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**Board of Commissioners of
Public Utilities
2000 Annual Financial Review
of Newfoundland and
Labrador Hydro**

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Introduction

This report to the Board of Commissioners of Public Utilities (“the Board”) presents our observations, findings and recommendations with respect to our 2000 Annual Review of Newfoundland and Labrador Hydro (“the Company”)(“Hydro”).

Scope and Limitations

Our analysis was carried out in accordance with the following Terms of Reference:

1. Examine Hydro’s accounting system and code of accounts to ensure that it can provide information sufficient to meet the reporting requirements of the Board.
2. Calculate the return on rate base, return on equity, capital structure and interest coverage ratio.
3. Conduct an examination of operations and administration expenses, fuels, power purchased, depreciation, and interest to assess their reasonableness and prudence in relation to sales of power and energy. The examination of the foregoing will include, but is not limited to, the following:
 - a) salaries and benefits,
 - b) system equipment maintenance,
 - c) insurance (including director’s liability),
 - d) transportation,
 - e) building rental and maintenance,
 - f) professional services,
 - g) miscellaneous,
 - h) capitalized expenses,
 - i) intercompany charges,
 - j) office expenses and membership fees,
 - k) equipmental rentals
 - l) fuels,
 - m) power purchased,
 - n) depreciation,
 - o) interest.
4. Verify Hydro’s reconciliation of Net income to Revenue Requirement for 2000. Review and assess the reasonableness of adjustments in the calculation of revenue requirement.

5. Review Hydro's rates of depreciation and assess their compliance with the 1986 Peat Marwick Depreciation Policy Study. Assess reasonableness of depreciation expense.
6. Conduct an examination of the changes to the Rate Stabilization Plan to assess compliance with Board directives.
7. Conduct an examination of the changes to deferred charges and assess their reasonableness and prudence in relation to sales of power and energy.
8. Review Minutes of Board of Director's and Management Committee meetings.
9. Review Hydro's initiatives and efforts with respect to productivity improvements, rationalization of operations and expenditure reductions. Obtain update on current activities and inquire as to any future initiatives currently being evaluated.
10. Review a sample of Contribution in Aid of Construction (CIAC) calculations for accuracy and compliance with approved policy.

The nature and extent of the procedures which we performed in our review varied for each of the items in the Terms of Reference. In general, our procedures were comprised of:

- enquiry and analytical procedures with respect to financial information included in the Company's records;
- examining, on a test basis where appropriate, documentation supporting amounts included in Company's records; and,
- assessing the Company's compliance with Board directives.

The procedures undertaken in the course of our financial review do not constitute an audit of Hydro's financial information and consequently, we do not express an opinion on the financial information as provided by Hydro.

The financial statements of the Company for the year ended December 31, 2000 have been audited by Ernst and Young LLP, Chartered Accountants, who have expressed their opinion on the fairness of the statements in their report dated February 9, 2000. In the course of completing our procedures we have, in certain circumstances, referred to the audited financial statements and the historical financial information contained therein.

Accounting System and Code of Accounts

Scope: *Examine Hydro's accounting system and code of accounts to ensure that it can provide information sufficient to meet the reporting requirements of the Board.*

Section 58 of the *Public Utilities Act* states that the Board may prescribe the form of all books, accounts, papers and records to be kept by Hydro and that Hydro shall comply with all such directions of the Board.

During 1998 Hydro implemented its new accounting system, J.D. Edwards. This new system resulted in a new chart of accounts, and several changes in a number of the account groupings. Then in 2000 several additional changes affecting the account groupings of inventory and non-inventory items were implemented. This change was expected to eliminate supplier dependency in the preparation of budgets and other financial information.

The objective of our review of Hydro's accounting system and code of accounts was to ensure that it can provide information sufficient to meet the reporting requirements of the Board. We have observed that the Company has in place a well-structured, comprehensive system of accounts and organization / reporting structure. Hydro was able to meet all our requests for information and reports on a timely basis during our Annual Review.

In regards to Section 58 of the *Public Utilities Act*, correspondence from the Board dated October 4, 2000 indicated that Hydro's current code of accounts was approved on a provisional basis, subject to final approval at a general rate hearing. Hydro's system of accounts provides adequate flexibility to allow the Company to meet its own and the Board's reporting requirements.

Return on Rate Base and Equity, Interest Coverage and Capital Structure

Scope: Calculate the return on rate base, return on equity, capital structure and interest coverage ratio.

