# HYDRO NEWFOUNDLAND AND LABRADOR HYDRO







ANNUAL REPORT



The Newfoundland and Labrador Hydro Act requires Hydro's Board of Directors to submit a report to the Minister of Mines and Energy containing financial statements and an account of the activities of the Corporation setting forth such other matters as may appear to be of public interest in relation to the affairs or activities of the Corporation.

#### CONTENTS

	PAGE
Highlights of the Year	1
Meeting the Demand	2
The Decade Begins	3
Personnel and Productivity	5
Churchill Falls (Labrador) Corporation	6
Operations Review	9
Rural Power System	11
Construction Program	13
Lower Churchill Development Corporation	14
Planning for the Future	15
Financial Overview	17
Financial Statements	20
Directors and Officers	28



#### **REVIEW 1980**

#### HIGHLIGHTS OF THE YEAR

- Record consolidated revenues of \$193.8 million.
- Official opening of the 150,000 KW thermal generating unit at Holyrood on February 25, 1980, built at a cost of \$75 million.
- \* Release of the Lower Churchill Development Corporation report and recommendations in June, 1980, regarding the development of Gull Island and Muskrat Falls.
- Completion of the Roddickton mini-hydro plant in December, 1980, at a cost of \$1.2 million. The plant displaces 125,000 gallons of diesel oil annually.
- Official opening of the 75,000 KW hydro-electric generating plant at Hinds Lake on December 17, 1980. Built at a cost of \$85 million, the plant displaces 530,000 barrels of oil annually.
- Introduction in the House of Assembly of the Upper Churchill Water Rights Reversion Act on November 21, 1980 aimed at returning control of the Churchill Falls power output to the Province.
- Renegotiation of the power contract with ERCo Industries Limited, announced on November 13, 1980, which results in additional revenues of \$146 million over the remaining life of the contract.
- \* A record peak of 5,746,000 KW in December, 1980 at the Churchill Falls power station.
- \* Record annual production of 40,767,400,000 kilowatthours during 1980 at the Churchill Falls power station.
- Continuation of construction on the 84,000 KW Upper Salmon hydro-electric development, at an estimated cost of \$155 million, which will displace 830,000 barrels of oil annually.



#### MEETING THE DEMAND



75,000 KW Hinds Lake hydro-electric generating station was officially opened on December 17, 1980. Located on the West Coast of the Island of Newfoundland the plant was built at a cost of \$84.7 million.



# THE DECADE BEGINS

The 1980 decade commenced with a year of record activity for the Hydro Group of Companies. An additional 225,000 kilowatts of capacity were added to Hydro's generating capabilities with the official start-up of (i) the \$75 million - 150,000 kilowatt thermal generating unit at Holyrood; and (ii) the \$85 million - 75,000 kilowatt hydro-electric plant at Hinds Lake. In addition, the 425 kilowatt mini-hydro plant at Marble Brook was completed at a cost of \$1.2 million to displace high cost diesel fuel in the Roddickton area.

Power and energy sales were at a record high as revenues of Newfoundland and Labrador Hydro reached \$87.2 million. The Churchill Falls plant reached record production levels including a peak in December of 5,746 megawatts and an annual production output in excess of 40 billion kilowatthours. Churchill Falls (Labrador) Corporation contributed record sales of \$100.4 million to the consolidated revenue position of \$193.8 million making 1980 the highest on record for production and sales for the Hydro Group.

Hydro's overall financial position showed steady improvement with record income levels. The consolidated net income of \$17 million was derived from several sources including the profits of Churchill Falls (Labrador) Corporation (\$8.6 million), industrial contracts with the iron ore companies and paper companies (\$3.5 million), financial arrangements with Government associated with industrial contracts (\$2.7 million), and contracts with retailers such as Newfoundland Light & Power (\$4.3 million). The profits derived from Churchill Falls will be applied in full against the outstanding debt associated with the CF(L)Co takeover and all other profits are retained within Hydro to assist in the financing of the ongoing capital program.

Major construction activity continued during the year on the \$155 million - 84,000 kilowatt Upper Salmon hydro-electric development in the Bay D'Espoir watershed. All major civil construction contracts were awarded and orders were placed for the turbine generator and other major equipment associated with the project. Peak construction employment was approximately 600 persons during the Summer of 1980. The on-power date for Upper Salmon is scheduled for the Fall of 1982.

Feasibility and environmental studies were completed during the year on the potential 127,000 kilowatt hydro-electric development at Cat Arm, White Bay, and a decision on project release for this project will probably be made during the Summer of 1981. The rural electrification program, designed to connect isolated diesel systems to the provincial power grid, was successfully continued and interconnections costing \$3.2 million were constructed, taking some 690 householders off diesel generation and onto the main power grid. Studies continued on the Dry Pond Brook (7,800 kilowatts) and Lake Michel (12,000 kilowatts) hydro-electric developments, both aimed at reducing or eliminating diesel generation in various parts of the Province.

In June of 1980 the recommendations of the Lower Churchill Development Corporation with respect to the hydro-electric potential on the Lower Churchill River in Labrador were released. LCDC, a subsidiary of Newfoundland and Labrador Hydro, presented a report which supported the economic and technical feasibility of both Gull Island and Muskrat Falls and outlined the framework for the financing of both projects. Also during the year the final environmental clearance for both projects was received from the Federal Minister of the Environment. At year-end both the Federal and Provincial shareholders were giving serious consideration to the best long-term solution respecting the Lower Churchill developments.

Of significance to the future financial position of Hydro was the renegotiation of the ERCo power contract which was announced in November of 1980. Under the new contract power rates paid by ERCo will rise immediately from 2 mills to 8 mills per kilowatthour and during the remaining 13 years of the contract to 30 mills per kilowatthour. The ultimate effect will be to reduce the necessity for payments from Government for that industrial power contract by some \$146 million.





Excavation for the powerhouse at the Upper Salmon hydro-electric project. The plant will cost \$155 million and displace 830,000 barrels of oil annually.

Even with the significant achievements of 1980, the Hydro Group entered the decade with a degree of uncertainty, particularly in relation to its long-term strategies. With the exception of Cat Arm on the Great Northern Peninsula, there are no large scale hydroelectric developments available on the Island. This situation emphasizes the need for a Librador electrical inter-connection (i) to free consumers from the effects of dependence on foreign oil and (ii) to meet future electrical requirements with stably priced hydro-electric energy.

The most significant development in the past year affecting our hydro-electric future and the prospect for stable rates was the passing of legislation to achieve fairness and equity in the utilization of the Churchill Falls hydro resource. The Upper Churchill Water Rights Reversion Act, approved by the House of Assembly on December 17, 1980 was a historical step forward in Newfoundland's determination to confirm its legal right to access the inexpensive, long-term power source at Churchill Falls for electrical consumers within this Province.

Accessing Labrador power will not result in a reduction of electricity rates but will stabilize electricity prices which continue to rise as a result of higher capital costs, rising interest rates and soaring prices for oil which is used to generate almost 30% of the Island's requirements. It is a distressing prospect but Hydro will be seeking a further rate increase in 1981, and we continue to predict a doubling of electricity rates over the next six or seven years.

