS

# INCOME

# CHANGES IN FINANCIAL POSITION

|  | For the ye<br>Decem |                           |   | For the ye        |                                  |
|--|---------------------|---------------------------|---|-------------------|----------------------------------|
|  | 1987                | 1986                      |   | 1987              | 1986                             |
|  | (\$000)             | (\$000)                   |   | (\$000)           | (\$000)                          |
| Revenue                                |                     |                           | Operating Activities  |                   |                                  |
| Energy sales                           | 5,736               | 314,030<br>5,842<br>907   | Net income from operations Add (deduct) items not involving a cash flow                 | 52,552            | 45,831                           |
|  | 332,294             | 320,779                   | Depreciation  |                   | 22,955                           |
| Expenses Operations and administration |                     | 53,166                    | exchange loss   | 2,655<br>(17,456) | 1,414<br>2,576<br>2,107<br>(459) |
| Fuels Power purchased Depreciation     | 61,351<br>433       | 53,571<br>1,042<br>22,955 | Miscellaneous   | 61,709<br>2,136   | 74,424<br>1,835                  |
| Interest (Note 12)                     | 140,102             | 144,214                   | equalization  |                   | (8,391)<br>4,263                 |
| Net income from                        | 279,742             | 274,948                   | working capital balances<br>related to operations                                       | (21,562)          | 7,240                            |
| operations                             | 52,552              | 45,831                    | Cash provided by operating activities   | 41,025            | 79,371                           |
| Net income for the year                |                     | 9,356                     | Investment Activities Additions to deferred charges                                     | (15,124)          | (11,019)                         |
|  |                     |                           | Additions to property, plant and equipment  | (36,854)          | (26,462)                         |
| RETAINED<br>EARNINGS                   |                     |                           | Twin Falls Power Corporation Limited Net change in payables and receivables relating to | 777               | 300                              |
|  | For the ye          |                           | investing activities  | 3,906             | (859)                            |
|  | (\$000)             | (\$000)                   | Cash used in investment activities  | (47,295)          | (38,040)                         |
| Balance beginning of year              | 234,400             | 197,925                   | Financing Activities Issue of long-term debt Reduction in long-term debt                |                   | 100,000<br>(59,908)              |
| Net income for the year                | 43,409              | 36,475                    | Dividends paid by a subsidiary to a minority interest                                   |                   | (8,774)                          |
| Balance end of year                    | 277,809             | 234,400                   | Increase (decrease) in promissory notes   | 95,145            | (71,425)                         |
|  |                     |                           | Cash provided by (used in) financing activities   | 6,353             | (40,107)                         |
| 24                                     |                     |                           | Net increase in cash Cash position at   | . 83              | 1,224                            |
|  |                     |                           | beginning of year   |                   | 43,892                           |
|  |                     | C                         | Cash position at end of year  | 45,199            | 45,116                           |

See accompanying notes

# NEWFOUNDLAND AND LABRADOR HYDRO NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 1987

Newfoundland and Labrador Hydro ("Hydro") is incorporated under a special act of the Legislature of the Province of Newfoundland (the "Province") as a Crown corporation and its principal activity is the development, generation and sale of electric power. Hydro and its subsidiary companies are exempt from paying income taxes under Section 149 (1) (d) of the Income Tax Act.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in conformity with generally accepted accounting principles as established in Canada. In order to match revenues and costs and to conform with recommendations of the Board of Commissioners of Public Utilities ("PUB"), Hydro's accounting for foreign exchange differs from that recommended by the Canadian Institute of Chartered Accountants.

#### Rates and regulations (excluding sales by subsidiaries)

The rates charged by Hydro, excluding sales by subsidiaries, are governed by The Electrical Power Control Act (the "Act"). Under the Act, Hydro is required to charge rates to all its customers designed "to recover the cost of service provided by it and a margin of profit sufficient to achieve and maintain a sound financial position so that it is able to achieve and maintain a sound credit rating in the financial markets of the world". There are presently four long-term contracts with industrial customers which were entered into prior to the coming into being of the Act and which do not allow Hydro to recover costs plus a margin of profit and therefore require payments from the Province to Hydro in order to ensure that Hydro meets the requirements of the Act. These payments were \$16,929,000 for the year ended December 31, 1987 (1986 \$18,761,000).