Return on Rate Base

We have calculated the average rate base for 2000 and restated 1999 and 1998 using the methodology and criteria that Hydro proposed in their rate application filed with the Board on May 31, 2001. It is important to note that the components of this calculation have not been approved by the Board and will be subject to review and approval as part of the rate hearing in the fall of 2001. However, until the rate base is fixed and approved, utilization of the above methodology and criteria provides a reasonable indication of the return on rate base achieved by Hydro.

In addition to utilizing the proposed methodology as noted above, the 1999 and 1998 net income and interest expense have been restated to reflect the adjustments made by Hydro to the calculation of the profit contribution from the Hydro Quebec recall. These adjustments are described in more detail in the revenue requirement section of our report.

We have calculated the return on rate base for 2000 at 7.69% as compared to 6.88% for 1999 and 9.20% for 1998. Details with respect to the calculation of average rate base and return on rate base are as follows:

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(000)'s	2000	1999	1998
Plant investment	\$ 1,678,600	\$ 1,640,900	\$ 1,641,300
Less: Accumulated depreciation	(380,500)	(351,700)	(331,500)
CIAC's	(89,000)	(89,800)	(90,500)
	1,209,100	1,199,400	1,219,300
Balance previous year	1,199,400	1,219,300	1,228,000
Average	1,204,250	1,209,350	1,223,650
Cash working capital allowance	2,947	2,940	2,682
Fuel inventory	20,005	10,238	11,478
Supplies inventory	21,251	21,933	21,536
Deferred realized foreign exchange loss	87,300	88,300	89,300
Average rate base	\$ 1,335,753	\$ 1,332,761	\$ 1,348,646
Net income (as adjusted per Schedule 3)	\$ 5,850	\$ (3,647)	\$ 25,132
Hydro net interest expense	96,900	95,300	98,900
Adjusted net income	\$ 102,750	\$ 91,653	\$ 124,032
Return on rate base	7.69%	6.88%	9.20%

The above calculation excludes the profit contribution of approximately \$11.6 million from the Hydro Quebec recall (1999 - \$35.5 million; 1998 - \$25.9 million). The return on rate base would be 8.36% (1999 - 9.38%, 1998 - 11.11%) if this profit contribution were included in the regulated net income and the net interest expense was adjusted for the savings that was considered to be a direct result of the increase in cash flows.

In February 2000, the Board issued P.U.5 (2000 - 2001) authorizing Hydro to abandon the woodchip fired thermal generating station located in Roddickton. This resulted in a write-down of capital assets of \$16.7 million, which Hydro has reflected in the 1999 financial statements. The return on rate base for 1999 would be 8.99% excluding this write-down of capital assets. Adjusting 1999 for both the capital asset write-down and the profit from the Hydro Quebec recall would result in a return of 11.35%.

Return on Equity

The return on equity for 2000 has been calculated at 2.10% as follows:

(000)'s	2000	1999	1998
Shareholder's equity			
2000	\$ 267,900		
1999	\$ 289,700	\$ 289,700	
1998		294,300	294,300
1997			279,500
Average equity	<u>\$ 278,800</u>	<u>\$ 292,000</u>	<u>\$ 286,900</u>
Net income (as adjusted per Schedule 3)	\$ 5,850	\$ (3,647)	\$ 25,132
Return on equity	2.10%	-1.25%	8.76%

The above calculation also excludes the profit contribution from the Hydro Quebec recall of approximately \$11.6 million in 2000, \$35.5 million in 1999 and \$25.9 million for 1998. The return on equity would be 5.46% for 2000, 9.69% for 1999 and 17.08% for 1998 if these profit contributions were included in the 2000, 1999 and 1998 net income respectively. Also, the net income indicated above for 1999 includes a write-down of capital assets of \$16.7 million. The return on equity would be 4.34% if this transaction were normalized in the net income calculation. Adjusting 1999 for both the capital asset write-down and the profit from the Hydro Quebec recall would result in a return on equity of 14.4%.

The shareholder's equity of Hydro has been adjusted to eliminate the portion of the equity of Hydro, which is attributable to subsidiary/non-regulated operations. These adjustments to Hydro's equity are as follows:

(000's)	2000	1999	1998
Equity per non-consolidated financial statements	\$ 568,600	\$ 626,280	\$ 591,650
Less: Contributed capital			
- Lower Churchill Development	(15,400)	(15,400)	(15,400)
- Muskrat Falls Project	(2,200)	(2,200)	(2,200)
Share capital issued to finance investment in CF(L)Co.	(22,500)	(22,500)	(22,500)
Net retained earnings attributable to CF(L)Co. (income recorded minus dividends flowed through to government)	(228,500)	(247,700)	(232,800)
Net retained earnings attributable to the sale of recall power to Hydro Quebec (income recorded minus allocation of dividends)	(32,116)	(48,776)	(24,434)
"Regulated Equity"	<u>\$ 267,884</u>	<u>\$ 289,704</u>	<u>\$ 294,316</u>

The adjustment to regulated equity relating to the net retained earnings attributable to the sale of recall power to Hydro Quebec is based on Hydro's revised calculation of profit from the sale of recall power and incorporates an allocation of dividends between the regulated versus non-regulated earnings. We will review the appropriateness of this notional adjustment to regulated equity as part of our review performed for the scheduled general rate hearing.