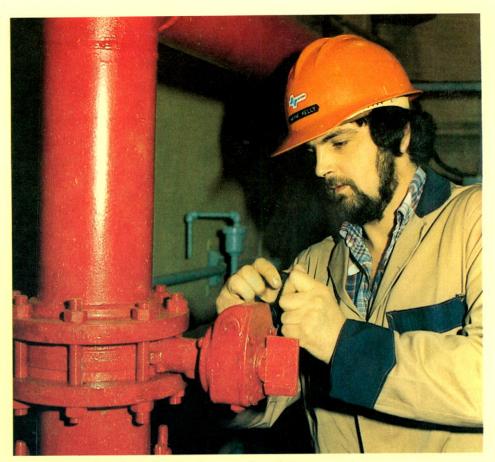
All of the accomplishments of 1980 for the Hydro Group were only possible with the effort and dedication of the staff of Newfoundland and Labrador Hydro, Churchill Falls (Labrador) Corporation, the Power Distribution District and Lower Churchill Development Corporation. As the 35th largest corporation in Canada, we have become an important element in the economic and social framework of our Province. We are prepared to meet the challenges which lie ahead with an efficient organization which is determined to maintain a record of high productivity and service excellence in the provision of electrical energy to consumers in Newfoundland and Labrador.

Victor L. Young Chairman and

Chief Executive Officer.



## PERSONNEL AND PRODUCTIVITY



Operator at Hinds Lake hydro-electric generating plant.

Maintaining reliability standards for such a geographically dispersed generation and transmission system; operating one of the largest hydro-electric plants in the world; planning ahead for construction of a transmission line from Labrador to the Island and preparing for the Lower Churchill developments, are just some of the challenges which lie ahead for employees of the Hydro Group of Companies. These are work opportunities unparalleled in our Province.

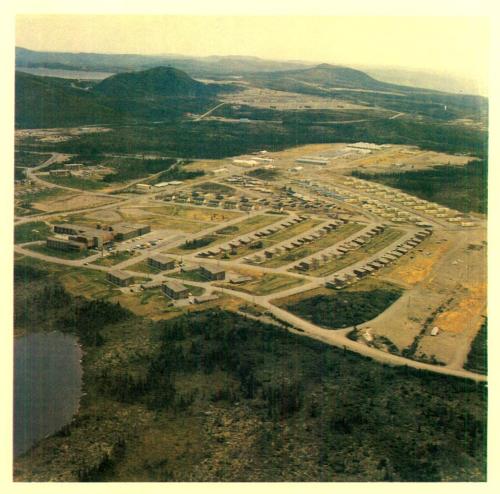
An efficient and competent team of people manage and operate the many complex tasks associated with our large public utility operation. In 1980 Newfoundland and Labrador Hydro employed a total of 1,361 persons with a payroll of \$32.5 million. In addition Hydro's construction program on the Island and in Labrador peaked at a further 800 people. The Group has become a major economic force in the Province.

Newfoundland and Labrador Hydro encourages employees to improve their skills through external and internal training courses and career counselling. During the year ninety-six training programs involving 1200 participants were conducted by our Safety and Training Department. Several new programs were introduced and special emphasis was placed on supervisory development programs.

Development work has started on several new personnel programs which will become effective early in 1981. A human resource information system, an orientation program and an employee information booklet are all designed to provide a greater understanding of the organization and to respond to the needs of employees at all levels. Our future will depend heavily on the talents that can be attracted and the skills which can be employed in the planning, building and operation of the Province's electrical system.



CHURCHILL FALLS (LABRADOR) CORPORATION



The town of Churchill Falls, Labrador.

The hydro-electric plant at Churchill Falls generated a total of 40,767,400,000 kilowatthours during the year 1980 establishing a new record for annual generation. Also, a record peak of 5,746 megawatts was recorded in December and the generation for that month totalling 4,065,440,000 kilowatthours was the highest monthly output from the plant since full operation commenced in 1976. These achievements were made possible through the successful completion of major maintenance efforts during previous years thereby permitting the plant to operate at this capacity.

The Corporation realized a record net income for the year of \$39,500,000 resulting from record energy sales of \$100,434,000 and control on operating costs. Sales to Hydro Quebec were \$97,226,000 which resulted from a record 37,815,000,000 KWH of energy. However, due to the terms of the existing power contract, the last 6,835,000,000 KWH were sold to Hydro-Quebec at a reduced rate of 1 mill per KWH thereby substantially reducing the positive impact of record production and sales on CFLCo's net income position.



Spillage was only 68.56 bcf for the year which is the lowest recorded since the plant was fully commissioned in 1976. Although run-off since 1976 has shown higher inflows than the design average, a review of twenty-five years of hydrology records has verified that there is only a 2% increase in annual average flows.

Regular maintenance was continued and the results of the well-organized maintenance programs reflect in the year's performance. Dyke surveillance continued as in the past and the Dyke Board of consultants met twice during the year. Considerable improvement was reported in the continued consolidation of the impounding system. Underwater inspections were carried out on all major structures including the penstocks with some minor damage repaired at the Whitefish Control Structure. The inspections indicated stable conditions at the Lobstick Control Structure with no major repairs anticipated in the foreseeable future.

During the year attention has been directed towards maintenance and land-scaping at the Churchill Falls townsite. Increased care of property greatly improved the townsite and further work in this regard will be undertaken during the coming year.



Lobstick - Main Control Structure in the Churchill Falls hydro-electric development.





# OPERATIONS REVIEW



Honourable Leo D. Barry, Q.C., Minister of Mines and Energy with Chief Operator, Garland Winsor (left) and John P. Henderson, Vice-President Operations (right) during opening of Hinds Lake plant.

Newfoundland and Labrador Hydro's Operations on the Island part of the Province were boosted in 1980 by the addition of two new generating sources. A third 150,000 kilowatt thermal unit at Holyrood was commissioned in February 1980 and the 75,000 kilowatt Hinds Lake hydroelectric plant went into operation in December 1980.

The Hinds Lake hydro plant is capable of producing 319 million KWH and displaces 530,000 barrels of oil annually.

Hydro's plants on the Island produced 3,837 million KWH in 1980. The dry weather experienced over the previous two years changed in May and above normal precipitation was experienced for the remainder of the year. This enabled Hydro to restore the water levels in the Bay D'Espoir watershed to normal elevations and to produce 95% of normal production from the Bay D'Espoir plant. Thermal production including gas turbines accounted for 1.429 million KWH. In addition Hydro purchased 94 million KWH from Newfoundland Light and Power Company, Bowater Power Company and Price (Nfld.) Pulp and Paper Company for a total produced and purchased of 3,931 million KWH compared to 3,730 million KWH in 1979 or an increase of 5.4%.

The Holyrood thermal plant produced a record 1,419 million KWH during the year. A world surplus of Bunker C in the first nine months of the year enabled Hydro to purchase its fuel for Holyrood at an average price of \$10.08 per barrel resulting in savings to all customers of Hydro through an extremely low fuel adjustment charge.

A new peak load of 836,000 kilowatts on the Hydro System and 1,030,000 kilowatts on the total integrated Island System was established on December 15. This represented a two percent increase over the 821,000 kilowatt peak of 1979.

In Labrador, Hydro sold 300 million KWH to the Iron Ore Company of Canada and 59 million KWH to the Power Distribution District of Newfoundland and Labrador up 7% and 3.5% respectively over 1979.