Rates proposed for utility customers from which approximately 69.1% of Hydro's revenue is derived (1986 69.8%) are subject to public hearings, following which the PUB recommends rates to the Province. If the Province does not change the rates recommended by the PUB within 15 days, the recommended rates become effective. Should the Province approve rates which are lower than those recommended by the PUB, the Act requires the Province to enter into financial and other arrangements as may be necessary to enable Hydro to conform to the Act quoted above. The Province has accepted all rate recommendations of the PUB to date. Rates, compatible with the Act, charged to industrial customers are set by the Board of Directors of Hydro. The PUB has determined that Hydro's net income from operations should provide coverage of from 1.15 times to 1.25 times its gross interest cost in order to achieve the profit margin required by the Act. The coverage from operations in 1987 was 1.24 (1986 1.19).

#### **Principles of consolidation**

The consolidated balance sheet includes the accounts of Hydro and those of its subsidiary companies, Churchill Falls (Labrador) Corporation Limited ("CF(L)Co"), (65.8% owned), Gull Island Power Company Limited ("GIPCo"), (100% owned) and Lower Churchill Development Corporation Limited ("LCDC"), (51% owned).

CF(L)Co is incorporated under the laws of Canada and has completed and commissioned a hydro-electric generating plant and related transmission facilities situated in Labrador and having a rated capacity of 5,428,000 kilowatts ("kW") (the "CF(L)Co Project").

The cost of the investment in CF(L)Co exceeds the equity in the book value of the net assets acquired by \$77,148,000. This amount is assigned to property, plant and equipment and is being written off on a straight-line basis at the rate of 11/2% per annum. As at December 31, 1987 \$15,044,000 (1986 \$13,887,000) had been written off.

Under the terms and conditions of the Churchill Falls (Labrador) Corporation (Lease) Act, 1961, (the "Lease"), CF(L)Co must pay rentals and royalties to the Province annually. These rentals and royalties have been assigned to Hydro.

A portion of Hydro's shareholding in CF(L)Co is deposited in a voting trust pursuant to an agreement with Hydro-Quebec with whom CF(L)Co has a long-term power contract.

GIPCo is incorporated under the laws of Canada and was established with the objective of developing the hydro-electric potential at Gull Island on the Lower Churchill River in Labrador, and of constructing a direct current transmission system from Labrador to the island of Newfoundland (the "Gull Island Project"). (See Note 5).

LCDC is incorporated under the laws of Newfoundland and was established with the objective of developing all or part of the hydro-electric potential of the Lower Churchill River (the "Lower Churchill Development"). (See Note 5).

Although CF(L)Co owns voting control (66%%) of Twin Falls Power Corporation Limited ("TWINCo"), its equity interst is 33½% and as the principal assets and credit resources of TWINCo cannot be transferred to CF(L)Co, consolidation is not considered appropriate and the investment is carried on an equity basis.

#### Fixed assets and depreciation

Expenditures for additions, improvements and renewals are capitalized and normal expenditures for maintenance and repairs are charged to operations.

#### Hydro, GIPCo and LCDC

Plant under construction includes the costs incurred in preliminary feasibility studies, engineering and construction of new generation, transmission and distribution facilities. Interest is charged to plant under construction at rates equivalent to the weighted average cost of the most recent funds borrowed. The average rate for the year ended December 31, 1987 was 9.30% (1986 9.75%).

Depreciation is calculated on hydro-electric generating plant and on transmission plant in service on the sinking fund method using interest factors ranging from 5.25% to 15.79%. Depreciation on other plant in service is calculated on the straight-line method. These methods are designed to fully amortize the cost of the facilities, after deducting contributions in aid of construction, over their estimated service lives.

Estimated service lives of the major assets are as follows:

 Generation
 50, 75 and 100 years

 Hydro-electric
 50, 75 and 100 years

 Thermal electric
 25 and 30 years

 Diesel electric
 20 years

 Transmission
 40 and 50 years

 Lines
 40 years

 Switching stations
 40 years

 Distribution System
 30 years

#### CF(L)Co

Depreciation is provided for at a rate of 11/4% per annum on a straight-line basis.

#### **Deferred charges**

Debt discount and financing expenses

These costs are, in general, amortized on a straight-line basis over the lives of the respective debt issues.

#### Deferred foreign exchange loss

CF(L)Co's unrealized foreign exchange loss, net of accumulated charges to income, is amortized over the remaining life of the related long-term debt.

In 1985, the PUB accepted the inclusion of realized foreign exchange losses in rates charged to customers commencing in 1986 for Hydro. Any such loss not recovered due to the operation of the rate setting process is deferred to the time of the next rate hearing for inclusion in the new rates set at that time.