Overall, the above calculations provide a reasonable indication of the rate of return on equity achieved by Hydro during the year.

Interest Coverage

Interest coverage for 2000 has been calculated at 1.18 times as follows:

(000's)	2000	1999	1998
Total interest	\$ 96,034	\$ 94,288	\$ 100,682
Less: CF(L)Co	<u>(1,841)</u>	<u>(1,109)</u>	<u>(1,896)</u>
Hydro net interest	94,193	93,179	98,786
Less: Guarantee fee	(10,610)	(10,849)	(11,153)
Add: Interest earned and IDC			
Power bills	16	85	250
RSP	3,217	3,217	4,150
Sinking funds	5,323	8,689	28,269
IDC	<u>3,694</u>	<u>1,984</u>	<u>428</u>
Gross interest	<u>\$ 95,833</u>	<u>\$ 96,305</u>	<u>\$ 120,730</u>
Net income (per Schedule 3)	\$ 17,296	\$ 31,715	\$ 51,257
Gross interest	<u>95,833</u>	<u>96,305</u>	<u>120,917</u>
Adjusted income	<u>\$ 113,129</u>	<u>\$ 128,020</u>	<u>\$ 171,174</u>
Interest Coverage	1.18	1.33	1.42

In 2000 gross interest costs continued to decline compared to 1999 and 1998. This decrease is a result of lower average interest rates, net debt retirement, higher interest charged to capital, and interest savings from increased cash flows from the Hydro Quebec recall. The decrease in net income in 2000 is largely attributed to a lower net profit from the recall since the Company reached the revenue cap set in the agreement in May 2000.

Interest coverage has been calculated at 1.06 times when the profit contribution from the Hydro Quebec recall is also excluded from net income.

The Company's interest coverage appears fairly reasonable and comparable to prior years, considering the maximum revenue cap of \$78.9 million from the Hydro Quebec recall was reached in early 2000.

Capital Structure

The capital structure of Hydro, excluding its subsidiary companies, can be determined from Schedule 1. For the years 1998 to 2000, the capital structure was as follows:

(000)'s	2000	%	1999	%	1998	%
Debt	\$ 1,153,996	79.4%	\$ 1,134,332	77.0%	\$ 1,165,400	78.5%
Equity	<u>300,050</u>	20.6%	<u>338,525</u>	23.0%	<u>318,800</u>	21.5%
	<u>\$ 1,454,046</u>		<u>\$ 1,472,857</u>		<u>\$ 1,484,200</u>	

For the 2000 fiscal year Hydro declared and paid dividends totaling \$69.9 million to the provincial government which included a \$33.3 million dividend based on a partial flow through of CF(L)Co revenue. The dividend policy approved by the Board of Directors of Hydro in November, 1995 provides for the payment of dividends annually up to 75% of net operating income provided such payment will not cause the debt: equity ratio to fall below 80:20. In addition, the policy provides for the payment annually of all dividends received from CF(L)Co after payment of debt servicing (including \$1 million principal) associated with the CF(L)Co loan.

In comparison to 1999's improvement over 1998 and 1997 ratios, Hydro's debt:equity ratio for 2000 has deteriorated slightly. This deterioration can be attributed primarily to the lower equity level at the end of 2000. The decrease to equity is largely a result of the implementation of the accrual accounting for employee future benefits as required by new recommendations of the Canadian Institute of Chartered Accountants. The impact from this change is a reduction in the opening retained earnings of \$22.6 million. The variance in debt is primarily attributed to increases in short-term promissory notes.

Other Costs

Scope: *Conduct an examination of operations and administration expenses, fuels, power purchased, and interest to assess their reasonableness and prudence in relation to sales of power and energy.*

Schedule 3 of our report provides a breakdown of other costs for the years 1998 to 2000. This schedule shows that the total other costs (before transfers to capital and cost recoveries) have increased in 2000 relative to 1999 by \$6.868 million (\$102,666,000 - \$95,798,000). This 7.2 % increase in 2000 is a continuation of the upward trend, which began in 1998.