The new digital microwave system between Bay D'Espoir and Hinds Lake was installed and put in operation during the year. The new dispatch centre was built in the Bay D'Espoir Plant and the existing supervisory control system relocated to it as well as the new Supervisory Control and Data Acquisition (SCADA) system. The new SCADA system controls the Hinds Lake hydro plant and substations at Deer Lake, Howley, Indian River and Springdale.



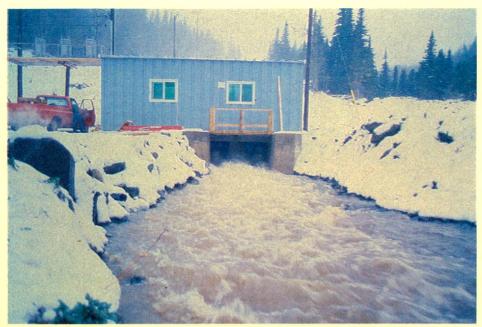


# RURAL POWER SYSTEM

Newfoundland and Labrador Hydro is responsible for managing and operating the rural power distribution systems through the Power Distribution District of Newfoundland and Labrador (P.D.D.). During 1980 a decision was made to transfer the assets of P.D.D. to Hydro, and all new capital assets needed for rural distribution after April 1, 1980 were funded and constructed by Hydro. P.D.D. will pay Hydro for the costs of providing these assets including interest and depreciation. Prior to this change, all capital assets required for rural electrification were provided by grants from the Provincial Government. The Provincial Government will continue to subsidize the operating cost of P.D.D.

P.D.D. provides the electricity requirements of approximately 22,500 customers. About 48% of these customers are supplied from 44 isolated diesel systems, with a total generating capacity of approximately 43,000 KW. Demand for electrical energy continued to increase during the calendar year. Sales on the diesel systems totalled 86,503,000 KWH for an increase of 9.3% over the previous year. Sales on the interconnected systems totalled 213,063,000 KWH, for an increase of 4.8% over last year. The total operating cost for the fiscal year ending March 31, 1981 is estimated to be \$28.3 million while the estimated revenue is \$16.7 million. The estimated grant-in-aid of operation from the Provincial Government is \$11.6 million, which is basically unchanged from that of the previous year.

The communities previously served by diesel electric plants located at Grand Le Pierre, English Harbour East, Gallants, Millertown and Greenspond were interconnected to the bulk power grid during the year and the systems subsequently transferred to Newfoundland Light & Power Co. Limited. Communities previously served by the diesel electric plant on Long Island were also interconnected to the bulk power grid. The construction of a line from the St. Anthony diesel system resulted in the shutdown of the Cook's Harbour diesel plant in December.



Mini-hydro plant at Roddickton in Northern Newfoundland went into operation in December, 1980. The plant was built under an agreement with the Government of Canada.



Diesel plant operator performing regular maintenance work on one of the 44 diesel generator plants operated by the Power Distribution District.





## CONSTRUCTION PROGRAM

Newfoundland and Labrador Hydro's Construction Program continued at a high level of activity during 1980 with expenditures reaching \$68.6 million. The major expenditures were associated with the Hinds Lake and Upper Salmon hydro-electric projects and the break-down attributed to generation and transmission and terminal plant was as follows:

Generation \$50,200,000

Transmission & terminals 13,200,000

Other facilities 5,200,000

Following the final commissioning stages, the third 150,000 KW oil-fired unit at the Holyrood generating station was officially opened on February 25, 1980. The addition of the third unit increased the generating capacity of this plant to 450,000 KW.

During the year under review the Hinds Lake hydro-electric project was completed within budget and schedule despite a strike at the site during the critical construction months. With the official opening of the generating station on December 17, 1980, the Island's hydro-electric generating capacity was increased by 75,000 kilowatts and 319 million kilowatthours annually. The Hinds Lake plant enables a reduction in the consumption of oil at Holyrood by 530,000 barrels annually.

The Upper Salmon hydro-electric development proceeded on schedule with the engineering design virtually completed and the major construction contracts awarded at the end of 1980. The major civil contractors mobilized during the fall and construction activities commenced with the peak employment scheduled during the latter half of 1981. The scheduled "onpower" date for the project is December 1982 at an estimated capital cost of \$155,000,000. When completed, the project will add 84,000 KW and an average energy capability of 497 million kilowatthours to the Island's generating system and will displace 830,000 barrels of oil annually.

Mitigative measures to alleviate a multiplicity of environmental concerns have been incorporated in the design and construction of the Upper Salmon project. Continuous monitoring has been implemented to ensure compliance with strict environmental guidelines and regulations during the construction phase of the project.

During 1980 a mini-hydro pilot project was constructed on Marble Brook near Roddickton. The hydro project is a "run of river" plant with an output of 425 kilowatts and is operated to displace fuel on the Roddickton diesel system of the Power Distribution District of Newfoundland and Labrador. The capital cost of the project was \$1,225,000 of which \$985,000 was provided as a grant through the Federal Department of Energy, Mines and Resources with Hydro contributing the balance of \$240,000.

During 1980 work was commenced on a \$28.4 million transmission line and terminal plant program. This included a 230 KV transmission line from Bay D'Espoir to the Upper Salmon project at a cost of \$4 million, a 230 KV line from Buchans to Grand Falls at \$6.2 million and a 230 KV line from Holyrood to St. John's with an estimated completion cost of \$2.9 million. In addition work was started on a 138 KV line from Deer Lake to Rocky Harbour at a cost of \$5.5 million and 69 KV lines from Howley to Jackson's Arm, Sops Arm and Hampden at a cost of \$4.3 million and South Brook to Roberts Arm at an estimated completion cost of \$1 million. This transmission work is part of an ongoing program by Newfoundland and Labrador Hydro to upgrade the transmission system on the Island of Newfoundland to maintain reliability consistent with modern power utility standards. Major terminal station extensions costing \$4.5 million are also nearing completion after a substantial 1980 work program.



# LOWER CHURCHILL DEVELOPMENT CORPORATION

The hydro-electric developments at Gull Island and Muskrat Falls on the Churchill River in Labrador continue to compare favourably with other energy sources available to the Province of Newfoundland. The task of defining an acceptable initial project progressed with the full support of Lower Churchill Development Corporation's (LCDC) shareholders — the Governments of Newfoundland and Labrador and Canada.

LCDC operated throughout 1980 with a minimum staff complement relying heavily on services provided by external engineering, financial and legal firms and Newfoundland and Labrador Hydro. Expenditures on the project at December 31st totalled \$12,400,000. All funding, since the initial investment of \$5,000,000 by the Federal Government in consideration of the option of the hydro sites given by Newfoundland, has been borne by cash subscription by Newfoundland and Canada. Ownership in the Corporation has been maintained in the proportion of 51% Newfoundland and 49% Canada.

During its second year of operation LCDC finalized the engineering, financial, environmental and marketing activities associated with the development of the Lower Churchill River hydro-electric sites and the transmission of that energy to potential customers.

The logical development of the Gull Island and Muskrat Falls power sites which have a total capacity of 16 billion kilowatthours or an oil equivalent of 27 million barrels annually is being severely restrained by the lack of access to potential markets. The problem is neither technical nor financial but stems from the inability to market energy surplus to Newfoundland's needs, to or through Quebec, to areas heavily reliant on fossil fuels.