#### Deferral of major repairs

Subject to PUB approval, costs of major repairs of an extraordinary and non-recurring nature are amortized to income over periods ranging from five to ten years commencing in the year in which they are incurred. The PUB has accepted the inclusion of these charges in determining Hydro's regulated rates.

#### Feasibility studies and other

These costs are amortized on a straight-line basis over a five year period.

#### Rate Stabilization Plan

On January 1, 1986 Hydro, having received the concurrence of the PUB, implemented a rate stabilization plan which provides for the deferral of cost variances resulting from changes in fuel prices, levels of precipitation and load. The balance in the plan on July 1, 1987 and annually thereafter, will be amortized over a three year period. Adjustments required in the retail rates to recover the amortization of the balance in the plan will be automatic on July 1 of each year. Similar adjustments required in industrial rates will be automatic on January 1 of each year.

#### Foreign currencies

Foreign currency transactions are translated into their Canadian dollar equivalent as follows:

- At the transaction date, each asset, liability, revenue or expense is translated using exchange rates in effect at that date
- (b) At each balance sheet date monetary assets and liabilities, except for long-term debt and its related current portion, are translated using exchange rates at that date.
  - (i) In the case of Hydro, long-term debt, including current portion, is translated in accordance with rate making practices, at exchange rates prevailing when the debt was incurred. Therefore, no recognition is given in the accounts to unrealized gains or losses.
  - (ii) Under the provisions of the contract between CF(L)Co and Hydro-Quebec (the "Power Contract") CF(L)Co's exposure for a foreign exchange loss is limited. CF(L)Co recovers a portion of the difference between actual exchange rates prevailing at the settlement date of its First Mortgage Bonds and a Weighted Average Exchange Rate as defined in the Power Contract.

The unrealized foreign exchange loss not recoverable under the Power Contract has been deferred and is being amortized to operations over the remaining life of the debt.

(c) Recorded gains or losses arising on foreign currencies are included with interest in the statement of income.

#### 2. Fixed Assets

|  | 1987                | 1986                |
|--|---------------------|---------------------|
|  | (\$000)             | (\$000)             |
| Hydro  |                     |                     |
| Property, plant and equipment, at cost             | 1,171,952           | 1,143,058           |
| Less contributions in aid of construction          | 78,310              | 71,582              |
| Less accumulated depreciation                      | 1,093,642<br>92,485 | 1,071,476<br>82,532 |
| Plant under construction                           | 1,001,157<br>21,536 | 988,944<br>9,412    |
|  | 1,022,693           | 998,356             |
| GIPCo  | 98,443              | 98,563              |
| Gull Island Project, at cost (Note 5)  CF(L)Co (a) | 30,443              |                     |
| Property, plant and equipment,                     | 004.000             | 000 007             |
| at cost  | 964,890<br>197,182  | 963,237<br>182,726  |
|  | 767,708             | 780,511             |
| LCDC   |                     |                     |
| Capital studies (Note 5)                           | 24,518              | 24,370              |
|  | 1,913,362           | 1,901,800           |
|  |                     |                     |

(a) CF(L)Co assets are pledged as security for its long-term debt.

#### 3. Long-Term Receivable

The long-term receivable which relates to a review, as provided for in Section 8.5.2 of the Power Contract, of power supplied to Hydro-Quebec by CF(L)Co bears interest at 7% per annum and is receivable over the next four years. The current portion of \$4,410,000 (1986 \$4,410,000) has been reclassified to current assets.

#### 4. Investment in Twin Falls Power Corporation Limited

|  | 1987    | 1986    |
|--|---------|---------|
|  | (\$000) | (\$000) |
| Shares, at cost                                  | 2,500   | 2,500   |
| Equity in retained earnings at beginning of year | 1,261   | 956     |
| Equity in net income for the year                | 749     | 605     |
| Dividends for the year                           | (777)   | (300)   |
|  | 3,733   | 3,761   |
|  |         |         |

#### 5. Lower Churchill Development

LCDC was incorporated in 1978 pursuant to the provisions of an agreement (the "Principal Agreement"), between the Province and the Government of Canada. The Province and the Government of Canada own equity interests of 51% and 49% of LCDC, respectively. The Principal Agreement provides that future issues of Class A common shares shall preserve, as nearly as possible, this ratio of beneficial ownership. Hydro is the designate for the Province's shareholding in LCDC.