On a net basis, other costs show a similar trend with an increase in 2000 relative to 1999 of \$7.992 million (\$93,144,000 - \$85,152,000). The additional increase on a net basis is attributable to the lower transfers to capital and C.F.(L) CO. in 2000 as compared to 1999.

The most significant expense variances in 2000 relate to an increase in salaries of \$4.2 million and system equipment maintenance of \$4 million. These two categories of expenses are the driving force behind the continuous increase in other costs since 1998. The salary increase is a result of four main factors: 1) a general scale increase of 2% for union and non-union employees; 2) a new collective agreement in 2000 resulted in the reclassification of some positions; 3) temporary employees back filling vacant permanent positions in the Transmission and Rural Operations division due to long term leave, promotions, transfers and assignments to special work; and 4) new recommendations by the Canadian Institute of Chartered Accountants (CICA) resulted in the accrual of employee future benefits. Secondly, the reasons for the increase to system equipment maintenance is two-fold: 1) addition maintenance work in the Transmission and Rural Operations division, mainly repairs to gas turbine and diesel plants in the central and Labrador regions; and 2) the introduction of a newly restructured code of accounts for all inventory and non-inventory items.

During 2000, it was decided that some additional restructuring to the J.D. Edwards code of accounts was necessary in order to provide more practical financial information and facilitate in the preparation of budgets. In 1998 there was a cost coding change that impacted the amount of expenses recorded within system equipment maintenance. Items supplied from inventory for routine operations were all coded to system equipment maintenance. Approximately a year and a half after the introduction of this change, the company realized this cost coding was not providing the useful information that was anticipated. Therefore in early 2000, a steering committee was created and allocated the task of assigning object codes to all purchases both inventory and non-inventory items. There was four object codes developed and assigned to commodity groups with items

currently in inventory and commodity groups with no items currently in inventory. Three of the four codes, maintenance material, tools and operating supplies and gases lubricants and chemicals are recorded within system equipment maintenance, the final code, safety equipment and supplies is recorded within building maintenance and rentals. This cost code restructuring accounts for many of the variances in the operations and administrative expenses. However, for the most part these fluctuations offset each other.

Schedule 4C of our report provides an analysis of the “other costs” on a kWh’s sold basis for the years 1996 to 2000. While the schedule reveals an overall increase in total “other costs” and the amount of kWh’s sold for 2000, the schedule also clearly indicates a slight drop in the total “other costs” per kWh, thus reversing its upward trend which began in 1998.

On an individual basis, the various expense categories in other costs showed inconsistent trends in 2000; several categories showed increases, while others showed decreases. Schedule 3 provides the details on expenses for the period 1998 to 2000. We have reviewed the various expense categories on an individual basis and our observations and comments are noted below for your consideration.

Based on the results of our procedures, nothing has come to our attention to indicate that the operations and administration expenses, fuels, power purchased, and interest costs are imprudent or unreasonable in relation to sales of power and energy. However, as noted throughout this section of the report, there are several expenses that are experiencing trends that will require monitoring and will be subject to our review in preparation for the 2001 fall rate hearing.

Salaries and benefits

Gross payroll costs for 2000 were \$61,374,000, which was 7.4%, or \$4.2 million higher than 1999 levels. The salaries and benefits costs are summarized below by category:

(000)'s	2000	1999	1998
Salaries	\$ 41,169	\$ 40,503	\$ 39,386
Directors fees	21	77	108
Hourly wages	6,482	5,727	4,681
Overtime	3,998	3,946	4,074
Employee future benefits	2,243		
Fringe benefits	6,205	5,514	5,437
Group insurance	1,129	1,289	1,200
Labrador travel benefit	127	71	74
	\$ 61,374	\$ 57,127	\$ 54,960

While salaries and benefits increased in almost every category in 2000, the majority of the overall increase can be attributed to the following categories: employee future benefits - \$2.243 million; hourly wages - \$755,000; and fringe benefits - \$691,000. These three categories account for \$3.689 million (or 87%) of the overall increase.

The adoption of new CICA recommendations for accounting for employee future benefits has resulted in new costs of \$2.243 million this year. Hydro applied this change retroactively and reduced its opening retained earnings by \$22.6 million, however, the prior years costs were not restated.