In spite of the fact that these two power sites, particularly the larger Gull Island development, will make a positive contribu-

tion to the Canadian energy scene, LCDC has only been able to establish the needs of the Province of Newfoundland as its market investigations showed that in the short term this market would only support the smaller, higher cost development at Muskrat Falls. In June, the Board of Directors submitted its recommendation to the shareholders:

"That the Corporation proceed with the 618,000 KW hydro-electric development at Muskrat Falls on the Churchill River with the necessary transmission facilities to interconnect the Labrador and Island power networks with that source including a submarine cable crossing of the Strait of Belle Isle."

By year end LCDC finalized the financial planning and environmental approvals for the recommended project while the shareholders were considering the recommendation.

No firm project release has yet been given although the Governments of Canada and Newfoundland and Labrador have indicated a strong preference that the first generating station to be built should be at the most economic and larger site — Gull Island. In the meantime, because the transmission interconnection to the Island of Newfoundland is considered an essential element for either alternative, the Corporation has been asked to consider protecting the schedule for that component.

In 1981 an extension of the agreement which options these power sites to LCDC will be sought and the second stage of investigation and development work for the Strait of Belle Isle Crossing will be proposed. A renewed effort at resolving the road blocks to marketing Gull Island surplus energy will be an essential activity as well. An expeditious resolution of this marketing problem and completion of this program will ensure displacement of high cost oil consumption in the Province of Newfoundland and ensure a greater contribution to Eastern Canada's needs.



#### PLANNING FOR THE FUTURE

The provision of adequate, reliable supplies of reasonably priced electric energy is a world wide challenge which, in many ways, characterizes our entry into the 1980's. While Newfoundland and Labrador Hydro faces this universal problem the solution for our Province lies within the unique spectrum of our opportunities. In addition to the customary utility planning and assessment factors such as cost effectiveness, technical feasibility and environmental acceptability, Hydro must take into account the forces which influence Newfoundland's access to Labrador power but which are beyond traditional analysis. These forces include (i) two separate court actions which have been initiated by Government to give our Province its rightful access to power from the Upper Churchill development and (ii) the matching of Federal and Provincial political wills which are necessary to provide the Lower Churchill Development Corporation with the shareholder support to finance the mighty untapped hydro potential at Gull Island and Muskrat Falls.

All studies and analyses performed during the past eight years have demonstrated that Newfoundland's electrical energy future is dependent upon accessing Labrador power. The issue, therefore, is not a choice between energy forms but rather a realistic determination of the timing for (i) accessing Churchill Falls power through the judicial system or negotiating with Quebec and (ii) getting a successful project release for Lower Churchill developments. In this strategic environment, Hydro planners must search for optimal methods of providing reliable customer service in the context of the uncertainties surrounding the power infeed from Labrador.

This planning has to date involved a close examination of all of the available options including small-scale or mini-hydro developments, wind power and fossil fuels. In all of these areas it is imperative to maintain Hydro's commitment to environmental protection, and emphasis is being placed on increased monitoring activities, extensive analyses of proposed new developments such as Cat Arm, improved diligence in hazardous material handling and employee education.

The prime certainty respecting our electrical energy future is that it is inextricably

linked to the Churchill River. A comprehensive strategy is in place for recapturing benefits from the Upper Churchill and for developing, in a planned and long-term manner, the potential of Gull Island and Muskrat Falls. Our strategy includes (i) obtaining our legal rights to the low cost Churchill Falls energy through the Water Rights Reversion Act; (ii) altering the terms of the Churchill Falls power contract; (iii) developing the Lower Churchill potential at Gull Island and Muskrat Falls with an essential ingredient being a power corridor through the Province of Quebec; and (iv) obtaining Federal Government support and cooperation for the necessary financial backing of a Labrador interconnection to the Island and for attracting energy intensive industries, especially in Labrador.

The successful unfolding of the Labrador power development strategy has gone hand in hand with essential financial and marketing discussions. During 1980 special emphasis was placed on discussions with credit rating agencies and institutional lenders aimed at ensuring that the Water Rights Reversion Act is properly understood. A formal presentation of the National Energy Board of Canada outlined the inequities of the Upper Churchill contract and the need for Federal Government action to confirm Newfoundland's constitutional right for the free flow of electricity across provincial borders. Favourable discussions were held with energy intensive industries regarding possible Island and Labrador locations for industries such as aluminum smelters and discussions were held with the States of New York and New Hampshire regarding their requirements for the purchase of Labrador power either through Quebec or via the Cabot Strait Crossing. Finally ongoing discussions continued with the Government of Canada regarding the shareholder decision on the Lower Churchill Development Corporation projects and the necessity for a power corridor through Quebec.

The challenge of bringing together these diverse elements into a successful implementation of our strategy is achievable in the near term and the Board of Newfoundland and Labrador Hydro continues to commit all of its efforts to bringing about a bright electrical energy future for our Province.





# FINANCIAL OVERVIEW

#### 1980 Consolidated Results

Consolidated revenues of \$193.8 million (\$189.4 million plus rentals and royalties of \$6.1 million less intercompany sales of \$1.7 million) were \$13.9 million greater than in 1979. Net income at \$17.0 million was \$8.3 million higher than in 1979.

	Contribut	tions to Net (\$ million			
	1980	1979	1978	1977	1976
HYDRO	8.4	2.2	1.3	3.0	2.7
CFLCo	8.6	6.5	8.3	2.5	(0.2)
	17.0	8.7	9.6	5.5	2.5

Segmented Information

December 31, 1980 (\$ millions)			
	HYDRO	CFLCo	TOTAL
Revenue (1)  Expenses (1)  Generation, Transmission and	87.2	102.2	189.4
Administration	40.7	19.2	59.9
Depreciation	6.7	13.2	19.9
Interest	31.4	30.3	61.7
	78.8	62.7	141.5
Net Operating Income	8.4	39.5	47.9
Other Dedicated Costs (1)			(18.5)
Minority Interest			(12.4)
Consolidated Net Income			17.0

- (1) Consolidated revenues of \$193.8 million have been
  - (i) reduced by \$6.1 million rentals and royalties which are also deducted from "Interest on CFLCo acquisition and other dedicated costs" and
  - (ii) increased by intercompany sales of \$1.7 million which also increased expenses.



Newfoundland and Labrador Hydro, excluding subsidiaries, showed revenues of \$87.2 million, \$10 million more than 1979. Revenues from fuel adjustment charges fell by \$6.9 million when compared to 1979 because of considerably lower fuel prices. Hydro's 1980 fuel consumption of 2.2 million barrels was unchanged from 1979, but the cost of \$22.3 million was actually \$7.7 million lower. This was because Hydro was able to take advantage of lower world prices for Bunker C which, together with petroleum compensation payments, reduced Hydro's cost to an average of \$10.08 per barrel (1979-\$13.32 per barrel). These savings were passed on to Hydro's customers. The increase in revenue was due to higher rates charged to industrial customers, a 5.7% increase in electricity sales and increases in rates charged to Hydro's utility customers, which were effective in October, 1979 and April, 1980.

Hydro has set a target of maintaining interest coverage of between 1.15 and 1.25 times gross interest and of achieving a debt to equity ratio of at least 90:10. Net income for 1980 of \$8.4 million gave interest coverage of 1.19 and compares favourably with the 1979 results of \$2.2 million and 1.06.