Upon agreement to continue with the Lower Churchill Development, GIPCo's assets and the hydro-electric development rights to the Lower Churchill River, (the "Water Rights"), will be acquired by LCDC pursuant to the provisions of an agreement between LCDC and the Province, (the "Option Agreement"). The purchase price in respect of GIPCo's assets will be a maximum of \$100,000,000 less \$5,200,000 representing the value assigned to 520 Class A common shares of LCDC issued pursuant to the signing of the Option Agreement. As consideration for GIPCo's assets, LCDC will issue a 10% Convertible Demand Debenture in the amount of \$94,800,000. LCDC will issue 3,000 Class B common shares, without nominal or par value, to the Province in consideration of the Water Rights and the Province will transfer such shares to Hydro. The Option Agreement expires November 24, 1989 and it is not anticipated that there will be any loss upon sale of GIPCo's assets to LCDC.

Hydro has acquired 1,540 Class A common shares of LCDC which have a stated value of \$10,000 each. 520 shares were acquired in 1979 pursuant to signing of the Option Agreement and 510 shares were acquired in each of the years 1980 and 1981, by way of capital contributions from the Province.

In 1980, the LCDC Board of Directors issued a report to the shareholders recommending development of the Muskrat Falls site and the transmission of this power to the island of Newfoundland. Engineering studies for the transmission system have been completed but a final commitment to the project awaits the resolution of the CF(L)Co issues. (See Note 13 (a)).

#### 6. Deferred Charges

|                                | 1987    | 1986    |
|--------------------------------|---------|---------|
|                                | (\$000) | (\$000) |
| Debt discount                  | 13,878  | 14,859  |
| Deferred foreign exchange loss | 37,662  | 19,213  |
| Major repair costs             | 636     | 990     |
| Feasibility studies and other  | 1,426   | 1,785   |
|                                | 53,602  | 36,847  |
|                                | -       |         |

#### 7. Power Distribution District

Hydro administers the Power Distribution District of Newfoundland and Labrador ("PDD"), a statutory corporation of the Province. PDD is responsible for the provision of electricity to its customers in certain remote rural communities. Hydro finances the capital requirements of PDD, manages PDD's operating responsibilities and is fully reimbursed for all costs associated therewith.

#### 8. Long-Term Debt

|   |                      | 1987               |                      | 1986                 |
|---|----------------------|--------------------|----------------------|----------------------|
|   | <b>Hydro</b> (\$000) | CF(L)Co<br>(\$000) | <b>Total</b> (\$000) | <b>Total</b> (\$000) |
| Summary of long-<br>term debt<br>Bonds, notes |                      |                    |                      |                      |
| and debentures Government of                  | 773,583              | 494,553            | 1,268,136            | 1,340,931            |
| Canada loans                                  | 78,562               |                    | 78,562               | 80,783               |
|   | 852,145              | 494,553            | 1,346,698            | 1,421,714            |

At December 31, 1987 it is estimated that required repayments of longterm debt over the next five years will be as follows:

|      | (\$000) |
|------|---------|
| 1988 | 78,300  |
| 1989 | 38,800  |
| 1990 | 51,200  |
| 1991 | 43,900  |
| 1992 | 198,400 |

Details of long-term debt are as follows:

#### Hydro

Bonds, notes and debentures, redeemable at the option of Hydro at various times and at various rates, none of which exceeds 1021/4% of par.