The breakdown of hourly wages by division is as follows:

(000)'s	2000	1999	1998
Finance	\$ 657	\$ 667	\$ 615
Human resources and legal	1,181	951	604
Transmission and rural operations (TRO)	2,951	2,344	2,119
Production	1,653	1,752	1,330
Internal audit	40	13	13
	\$ 6,482	\$ 5,727	\$ 4,681

The main contributing factors to the increase in the hourly wages is as follows:

- Backfilling vacant permanent positions in the TRO division with temporary employees.
- In the Human Resources and Legal division there was an increase in the number of filled apprentice positions in preparation of anticipated retirements plus the implementation of a Graduate Trainee Program.

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However, the regular salaries category, which has risen consistently for the past three years and represents the largest portion of payroll costs for the year incurred a much lower increase at 1.6% for 2000. The breakdown of salaries only, by division, is as follows:

(000)'s	2000	1999	1998
Finance	\$ 3,901	\$ 3,894	\$ 5,261
Human resources and legal	3,165	2,857	2,990
Transmission and rural operations (TRO)	17,410	17,227	17,360
Production	15,344	15,057	12,720
Internal audit	206	207	194
Management	1,143	1,261	861
	<u>\$ 41,169</u>	<u>\$ 40,503</u>	<u>\$ 39,386</u>

The increase in salary costs relating to the Human Resources & Legal division and the decrease in Management divisions is mainly the result of the transfer of the legal staff from Management to Human Resources. Addition explanations for the variances experienced within the Management division are due to the elimination of the Vice President for the Churchill River Negotiations, partially offset by the full year's effect of the Director for the Production division.

On an overall basis, increases in the salaries category can be attributed to the following items:

- A general scale increase of 2% was provided to all union and non-union workers and Management Committee in 2000.
- In 2000, a new collective agreement was signed which allowed for the reclassification of some positions.

The gross payroll costs for 1998 to 2000 were allocated to operations and capital as follows:

(000)'s	2000	1999	1998
Payroll charged to operating	\$ 54,155	\$ 48,954	\$ 46,765
Payroll charged to capital	7,219	8,173	8,195
	<u>\$ 61,374</u>	<u>\$ 57,127</u>	<u>\$ 54,960</u>

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The payroll costs charged to capital continued its downward trend in 2000. Capitalized salaries are made up of more than 25 separate projects, however 6 of these projects represent approximately 43% of total salary costs. Some of these projects are continuations of the larger projects capitalized in 1999 such as the Lower Churchill River project, upgrading work on TL217 and service extensions and upgrading in the Central Region. Several of the larger projects in 2000 included the Granite Canal development and the service extensions and upgrading in the Northwest Region.

The Lower Churchill River project refers to the negotiations with Hydro Quebec relating to hydro electric development on the Lower Churchill River in Labrador. All costs associated with these negotiations are capitalized. Upgrading and service extensions includes the erection of new poles, upgrading existing transmission lines and providing services to new customers. The Granite Canal development relates to the new generation project started in 2000.

Executive salaries for the years 1998 to 2000 are as follows:

	<u>2000</u>	<u>1999</u>	<u>1998</u>
Total executive salaries and benefits	\$ 838,578	\$ 811,139	\$ 770,999
Number of executives	5	5	5
Average salary	\$ 167,715	\$ 162,230	\$ 154,200

The total executive salaries and benefits and the average salary per executive increased by 3.4% in 2000 in comparison to 1999.

The Compensation Committee recommended a salary increase for the President and Vice-Presidents consistent with the increase provided for non-union staff. They also approved step progression for those who were not at their job rate. Salary adjustments were effective January 1, 2000 following an evaluation of their performance.

The staff complement for 1998 to 2000 is as follows:

	<u>2000</u>	<u>1999</u>	<u>1998</u>
Production	318	320	278
TRO	411	412	406
Finance	84	85	121
Internal audit	4	4	4
Management	8	9	9
Human resources and legal	66	71	71
	<u>891</u>	<u>901</u>	<u>889</u>

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The figures above include both filled and vacant positions. A similar analysis of filled positions only is as follows:

	2000	1999	1998
Production	312	312	271
TRO	382	383	395
Finance	81	81	118
Internal audit	4	4	4
Management	8	9	9
Human resources and legal	66	70	71
	<u>853</u>	<u>859</u>	<u>868</u>

The above tables reflect staffing numbers as at the end of the fiscal year.

The staff complement for 2000 is fairly consistent with 1999, with only a slight decline in the Human Resources and Legal department due to the elimination of several positions relating to the purchasing and control of inventory.

In 2000, Hydro developed a system to report full-time equivalent employees by category. Unfortunately these figures are only available for April to December 2000, and comparative data for prior years is not available. In the future as comparative data becomes available, this information will be very useful for analyzing the salaries and benefits cost category.