Hydro (Excluding Subsidiary Earnings)					
	1980	1979	1978	1977	1976
Interest Coverage	1.19	1.06	1.04	1.13	1.15
Debt to Equity Ratio	95:5	96:4	96:4	96:4	97:3

#### CFLCo Earnings in 1980

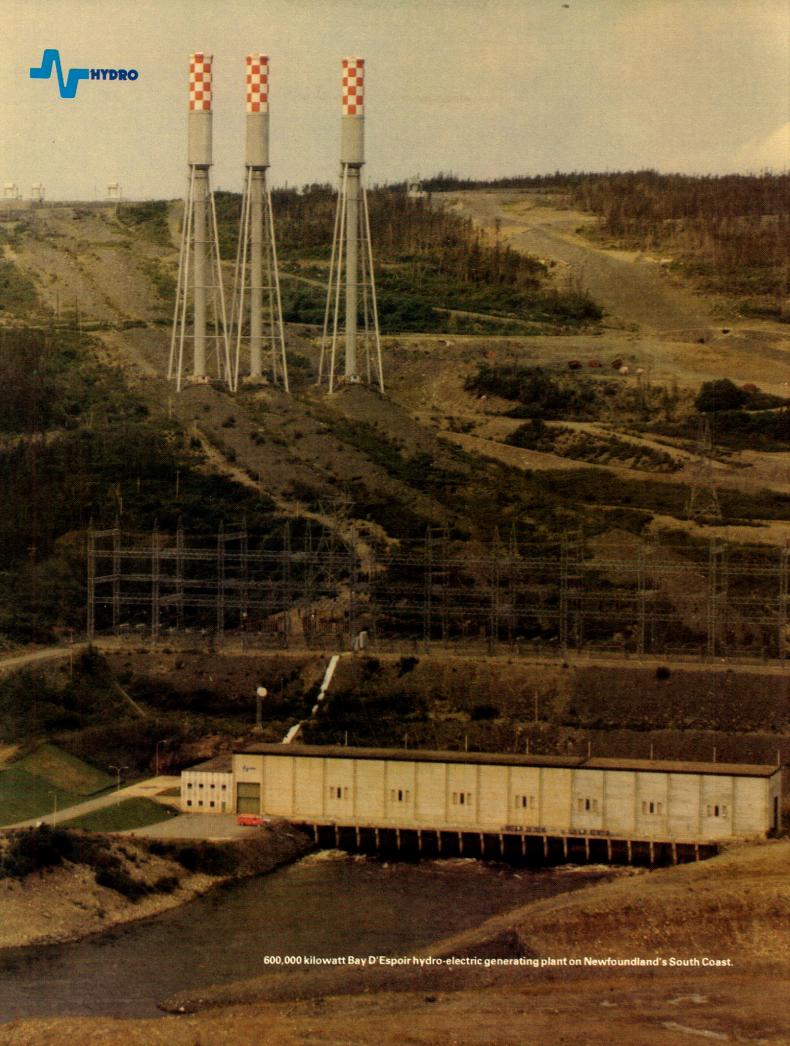
Hydro's income from CFLCo consisted of its share of CFLCo earnings of \$25.9 million (1979 - \$22.8 million) and rentals and royalties assigned to Hydro of \$6.1 million (1979 - \$5.5 million) less interest on the debt to finance the investment of CFLCo of \$23.4 million (1979 - \$21.8 million). This resulted in a net income to Hydro in 1980 of \$8.6 million (1979 - \$6.5 million). During 1980 CFLCo paid dividends of \$18,900,000 to Newfoundland Hydro and \$8,145,000 to Hydro-Quebec.

#### Financing

Hydro entered 1980 with considerable cash balances due to a \$75 million loan raised late in 1979. No long term issues were made in 1980 and Hydro's construction program was financed by internally generated funds and short term borrowings. A loan from the Alberta Heritage Trust Fund of \$75 million for twenty years at 13%% was made in January 1981 and agreement to extend the term of the Swiss Franc loan to December 1, 1982 was reached in March 1981.

With the growth in load and the consequent need for more generation and transmission facilities, Hydro's needs for funds will remain high during the next few years. Obtaining these funds at a reasonable cost in today's unsettled financial markets is one of Hydro's major challenges.

Funds Required for H	Millions		ion i rog	i dili	
	1977	1978	1979	1980	1981*
Generation	32.8	49.5	64.5	50.2	75.0
Transmission	8.7	2.2	2.1	13.2	15.3
Other Assets	1.8	5.4	2.4	5.2	6.1
TOTAL	43.3	57.1	69.0	68.6	96.4



# Newfoundland Consolidated Balance

with comparative

#### **Assets**

Fixed assets (Note 2)	1980	1979 (000)
Property, plant and equipment	\$1,468,808	1,406,957
Current assets		
Cash and term deposits	38,582	64,333
Receivables	35,592	33,799
Fuel, supplies and prepaid expenses	21,002	13,119
	95,176	111,251
Long-term receivable (Note 3)	7,843	9,331
Investment in Twin Falls Power Corporation Limited (Note 4)	2,923	2,948
Lower Churchill option (Note 5)	5,200	5,200
Deferred charges	16,625	17,610

\$1,596,575

1,553,297

The Lieutenant-Governor in Council Province of Newfoundland

#### AUDITORS' REPORT

We have examined the consolidated balance sheet of Newfoundland and Labrador Hydro as at December 31, 1980 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, 1980 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.

Reat. Meswick, mitchell & las

Chartered Accountants

St. John's, Newfoundland March 6, 1981

### and Labrador Hydro Sheet December 31, 1980

igures for 1979

Liabilities	and Shareholder	's Equity

	1980 (000)	1979 (000)
Long-term debt (Notes 7 and 8)		1,296,840
Current liabilities		
Promissory notes	. 32,990	
Accounts payable and accrued liabilities		33,991
Accrued interest		16,719
Long-term debt due within one year	39,929	39,970
	127,791	90,680
Provision for water equalization	7,843	9,331
Minority interest in Churchill Falls		
(Labrador) Corporation Limited	79,239	74,989
Minority interest in Lower Churchill		
Development Corporation Limited	9,850	5,000
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 — Lower Churchill Development (Note 5)	10,300	7,800
Contributed capital — Gull Island Project (Note 7)		7 to 27 📆
Retained earnings	. 63,131	46,153
	195,935	76,457
	\$1,596,575	1,553,297

See accompanying notes

On behalf of the Board:

Janet Gardiner

JANET C. GARDINER Director a.a. Duran

ANGUS A. BRUNEAU Director

#### **Background Photo:**

Surge tanks which act as Safety devices to reduce water pressure in the penstocks, tower some 371 feet above the mist at the 600,000 KW Bay D'Espoir hydro-electric generating station on NfId's South Coast.