|                                  | Interest<br>Rate %        | Year of Issue                        | Year of<br>Maturity                  | 1                    | Foreign<br>Funds          | 1987   | 1986   |                          |
|----------------------------------|---------------------------|--------------------------------------|--------------------------------------|----------------------|---------------------------|--|--|--------------------------|
|                                  |                           |                                      |                                      |                      | (\$000)                   | (\$000)  | (\$000)  |                          |
|                                  | 5¼<br>7¾<br>9<br>8%<br>8% | 1965<br>1968<br>1969<br>1972<br>1974 | 1990<br>1993<br>1994<br>1992<br>1999 | U.S.<br>U.S.<br>U.S. | 10,680<br>25,000<br>9,150 | 11,527<br>26,773<br>9,837<br>15,000<br>20,000  | 13,556<br>26,773<br>10,321<br>15,000<br>20,000 | (a)<br>(b)<br>(b)<br>(b) |
| Series J                         | 10%<br>6%<br>10%<br>10    | 1975<br>1975<br>1976<br>1977<br>1977 | 1995<br>1992<br>2001<br>2002<br>2002 | S.Fr.                | 75,000                    | 25,000<br>28,286<br>30,000<br>30,000<br>35,000 | 25,000<br>28,286<br>30,000<br>30,000<br>35,000 | (b) (b) (d)              |
| Series K<br>Series L<br>Series M | 10 ¼<br>10<br>9 %         | 1978<br>1978<br>1979<br>1979         | 2002<br>2001<br>2003<br>1994<br>1999 | U.S.                 | 50,000                    | 35,000<br>40,000<br>57,797<br>110,000          | 35,000<br>40,000<br>57,797<br>110,000          | (b) (d) (b)              |
| Series N                         | 13%<br>17%<br>15%<br>15%  | 1981<br>1981<br>1982<br>1982         | 2001<br>1989<br>1992<br>1987         | U.S.<br>U.S.         | 75,000<br>100,000         | 75,000<br>124,072                              | 75,000<br>88,876<br>124,072<br>50,000          | (b)<br>(c)               |
| Series R                         | 11¼<br>7¾<br>9%<br>10½    | 1983<br>1985<br>1986<br>1987         | 1988<br>1995<br>1996<br>1997         | YEN?                 | 7,000,000                 | 50,000<br>37,349<br>100,000<br>100,000         | 50,000<br>37,349<br>100,000                    | (d)                      |
|                                  | Less sinkir               | ng funds                             |                                      |                      |                           | 960,641<br>126,997                             | 1,002,030<br>105,780                           |                          |
|                                  |                           | nents due wi                         | thin                                 |                      |                           | 833,644  | 896,250  |                          |
|                                  | one year                  |                                      |                                      |                      |                           | 60,061<br>773,583                              | 836,189  |                          |

- Secured by an assignment of amounts receivable under a power contract.
- (b) A sinking fund has been established for this issue.
- (c) This issue had a prepayment option which was exercised in November 1987.
- (d) The registered holder of any debenture has the right to elect that such debenture shall mature on December 15, 1992 and Hydro has the right to increase the rate of interest on all debentures of this issue from that date to December 15, 1997.

#### Government of Canada loans

These loans, in the aggregate amount of \$80,782,000 (1986 \$82,858,000), including the current portions, bear interest at various rates from 514% to 81/2% and each loan is repayable following the completion date of the related facility, by thirty or forty equal annual instalments including interest. The years of maturity of these loans range between 2003 and 2014, and the current portion as at December 31, 1987 was \$2,220,000 (1986 \$2.075,000).

Based on exchange rates in effect at December 31, 1987, the approximate amount required to discharge foreign currency debt obligations recorded in the accounts in Canadian dollars as \$295,640,000 would be \$405,055,000 (1986 as \$387,030,000 would be \$501,159,000).

#### CF(L)Co

|  | 1987              | 1986              |
|--|-------------------|-------------------|
|  | (\$000)           | (\$000)           |
| First Mortgage Bonds<br>7%% Series A due December 15,<br>2007 (U.S. \$362,563,000)             | 389,004           | 396,147           |
| 7%% Series B due December 15, 2007   | 36,364            | 37,582            |
| General Mortgage Bonds<br>71/4% due three years after latest<br>maturity of any First Mortgage |                   |                   |
| Bonds  | 85,077            | 86,813            |
| Less payments due within one year  | 510,445<br>15,892 | 520,542<br>15,800 |
|  | 494,553           | 504,742           |

The First Mortgage Bonds, Series A and B, are repayable in fixed semiannual and in contingent annual sinking fund instalments which commenced in June 1978.

The Deed of Trust and Mortgage securing the General Mortgage Bonds provides for semi-annual sinking fund payments which commenced in June 1980. Each payment is equal to 1% of the aggregate principal amount outstanding on January 1, preceding each payment date. The General Mortgage Bonds are subordinate to the First Mortgage Bonds.

#### 9. Guarantees by the Province

The Province has unconditionally guaranteed the principal and interest on promissory notes and long-term debt, except for the Swiss franc loan and the debt of  $\mathsf{CF}(\mathsf{L})$  Co.

#### 10. Water Equalization

In order to equalize the effect on thermal generation cost due to fluctuations in water availability, Hydro charged or credited fuel expense in the income statement annually with an amount calculated to adjust generation costs to an average annual water condition. The calculation was based on historical water flow data compiled over a period of 36 years. The offsetting debit or credit was included in the water equalization provision account. This practice was accepted by the PUB in determining Hydro's regulated rates up to December 31, 1985.