The following is a schedule of the average number of temporary employees on staff for 1998 to 2000. The monthly numbers were taken at the end of each particular month.

	2000	1999	1998
January	99	94	84
February	115	93	131
March	110	115	107
April	123	134	140
May	133	168	141
June	187	240	236
July	195	231	248
August	212	235	199
September	174	207	195
October	161	183	155
November	119	150	162
December	88	100	99
Monthly average	<u>143.0</u>	<u>162.5</u>	<u>158.1</u>

System equipment maintenance

In 2000, system equipment maintenance costs increased from 1999 levels by \$4,020,000 or 26.9%. This increase is made up of several significant variances within the account groupings for this category. The changes in system equipment maintenance costs in 2000 as compared to 1999 are as follows:

• Higher maintenance costs for TRO	\$ 4,170,000
• Lower maintenance costs for hydro generation	(341,000)
• Lower maintenance costs for thermal generation	(891,000)
• Higher maintenance and inventory costs for Human resources & legal	528,000
• Higher inventory costs for Finance	136,000
• Higher costs for lubricants, gases and chemicals	194,000
• Other miscellaneous variances – net	224,000
	<u>\$ 4,020,000</u>

The costs for 1998 to 2000 for the system equipment maintenance portion of this expense only (excluding tools and equipment, freight and lubricants, gases and chemicals) are broken down by department as follows:

(000)'s	2000	1999	1998
Transmission and rural operations	\$ 8,666	\$ 4,497	\$ 4,776
Production	8,439	9,544	5,577
Human Resources & Legal	536		
Finance	137		
Other	2	9	8
	<u>\$ 17,780</u>	<u>\$ 14,050</u>	<u>\$ 10,361</u>

Extra maintenance requirements in the Central and Labrador regions of the province is the main contributing factor to the increased costs within transmission and rural operations. The extra maintenance requirements in these regions included \$1,800,000 of gas turbine repairs and \$300,000 for overhaul at the Nain Diesel Plant. The remaining portion of the increase is attributed to costs transferred to the maintenance material object code from other accounts as a result of the account code restructuring that the Company implemented in April 2000.

In 1999, extra maintenance requirements for the hydro generation division contributed to the increased costs within the production department. The extra maintenance projects in 1999 amounting to over \$1,000,000 were not part of the regular routine maintenance at the Cat Arm and Upper Salmon hydro plants, and as such were non-recurring. Several smaller maintenance projects at Bay D’Espoir in 2000 offset the \$1,000,000 anticipated savings resulting in a net reduction in costs of \$681,000. The introduction of the account

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code restructuring resulted in additional costs allocated to this category of approximately \$340,000 leaving a net overall decrease of \$341,000.

The Holyrood thermal plant costs are as follows:

(000)'s	2000	1999	1998
Unit # 1 overhaul	\$1,433	\$1,428	\$909
Unit # 2 overhaul	1,148	3,268	965
Unit # 3 overhaul	1,170	1,193	1,323
Annual routine maintenance	<u>2,769</u>	1,522	1,333
	<u><u>\$6,520</u></u>	<u><u>\$7,411</u></u>	<u><u>\$4,530</u></u>

Maintenance costs at Holyrood are subject to a high degree of variability. Based on information provided by the Company, Unit # 1 had a minor overhaul in 2000, 1999 and 1998, however the overhaul for Unit #1 in 2000 also included costs relating to work performed on the valves. The costs incurred in 1999 and 2000 when compared to 1998 are largely due to the scope of the overhaul, since the last major overhaul performed on Unit #1 was in 1997. Unit # 2 had a minor overhaul in 2000 versus a major overhaul in 1999. The cost differential between a minor and major overhaul on Unit # 2 accounts for a majority of the variance between 2000 and 1999. Unit # 3 had minor overhauls done in 2000, 1999, and 1998. Annual routine maintenance has risen significantly since 1998. Approximately \$856,000 of this cost increase can be attributed to the account code restructuring mentioned earlier in the report whereby property costs are now charged to system equipment maintenance. However, even if the effect of the account code restructuring is eliminated, the annual routine maintenance costs have increased significantly. This increasing trend is evident from 1997 to 2000 and further analysis of this cost category is warranted, particularly in light of the rate application now before the Board, which is based on 2002 forecast information.

Again, due to the account code restructuring in 2000, variance increases were noted in the lubricants, gases and chemicals account and the finance and human resources & legal departments. All inventory and non-inventory items that fall under the object code “gases lubricants and chemicals” are now recorded to the lubricants, gases and chemicals account. The departmental increases are the result of coding the office supplies group of expenses to system equipment maintenance. In addition to the code restructuring, roof repairs of approximately \$75,000 to Hydro Place account for a portion of the increase in the human resources & legal department. These roof repairs are expected to continue over the next several years.