### Newfoundland and Labrador Hydro Consolidated Statements For the Year Ended December 31, 1980

with comparative figures for 1979

Income		
	1980 (000)	1979 (000)
Revenue		
Energy sales	\$185,738	172,126
Rentals and royalties	6,069	5,509
Other	2,014	2,220
	193,821	179,855
Expenses		
Generation, transmission and	50.040	00 500
administration	58,010	60,586
Depreciation	21,094	18,549
Interest (Note 10)	85,344	80,981
	164,448	160,116
Net income before minority interest	29,373	19,739
Minority interest	12,395	11,062
Net income for the year	\$16,978	8,677
Retained Earnings		
	1980 (000)	1979 (000)
Balance at beginning of year	\$46,153	37,476
Net income for the year	16,978	8,677
The moone for the year		
Balance at end of year	\$63,131	46,153

### Changes in Financial Position

	1980 (000)	1979 (000)
Funds provided		
From operations		
Net income	\$16,978	8,677
Add items not requiring		
working capital	32,558	27,442
		_
Funds provided		
by operations	49,536	36,119
Proceeds from long-term debt	_	132,797
Minority investment in Lower Churc		
Development Corporation Limited	4,850	5,000
Contributed capital — Gull		
Island Project	100,000	_
Contributed capital — Lower		
Churchill Development	2,500	7,800
Current portion of long-term		
receivable	1,488	1,403
Dividends received from Twin Falls		0.10
Power Corporation Limited	1,012	912
Proceeds on disposal of	210	1 174
fixed assets	219	1,174
Total funds provided	159,605	185,205
		-
Funds applied	00.700	01 071
Additions to fixed assets	83,723	91,271
Reduction in long-term debt	120,923	39,870
Dividends paid by a subsidiary to	0.145	10.062
minority interest	8,145	10,063
Acquisition of Lower Churchill		5,200
option Increase in deferred charges		5,200
increase in deferred charges	_	5,225
Total funds applied	212,791	151,627
In a second in a second in a	C	
Increase (decrease) in working	(53, 186)	33,578
capital	(55, 160)	33,370
Working capital (deficiency) as at beginning of year	20,571	(13,007)
Working capital (deficiency) as at end of year	\$ (32,615)	\$ 20,571

See accompanying notes

### Newfoundland and Labrador Hydro **Notes to Consolidated Financial Statements December 31, 1980**

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

#### Summary of significant accounting policies

The accounting policies followed by Hydro and its subsidiaries are in accordance with generally accepted accounting principles in Canada.

#### Principles of consolidation

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

CFLCo 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 5,225 megawatts ("CFLCo Project").

The excess of cost of the investment in CFLCo over the equity in the book value of the net assets acquired is assigned to property, plant and equipment.

A portion of Hydro's shareholding in CFLCo is deposited in a voting trust pursuant to an agreement with Quebec Hydro-Electric Commission ("Hydro-Quebec").

GIPCo is incorporated under the laws of Canada and was established with the objective of developing the hydroelectric 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 ("Gull Island Project"), (refer to Note 5).

LCDC is incorporated under The Companies Act (Newfoundland) and was established with the objective of developing all or part of the hydro-electric potential of the Lower Churchill Basin ("Lower Churchill Project"), (refer to

CFLCo owns voting control (66 2/3%) of Twin Falls Power Corporation Limited ("Twin Falls"), but only a 33 1/3% equity interest, and as the principal assets and credit resources of Twin Falls cannot be transferred to CFLCo, consolidation is not considered appropriate and the investment is carried on an equity basis.

#### Fixed assets and depreciation

Hydro, GIPCo and LCDC

Plant under construction includes the costs incurred in preliminary feasibility studies, engineering and design of new generation, transmission and distribution facilities. Interest is charged to plant under construction at rates equivalent to the average cost of the most recent funds borrowed.

Depreciation is calculated on hydro-electric generating plant and on transmission plant in service on the sinking fund method using interest factors ranging from 51/4 % to 11%. 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 grants in aid of construction, over their estimated service

Estimated service lives of the major assets are as follows:

Generation	
Hydro-electric	50, 75 and 100 years
Thermal-electric	25 and 30 years
Diesel-electric (Note 6)	20 years
Transmission	
Lines	40 and 50 years
Switching stations	40 years
Distribution System (Note 6)	30 years

#### CFLCo

Depreciation is provided for at a rate of 11/2 % per annum on a straight-line basis.

#### Deferred charges

Deferral of major repairs

Major repairs of an extraordinary or non-recurring nature are deferred and amortized to income over a five-year period commencing in the year in which they are incurred. This practice has been recommended and approved by the Public Utilities Board (Newfoundland).

Debt discount and financing expenses

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

#### Provision for water equalization

In order to compensate for the effect of year to year variations in fuel consumption resulting from fluctuations in hydro generation, Hydro has adopted the accounting treatment of recording a provision for water equalization.

#### Foreign currencies

Foreign currency accounts are stated in Canadian dollars on the following bases:

(a) Current assets and liabilities, exclusive of current portion of long-term debt, at the rate of exchange prevailing at the balance sheet date.

- (b) Long-term debt at the exchange rates prevailing when the debt was incurred. No recognition is given in the accounts to unrealized gains or losses.
- (c) All other assets and any related depreciation at rates in effect at the time of the transaction.
- (d) Gains or losses arising on the translation of, or conversion to foreign currencies are included with interest in the statement of income.

#### 2. Fixed assets

Thou about	1980 (000)	1979 (000)
Hydro Property, plant and equipment,		
at cost	\$ 558,020	418,266
Less grants in aid of construction	70,506	23,742
	487,514	394,524
Less accumulated depreciation	30,638	24,793
	456,876	369,731
Plant under construction	40,794	59,387
	497,670	429,118
GIPCo		
Gull Island Project, at cost (Note 5)	100,000	98,522
CFLCo (a)		
Property, plant and equipment, at cost	961,537	959,413
Less accumulated depreciation	102,256	87,891
	859,281	871,522
Capital studies (Note 5)	11,857	7,795
	\$1,468,808	1,406,957

 (a) The assets of CFLCo are pledged as security for the longterm debt of that company.

#### 3. Long-term receivable

This receivable represents an amount due from Newfoundland and relates to \$7,843,000 of the balance in the provision for water equalization. It will become collectible as the year-end balance in the provision falls below this amount (refer to Note 1 "Provision for water equalization").

#### 4. Investment in Twin Falls

	1980 (000)	1979 (000)
Shares, at cost	\$ 2,500	2,500
Equity in retained earnings at beginning of year	448 987 (1,012)	369 991 (912)
	\$ 2,923	2,948

#### 5. Lower Churchill Development

Hydro suspended all work on the Gull Island Project in 1976, in the absence of satisfactory arrangements for the financing of the Project and the marketing of available power. LCDC was incorporated on December 15, 1978, and as of December 31, 1980, the LCDC Board of Directors has issued a report to the shareholders recommending development of the Muskrat Falls site. To date, no decision has been taken by the shareholders.

Upon agreement to continue with the Lower Churchill Project, the GIPCo assets and the Water Rights will be acquired by LCDC pursuant to the provisions of an Option Agreement, dated November 24, 1978, and expiring May 24, 1981, between LCDC and Newfoundland. The Option Agreement stipulates that the purchase price in respect of the GIPCo assets will be a maximum of \$100,000,000 less the amount of \$5,200,000 representing the shares issued pursuant to the signing of the Option Agreement. As consideration for the GIPCo 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 valued at \$30,000,000 to Newfoundland in consideration of the Water Rights and Newfoundland will transfer such shares to Hydro. It is not anticipated that there will be any loss upon sale of the GIPCo assets to LCDC.

During 1979, Hydro, the designate for Newfoundland's shareholding in LCDC, acquired 520 Class A common shares in LCDC valued at \$5,200,000, pursuant to signing of the Option Agreement. In 1980, Hydro acquired, by way of capital contributions from Newfoundland, an additional 510 shares of LCDC's Class A common shares valued at \$5,100,000.