On January 1, 1986 Hydro implemented a rate stabilization plan which includes a water variation provision component and the water equalization provision was discontinued. The balance in the water equalization provision at December 31, 1985 was \$30,267,000. Of this amount, \$7,843,000 was used to extinguish a related receivable from the Government. The remainder is being refunded to customers over a three year period which commenced January 1, 1986.

#### 11. Agreement with Hydro-Quebec

During 1987 agreement was reached between CF(L)Co and Hydro-Quebec covering a number of outstanding items. The Final Capital Cost element of the agreement is subject to approval by the holders of the First Mortgage Bonds. Major matters included in the agreement are set out below.

The Final Capital Cost of the Project has been agreed at \$900,000,000, the maximum allowed under the Power Contract as a basis for the mill rate for energy sales. For purposes of calculation the agreement takes effect from January 1, 1984. When approval is received from the bondholders with respect to the Final Capital Cost, legal action between CF(L)Co and Hydro-Quebec with respect to this matter will be discontinued.

CF(L)Co and Hydro-Quebec also agreed as to the method to be used in calculating the amounts of foreign exchange loss to be shared between them. As a result the First Mortgage Bond liability and the deferred foreign exchange loss accounts have been adjusted.

#### 12. Interest Expense

|   | 1987              | 1986   |
|---|-------------------|--|
|   | (\$000)           | (\$000)  |
| Gross interest                                  |                   |  |
| Long-term debt                                  | 179,512<br>4,909  | 183,051<br>6,885   |
|   | 184,421           | 189,936  |
| Amortization of debt discount and               |                   |  |
| financing expense Exchange loss on sinking fund | 1,674             | 1,651  |
| transactions and retirement of debt             | 1,819             | 1,949  |
|   | 187,914           | 193,536  |
| Less:<br>Recovered from:                        |                   |  |
| Hydro-Quebec (a)                                | 21,266            | 24,605   |
| PDD   | 5,333<br>1,093    | 4,833<br>386   |
| Interest earned                                 | 20,120            | 19,498   |
| Net interest expense                            | 140,102           | 144,214  |
|   | The second second | Name of the last o |

(a) Under the terms of the Power Contract, CF(L)Co recovers the difference between interest calculated at the rates prescribed in the Power Contract and interest paid on its long-term debt.

Also, CF(L)Co can require Hydro-Quebec to make additional cash advances to service its debt and to cover its expenses if funds are not otherwise available. In exchange CF(L)Co will issue units of Subordinate Debentures and shares of common stock.

#### 13. Commitments and Contingent Liabilities

(a) (i) A request was made by the Province in 1976 for CF(L)Co to supply 800,000 kW of power, pursuant to Clause 2(e) of Part I of the lease, to meet the Province's requirements commencing in 1983. This request was denied and legal action was commenced against CF(L)Co. The trial of this action concluded July 8, 1982 and on June 13, 1983 the Newfoundland Supreme Court, Trial Division denied the Province's request. This judgement was appealed to the Newfoundland Supreme Court, Court of Appeal which heard the appeal on October 15-18, 1984. On October 25, 1985, the Court of Appeal dismissed the Province's appeal. On May 22, 1986 the Supreme Court of Canada granted the Province leave to appeal this judgement and the hearing will be held in early May 1988.

- (ii) In June 1977, Hydro-Quebec commenced an action against CF(L)Co in the Superior Court in Montreal seeking a declaration as to its rights under the Power Contract should CF(L)Co comply with the Province's request referred to in Note 13(a)(i). On August 4, 1983 judgement was rendered in which the Superior Court stated that, inter alia, failure by CF(L)Co to supply Hydro-Quebec all the power and energy pursuant to the Power Contract would be a breach of the Power Contract. This judgement was appealed by CF(L)Co and on February 18, 1985 the Quebec Court of Appeal rendered its judgement dismissing the appeal. On May 22, 1986 the Supreme Court of Canada granted CF(L)Co leave to appeal this judgement and the hearing will be held in early May 1988.
- (b) Under the terms of a sublease with TWINCo, CF(L)Co is required to deliver to TWINCo, at an agreed price, horsepower equivalent to the installed horsepower of the TWINCo plant and to maintain in good working order, TWINCo's plant and equipment. The sublease expires on December 31, 1989 and has a 25-year renewal option subject to certain conditions.
- (c) Hydro has received claims instituted by various companies with respect to construction costs, outages and plant shutdowns. The aggregate of these claims, less any amounts that have been provided for in Hydro's financial statements, is approximately \$1,800,000 (1986 \$1,000,000). The final resolution of these matters is currently under negotiation.
- (d) Hydro's employees are covered by the Province's Public Service Pension Plan to which contributions are made equally by Hydro and its employees. The majority of CF(L)Co employees are also members of the Public Service Pension Plan, and in addition, a number of employees are members of two private pension plans established by CF(L)Co. Both private plans are fully funded and managed by a Trustee. Based on the most recent actuarial valuations each private plan is in a surplus position.
- (e) Hydro's outstanding commitments for capital projects total approximately \$20,655,000 at December 31, 1987 (1986 \$10,290,000).