Insurance (including director's liability)

Insurance costs decreased overall by \$31,000 or 2.92% in 2000 over 1999.

The All-risk (property) premium decreased by \$225,500 and the Boiler and Machinery premium increased by \$168,000 due to the negotiation of a new three-year policy, which combined both premiums, and the result was a slightly lower overall premium.

Miscellaneous changes to other premiums paid in the year net to a increase of \$26,500.

Transportation

Transportation expense is comprised of aircraft rentals, vehicle expenses (fuel, labour and repairs) and mobile equipment expenses (fuel, labour and repairs). This expense category decreased overall by \$589,000 (16.9%) in 2000 as compared to 1999. The majority of this decrease is due to lower vehicle repairs of \$413,000 and lower mobile equipment repairs of \$325,000. However, this decrease was partially offset by an increase in fuel costs for vehicles of \$159,000. Other miscellaneous variances such as an increase in aircraft rentals of \$71,000 and a decrease in the fuel costs for mobile equipment of \$81,000 netted to a decrease of \$10,000.

The combined reduction in vehicle and mobile equipment repairs is primarily a result of the introduction of the account code restructuring in the spring of 2000. These expenses are now coded to maintenance materials in system equipment maintenance. The increase in maintenance costs within the Transmission and Rural Operations division, the primary user of Hydro's vehicles and equipment, is reflective of this cost coding change. The decrease in mobile equipment repairs and fuel costs is also a result of the type of maintenance incurred in the Transmission and Rural Operations in 2000. Installation of an engine at the Stephenville Gas Turbine and overhauls at the Nain Diesel Plant did not provide heavy demands on the use of mobile equipment, however overhauls at the Nain Diesel Plant does explain some of the increase in aircraft rentals.

Despite, the overall decrease in transportation expenditures for 2000 as compared to 1999, the fuel costs for vehicles has risen steadily due to increasing fuel prices.

Based on information provided by Hydro, in 1999 the fleet included 356 vehicles and 355 mobile equipment units, and in 2000 the Company had 371 vehicles and 360 mobile equipment units.

Office expenses, including membership fees

Office expenses in 2000 (including heat and light, telephone, supplies, postage, advertising, cleaning, office equipment maintenance, books and subscriptions and membership fees) decreased by \$777,000 or 27.2% over 1999. The large decrease was in the areas of printing forms and supplies of \$353,000, cleaning and janitorial supplies of \$205,000, and office equipment and maintenance of \$235,000. Other miscellaneous variances result in a net increase of \$16,000.

The decreases within the account groupings of this category were primarily attributable to the new method of allocating inventory and non-inventory items to account codes. These accounts include costs for approximately the first four months of the year with costs for the remainder of the year coded to the object code maintenance materials in system equipment maintenance.

Membership dues continued to increase in 2000 as they did in 1999. The increase in 2000 is approximately \$42,000. These increases are largely a result of additional initiatives undertaken by the Canadian Electrical Association. The costs associated with these initiatives are generally cost shared among the members.

Building rental and maintenance

In 2000 building and rental maintenance decreased from 1999 levels by \$1.9 million or 65.6%. The decrease is attributed entirely to restructuring the code of accounts. This category originally consisted of the accounts relating to building rentals, safety equipment & supplies and property costs. When the new object codes were introduced in the spring of 2000, the account “property costs” became inactive and all related expenses were then recorded to system equipment maintenance. This resulted in a decrease to the account of approximately \$2,150,000. This decrease was slightly offset by an approximate increase of \$250,000 to the “safety equipment & supplies” account when items of protective clothing, originally part of miscellaneous expense, were coded to the new object code.

Professional services

In 2000, professional services costs of \$3,814,854 increased from 1999 levels by \$58,500. While this overall increase of 1.6% is only slight, there were some significant variances within the account groupings for this category. The changes in professional services costs in 2000 as compared to 1999 are as follows:

• Lower professional fees	\$ (429,000)
• Higher PUB related costs	561,500
• Lower software acquisitions	<u>(74,000)</u>
	<u>\$ 58,500</u>

The professional fees category decreased in 2000 primarily because of several non-recurring projects in 1999 relating to the information security architecture and IT governance consulting work. These non-recurring project costs were approximately \$385,000 in 1999.