On February 17, 1981, the Board of Directors approved the 1981 plan which calls for expenditures of \$13,000,000 for engineering studies, field investigations and development work relating to the Strait of Belle Isle Cable Crossing. In addition, the Board of Directors has recommended that the Option Agreement be extended for a further eighteen months.

#### 6. Power Distribution District

On April 1, 1980, as directed by an Order In Council of the Government of Newfoundland and Labrador, Hydro acquired the fixed assets of the Power Distribution District of Newfoundland and Labrador ("PDD"), a statutory corporation of Newfoundland, for a nominal amount and also acquired PDD's current assets and liabilities at cost. PDD is responsible for the generation and distribution of electricity at subsidized rates to its customers in certain remote rural communities.

Hydro will finance all future capital requirements of PDD and will continue to manage PDD's operating responsibilities. PDD will continue to be supplier of record to its customers and will reimburse Hydro fully for all costs associated with serving these customers, including financing costs of its capital requirements.

#### 7. Long-term debt

Hydro (000)	CFLCo (000)	1980 Total (000)	1979 Total (000)
448,668 38,676	597,193	1,045,861 38,676	1,074,205 51,567
91,380	=	91,380 —	92,768 78,300
578,724	597,193	1,175,917	1,296,840
	(000) 448,668 38,676 91,380	(000) (000) 448,668 597,193 38,676 — 91,380 — —	Hydro (000) CFLCo (000) (000)  448,668 597,193 1,045,861 38,676 — 38,676 91,380 — 91,380 — — — —

It is estimated that repayments of long-term debt over the next five years will be as follows:

	(000)
1981	\$39,900
1982	68,000
1983	39,800
1984	39,900
1985	27,200

Based on exchange rates in effect at December 31, 1980, after giving effect to foreign exchange cost sharing arrangements provided for in the contract between CFLCo and Hydro-Quebec ("Power Contract"), the approximate amount required to discharge foreign currency debt obligations recorded in the accounts in Canadian dollars as \$698,000,000 would be \$759,000,000.

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 102.2% of par.

Interest Rate %	Year of Maturity		1980 (000)	1979 (000)	
51/4	1990 (U.S. \$23,840,000)	\$	25,731	27,761	(a)
73/4	1993 (U.S. \$25,000,000)		26,773	26,773	(b)
9	1994 (U.S. \$12,300,000)		13,223	13,706	
93/4	1986 (U.S. \$23,809,000)		23,442	24,131	
81/8	1992		15,000	15,000	(b)
81/8	1999		20,000	20,000	(b)
103/4	1995		25,000	25,000	(b)
41/4	1982 (Sw. Fr. 75,000,000)		28,286	28,286	
7	1981 (£166,000 Sterling)		287	575	
101/4	2001		30,000	30,000	(b)
10	2002		30,000	30,000	(b)
10 Series J	2002		35,000	35,000	(b)
101/4 Series K	2001		35,000	35,000	(b)
10 Series L	2003		40,000	40,000	(b)
91/8	1994 (U.S. \$50,000,000)		57,797	57,797	
111/4 Series M	1999		75,000	75,000	(b)
			480,539	484,029	
Less sinking funds			23,723	16,585	
		51	456,816	467,444	
Less payments due within one year .	9		8,148	8,148	
		-\$	448,668	459,296	
		-			

- Secured by an assignment of amounts receivable under a power contract.
- (b) A sinking fund has been established for this issue.

#### Swiss franc loan

The maturity date of this loan has been extended by twelve months to December 1, 1982. The interest rate will be adjusted on December 1, 1981.

#### Bank loan

This loan, in the amount of \$51,567,000 (U.S. \$52,000,000) is repayable in four equal annual instalments. The loan bears interest at rates which range from 20% to 22 9/16%. The interest rates are adjusted periodically and are based upon the London interbank offering rate. Hydro may repay the loan in whole or in part on any interest adjustment date. The current portion as at December 31, 1980, was \$12,892,000 (1979 \$12,892,000).

#### Government of Canada loans

These loans, in the amount of \$92,768,000 (1979 \$94,067,000), bear interest at various rates from 5¼% to 8½% 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, 1980, was \$1,389,000 (1979 \$1,299,000).

#### **CFLCo**

51 E00	1980 (000)	1979 (000)
First Mortgage Bonds 7¾% Series A due December 15, 2007 (U.S. \$444,826,000)	\$470,799	483,763
7%% Series B due December 15, 2007	45,894	47,146
General Mortgage Bonds 7½% due three years after latest maturity of any First Mortgage Bonds	98,000	100,000
Less payments due within one year	614,693 17,500	630,909
	\$597,193	614,909

The First Mortgage Bonds, Series A and B, are repayable in fixed semi-annual 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 will be an amount 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.

#### **GIPCo**

#### Newfoundland loan

In February, 1980, when the Gull Island Project costs reached \$100,000,000, the maximum value at which these assets may be acquired by LCDC, the Newfoundland loan was forgiven by way of a capital contribution (refer to Note 5).

#### 8. Guarantees by Newfoundland

Newfoundland has unconditionally guaranteed the principal and interest on the long-term debt, except for the Swiss franc loan and the debt of CFLCo.

#### 9. Sales of power, CFLCo

The Power Contract provides for the sale of substantially all of the power from the CFLCo Project for an initial period of approximately 40 years with a renewal for a further period of 25 years. Sales of power under the Power Contract have been recorded at mill rates based on an estimate of the final capital cost of the CFLCo Project, as defined, and are subject to adjustment when such cost is determined. Pursuant to the Power Contract a joint reference has been made by Hydro-Quebec and CFLCo to an independent auditor to determine the final capital cost. Although such determination has not been made, it is not anticipated that such adjustment will result in a decrese in recorded sales.

#### 10. Interest expense

	1980 (000)	1979 (000)
Gross interest	\$118,702	113,132
and financing expenses Exchange loss on sinking fund transactions and	1,312	894
retirement of debt	2,831	2,637
Less: Recovered from:	122,845	116,663
Hydro-Quebec (a) PDD	19,007 336	19,110
Interest capitalized	7,896 10,262	9,723 6,849
	\$ 85,344	80,981

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

Also, CFLCo can require Hydro-Quebec to make additional advances, against the issue of units of Subordinate Debentures and shares of common stock, to service its debt and to cover its expenses if funds are not otherwise available.

#### 11. Dividend restrictions, CFLCo

Under the terms of the debt instruments, CFLCo may pay cash dividends only out of earnings, as defined, accumulated from September 1, 1976. As at December 31, 1980, \$1,900,000 of retained earnings has been appropriated as a reserve for self-insurance and \$7,991,000 is available for cash dividends.

Subsequent to December 31, 1980, the Board of Directors declared a dividend on common shares amounting to \$7,446,000 of which \$2,546,000 will be paid to minority interest.

#### 12. Commitments and contingent liabilities.

- (a) (i) CFLCo (together with Hydro-Quebec) is defending a legal action in connection with a request by Newfoundland for the supply by CFLCo of 800 megawatts of power, pursuant to Clause 2(e) of Part I of the Churchill Falls (Labrador) Corporation (Lease) Act, 1961, ("lease"), commencing in 1983.
  - (ii) The Government of Newfoundland introduced in the Legislature, on November 21, 1980, a bill entitled "The Upper Churchill Water Rights Reversion Act" ("Act"). The Government stated that this bill was introduced because of the lack of satisfactory progress in relation to its earlier request and that the purpose of the bill is to repeal the lease. This bill received Royal Assent on December 17, 1980, but has not yet been proclaimed into force. The Government also stated that this Act will be referred to the Court of Appeal of Newfoundland and thereafter to the Supreme Court of Canada to test its validity prior to being proclaimed into force.