#### 14. Comparative Figures

Certain comparative figures have been reclassified to conform with the current year's presentation.

## **AUDITORS' REPORT**

The Lieutenant-Governor in Council Province of Newfoundland

We have examined the consolidated balance sheet of Newfoundland and Labrador Hydro as at December 31, 1987 and the consolidated statements of income, retained earnings 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 Corporation as at December 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.

lat Marwick
Chartered Accountants

St. John's, Newfoundland Canada March 14, 1988

# **OPERATING STATISTICS**

#### **Years Ended December 31**

|  | 1987   | 1986   | 1985           | 1984         | 1983            | 1982   | 1981   |
|--|--------|--------|----------------|--------------|-----------------|--------|--------|
| Installed generating capacity at end of period (rated kW in thousands) |        |        |                |              |                 |        |        |
| CF(L)Co  | 5,428  | 5,403  | 5,403          | 5,225        | 5,225           | 5,225  | 5,225  |
| TWINCo   | 225    | 225    | 225            | 225          | 225             | 225    | 225    |
| Hydro — Hydro-electric   | 891    | 891    | 891            | 764          | 764             | 680    | 680    |
| — Thermal  | 637    | 638    | 637            | 637          | 637             | 638    | 636    |
| Total  | 7,181  | 7,157  | 7,156          | 6,851        | 6,851           | 6,768  | 6,766  |
| Electric energy generated, net of                                      |        |        |                |              |                 |        |        |
| station services (kWh in millions)                                     |        |        |                | 00010        | 00.010          | 38,242 | 38.958 |
| CF(L)Co  | 33,308 | 33,721 | 34,777         | 38,910       | 33,819<br>3,912 | 3,134  | 3,387  |
| Hydro — Hydro-electric   | 3,063  | 3,898  | 3,449<br>1,725 | 4,086<br>757 | 575             | 1,121  | 414    |
| — Thermal  | 2,245  | 1,255  |                |              |                 |        |        |
| Total Available for Sale   | 38,616 | 38,874 | 39,951         | 43,753       | 38,306          | 42,497 | 42,759 |
| Electric energy sales (kWh in millions)                                |        |        |                |              |                 |        |        |
| CF(L)Co — Export   | 30,367 | 30,666 | 31,833         | 35,989       | 31,188          | 35,715 | 35,881 |
| Hydro — Utility  | 3,755  | 3,590  | 3,536          | 3,246        | 3,033           | 2,992  | 2,724  |
| — Industrial   | 2,058  | 2,059  | 1,975          | 1,856        | 1,783           | 1,628  | 1,424  |
| Total  | 36,180 | 36,315 | 37,344         | 41,091       | 36,004          | 40,335 | 40,029 |
| Averge sales revenue   |        |        |                |              |                 |        |        |
| (cents per kWh)  CF(L)Co — Export                                      | 0.29   | 0.29   | 0.29           | 0.26         | 0.29            | 0.26   | 0.27   |
| Hydro — Utility  | 4.33   | 4.36   | 4.45           | 3.63         | 3.12            | 2.98   | 2.42   |
| — Industrial   | 3.50   | 3.28   | 3.75           | 3.02         | 2.89            | 2.60   | 2.22   |
| Transmission Lines (kilometres)  |        |        |                |              |                 |        |        |
| CF(L)Co — 735 kV   | 608    | 608    | 608            | 608          | 608             | 608    | 608    |
| - 230 kV   | 431    | 431    | 431            | 431          | 431             | 431    | 431    |
| Hydro — 230 kV   | 1,531  | 1,531  | 1,531          | 1,531        | 1,408           | 1,353  | 1,326  |
| — 138 kV   | 1,039  | 916    | 916            | 916          | 916             | 916    | 845    |
| — 69 kV  | 539    | 539    | 539            | 539          | 539             | 455    | 443    |
| Total  | 4,148  | 4,025  | 4,025          | 4,025        | 3,902           | 3,763  | 3,653  |
| Peak demand (kV in thousands)  |        |        |                |              |                 |        |        |
| CF(L)Co System   | 5,765  | 5,203  | 5,614          | 5,530        | 5,562           | 5,685  | 5,680  |
| Hydro System   | 1,065  | 1,084  | 1,009          | 1,013        | 1,040           | 881    | 834    |

# **FINANCIAL STATISTICS**

(in millions of dollars) Years Ended December 31

|  | 1987    | 1986    | 1985    | 1984    | 1983    | 1982    | 1981    |
|--|---------|---------|---------|---------|---------|---------|---------|
| Operating Results:   |         |         |         |         |         |         |         |
| Revenue  Energy sales  Rentals and royalties  Other                                  | 325.4   | 314.0   | 323.7   | 268.9   | 236.1   | 225.0   | 195.6   |
|  | 5.7     | 5.9     | 5.4     | 8.5     | 4.9     | 5.3     | 5.9     |
|  | 1.1     | 0.9     | 1.5     | *37.0   | 1.8     | 2.3     | 1.8     |
|  | 332.2   | 320.8   | 330.6   | 314.4   | 242.8   | 232.6   | 203.3   |
| Expenses Operations & administration Fuels Depreciation Interest                     | 54.9    | 54.2    | 51.1    | 52.7    | 47.4    | 48.1    | 40.4    |
|  | 61.8    | 53.6    | 95.1    | 49.4    | 31.7    | 40.2    | 17.5    |
|  | 22.9    | 23.0    | 22.9    | 22.3    | 22.2    | 22.4    | 22.1    |
|  | 140.1   | 144.2   | 121.4   | 117.0   | 115.4   | 91.2    | 91.7    |
|  | 279.7   | 275.0   | 290.5   | 241.4   | 216.7   | 201.9   | 171.7   |
| Net income before minority interest Minority interest Net income                     | 52.5    | 45.8    | 40.1    | 73.0    | 26.1    | 30.7    | 31.6    |
|  | 9.1     | 9.3     | 11.0    | 22.1    | 9.7     | 10.6    | 13.0    |
|  | 43.4    | 36.5    | 29.1    | 50.9    | 16.4    | 20.1    | 18.6    |
| Contributions to Net Income Hydro Corporate CF(L)Co                                  | 27.9    | 22.1    | 15.0    | 19.7    | 14.3    | 16.5    | 10.8    |
|  | 15.5    | 14.4    | 14.1    | 31.2    | 2.1     | 3.6     | 7.8     |
| Financial Position:  |         |         |         |         |         |         |         |
| Total current assets Total current liabilities Net working capital                   | 138.6   | 126.7   | 140.4   | 135.4   | 112.3   | 183.4   | 144.3   |
|  | 263.6   | 173.0   | 224.2   | 168.5   | 147.0   | 121.2   | 108.2   |
|  | (125.0) | (46.3)  | (83.8)  | (33.1)  | (34.7)  | 62.2    | 36.1    |
| Property, plant & equipment Accumulated depreciation Property, plant & equipment net | 2,189.1 | 2,167.1 | 2,141.8 | 2,108.2 | 2,011.9 | 1,864.1 | 1,712.4 |
|  | 275.7   | 265.3   | 241.5   | 218.4   | 197.5   | 174.8   | 152.4   |
|  | 1,913.4 | 1,901.8 | 1,900.3 | 1,889.8 | 1,814.4 | 1,689.3 | 1,560.0 |
| Other assets Long-term debt Other liabilities Shareholder's equity                   | 94.5    | 66.8    | 63.7    | 77.7    | 35.8    | 35.2    | 34.1    |
|  | 1,346.7 | 1,422.7 | 1,411.4 | 1,474.3 | 1,427.7 | 1,425.5 | 1,296.8 |
|  | 118.3   | 125.1   | 130.8   | 151.2   | 129.8   | 119.0   | 111.1   |
|  | 417.9   | 374.5   | 338.0   | 308.9   | 258.0   | 242.2   | 222.3   |
| Employees at year end:   |         |         |         |         |         |         |         |
| Permanent  | 1,220   | 1,201   | 1,196   | 1,197   | 1,213   | 1,232   | 1.205   |
|  | 135     | 132     | 113     | 107     | 93      | 95      | 126     |
|  | 1,355   | 1,333   | 1,309   | 1,304   | 1,306   | 1,327   | 1,331   |
|  |         |         |         |         |         |         |         |

<sup>\*</sup> Includes unusual item relating to a sale of power adjustment of \$35.3

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