If this Act is proclaimed, the rights given to CFLCo under the lease will be rescinded and the hydro-electric works attached to the land held under the lease will revest in Her Majesty in Right of the Province of Newfoundland. Thereafter, CFLCo will not have any rights under the lease nor will it own the hydro-electric works attached to the land and consequently will be unable to use the

water of the Upper Churchill basin to generate electricity for export from Newfoundland or for any other purpose.

The Act provides for the payment of all indebtedness secured by way of mortgage, lien, debenture or other incumbrance against the rights, privileges, liberties or interests referred to in the lease. The Act also provides that the shareholders may elect to be compensated for any reduction in the value of their common shares, subject to the conditions contained in the Act. It is the Government's stated intention that the Act will not be proclaimed into force until all arrangements have been made by it for the payment in full of all the secured indebtedness of CFLCo.

The Board of Directors of CFLCo has resolved that an intervention will be made to the courts to contest the validity of this legislation.

(b) Under the terms of a sublease with Twin Falls, expiring December 31, 1989, with a 25-year renewal option under certain conditions, CFLCo is required to deliver to Twin Falls, at an agreed price, horsepower equivalent to the installed horsepower of the Twin Falls plant and to maintain in good working order, Twin Falls' plant and equipment.

The Act has specifically assured that the rights of Twin Falls, to use the waters of the Upper Churchill to generate electricity at the Twin Falls plant, are protected not-withstanding the loss of rights by CFLCo to use the water of the Upper Churchill basin to generate electricity as CFLCo is replaced as lessor or licensor to Twin Falls by Her Majesty.

- (c) Proceedings have been instituted by CFLCo against contractors for damages resulting from the reduction in revenue due to premature failure of certain generating units. Settlement of this matter is currently under negotiation.
- (d) Hydro is defending claims instituted by various companies with respect to construction costs, outages and plant shut-downs. In aggregate, these claims amount to approximately \$800,000. It is not possible at this time to indicate the outcome of these claims.
- (e) Contractual commitments as at December 31, 1980 total approximately \$64,000,000 (1979 \$28,000,000). The total cost of major projects presently under construction and to be completed by 1982 is estimated to be \$155,000,000.

#### 13. Subsequent event

On January 30, 1981, Hydro sold \$75,000,000 of its 13%% Sinking Fund Debentures, Series N, maturing on January 30, 2001.

#### 14. Comparative figures

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



54,000 kilowatt gas turbine operated by Newfoundland and Labrador Hydro at St. John's.



# BOARDS OF DIRECTORS AND OFFICERS

#### **DIRECTORS**

#### NEWFOUNDLAND AND LABRADOR HYDRO

Victor L. Young, Chairman

\* Fintan J. Aylward, Q.C.

**‡Lewis H.M. Ayre** 

‡Angus A. Bruneau

**‡Lawrence** D. Fahey

\*Janet C.Gardiner Edward M. Hearn

\* Roland T. Martin

noiallu 1. Martin

Moses O. Morgan

**‡David** A. Vardy

#### LOWER CHURCHILL DEVELOPMENT CORPORATION

†Victor L. Young, Chairman

†A. Digby Hunt, Deputy Chairman

Angus A. Bruneau

Alexander J. MacIntosh, Q.C.

Harold F. Marshall

H. Harley McGee

tDavid W. Mercer

tDavid G. Norris

tWallace S. Read

tA. Sidney Rubinoff

David. A. Vardy

#### **CHURCHILL FALLS (LABRADOR) CORPORATION**

Victor L. Young, Chairman

- \*Robert A. Boyd
- \*Roland Giroux
- \*James J. Greene, Q.C. Brian C. McGrath
- \*David W. Mercer
- \* Member Audit Committee
- # Member Compensation Committee
- Appointed after the end of the year
- <sup>†</sup> Member Executive Committee

#### **OFFICERS**

#### NEWFOUNDLAND AND LABRADOR HYDRO

Victor L. Young, Chairman and Chief Executive Officer

 John Baxter, Vice President, Finance and Administration

Leo J. Cole, Vice-President, Engineering and Construction

Cyril J. Greene, Q.C., Vice-President, Legal

John P. Henderson, Vice-President, Operations

Brian C. McGrath, Vice-President

David W. Mercer, Vice-President, Corporate Planning

Sidney W. Butler, Corporate Secretary

Robert D.C. Taylor, Treasurer

Michael D. Wright, Controller

### LOWER CHURCHILL DEVELOPMENT CORPORATION

Victor L. Young, Chairman
Wallace S. Read, President
and Chief Executive Officer
A. Digby Hunt, Deputy Chairman
Sidney W. Butler, Corporate
Secretary

#### CHURCHILL FALLS (LABRADOR) CORPORATION

Victor L. Young, Chairman and
Chief Executive Officer
Brian C. McGrath, President
R. Andrew Grant, Vice-President,
Finance and Chief Financial Officer
Sidney W. Butler, Corporate Secretary
George N. Gray, Treasurer

### POWER DISTRIBUTION DISTRICT OF OF NEWFOUNDLAND AND LABRADOR

Victor L. Young, Chairman John P. Henderson, Vice-Chairman Lloyd E. Payne Frank A. Wright, Secretary

#### COVER: Photographs of Paintings by Raymond W. Flynn

#### The Artist:

Raymond Flynn was born in Forteau, Labrador in 1931 and has spent almost his entire life in Labrador. After finishing high school, he turned his hand to a variety of things. He taught elementary school in the Labrador Straits Area; was a surveyor for the Quebec-North Shore Labrador Railway; did plumbing, heating and sheet metal work in Corner Brook, Newfoundland; was a telephone foreman in Schefferville, Quebec; taught school in English Point, Labrador; worked as a plumber in Goose Bay, Labrador and as a fisherman in Labrador. For the past 12 years, he has been a diesel plant operator in L'Anse au Loup for Newfoundland and Labrador Hydro and spends his spare time painting or in the summer, fishing. He and his wife, Herselia and their six children live in L'Anse au Loup, Labrador.

#### Description of Paintings:

Front Cover (top) Suspended in Frost: The Flynn children prepare to launch their "Komatik"-a typical Labrador sleigh from atop an icy slope near their home in L'Anse au Loup, Labrador.

Front Cover (lower right) Point Amour Lighthouse: one of the oldest lighthouses in Newfoundland and Labrador - this guiding beacon has enabled a safe passage for ships travelling through the Strait of Belle Isle towards the Gulf of St. Lawrence. Point Amour will be the Labrador terminal in the Strait of Belle Isle for the proposed transmission link that will bring Labrador power to the Island of Newfoundland.

Fold Around Cover (front and back) L'Anse au Loup Bay: Small fishing boats lie at anchorage in typical Labrador fishing community. This scene is common along the coast line of Labrador during the summer fishing season.

Back Cover (left) Igloo of Flynn Children: Children of the Flynn family enjoy winter activity playing around their igloo constructed of Labrador ice while the family wash dries in the brisk, fresh air of Labrador.

Back Cover (upper right) Mrs. Ursula Fowler's House at L'Anse au Loup.