With respect to the increase in PUB related expenses, the Company hired consultants during the year to complete an analysis of the cost of service and the rate stabilization plan model at a cost of approximately \$400,000. These consultants were contracted in preparation for the 2001 rate hearing. In addition to these consultant costs, there were increased billings from the Board during the year relating to regulatory reviews.

The third variance noted above, which offsets a portion of the overall increase to the professional services category, relates to software acquisition and maintenance. In 1999 there was a rollout of the Microsoft suite of products, and as a result there were fewer requests for additional software in 2000. The actual costs in this category came in under budget by approximately \$137,000.

The professional services expense category has exhibited a significant upward trend over the past four years (64% increase from 1996 to 2000). Consequently, in order to obtain a better understanding of the nature of the items included in this expense category, we conducted a more detailed review of professional fees by department. The significant consulting/professional services that have been contracted out by individual departments during 2000 are as follows:

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Department	Professional Services	Cost
Management	• Hydro's Strategic Planning Initiative	\$52,000
	• Audit Services	59,000
Human resources & legal	• Valuation of post retirement non-pension benefits	16,000
	• Job classification review	32,600
	• Implementation of Career Succession software	65,000
Finance	• Conversion of the cost of service (COS) model from DOS and conduct 1996 and 1997 COS studies	32,000
	• Implementation of the Capital Asset Projection Software Module	86,000
	• Training session for customer service employees on the process of analyzing customer data	15,300
	• Annual report fees	42,500
	• Consulting work for the development of Hydro's Communication Plan	37,000
	• Media Monitoring	11,300
	• Design, produce and coordinate outlet newsletter	21,000
	• Insurance Broker Selection	16,300
TRO	• Proposal for a management environmental system	28,000
	• Proposal for a environmental audit system	28,700
	• Environment effects and monitoring studies	137,000
Production	• Monthly consulting services for unit 1, 2, and 3 at Holyrood Plant	182,000
	• Environment effects, monitoring studies and tests on water, marine and wildlife around the Holyrood plant	30,000
	• Stack emissions testing	25,000
	• High pressure safety valves testing	<u>33,500</u>
		<u>\$950,200</u>

With respect to the variances in this expense category, we have obtained explanations and performed additional analysis where appropriate.

Travel and conferences

In 2000 the travel and conference expense category increased from 1999 levels by \$376,000 or 15.3%. Travel costs increased from \$2.3 million to \$2.6 million and conference costs increased from \$145,000 to \$193,000.

The most significant increase in travel costs was noted in transmission and rural operations. The travel costs in this department increased by approximately \$287,000. This increase is attributable to relocation expenses related to internal reorganization, increase travel associated with ongoing maintenance, and extra travel associated with the Reliability Centered Maintenance Program.

The increased spending on conferences in 2000 was primarily attributable to the Production and Finance departments. Increased spending of \$43,000 in the Production department is due to a number of the EMS & telecontrol employees attending 3 separate conferences in Rochester, Denver and Orlando. In the Finance department conference costs for 2000 exceeded 1999 by approximately \$13,500. Several treasury employees attended conferences in 2000 regarding management reporting and cash and risk management. The increased spending in these two departments in 2000 was slightly offset by a decrease in costs of \$17,600 within the management department. This decrease is a result of fewer conferences attended by executive management in 2000 compared to 1999.

Similar to our 1999 findings, we noted during our review of the travel accounts that management travel includes several payments for spousal travel costs. While these items are accepted practice by Hydro, we believe that it is not prudent to include expenditures of this nature in the revenue requirement.

Equipment rentals

Equipment rental expense decreased by \$202,000 or 12.6% in 2000, as compared to 1999. This decrease is attributable to a decline in computer costs of \$395,000, with an offset of \$187,000 due to increased expenditures on equipment rentals.

The decrease in computer costs is primarily due to the ownership and or financing arrangements of the mainframe computers, currently in use. Over the past couple of years, Hydro has gradually moved from the older Amdhal system to the AS400. In 1999, both mainframes were run parallel, but in 2000, the full transition was made to the AS400, which has lowered computer costs significantly.

The increase in equipment rentals is attributed to the extension of the bandwidth to facilitate the wide area network rollout of Lotus Notes and various J.D. Edwards suite of applications to areas such as Happy Valley /Goose Bay, Wabush, Springdale, Flowers Cove and Lance au Loup.

Miscellaneous

In 2000, miscellaneous expense increased by \$550,000 or 12.7% from 1999. The major variances in this expense category are as follows:

Increase in staff training	\$	374,000
Increase in payroll and municipal taxes		148,000
Decrease in employee expenses		(97,000)
Net increase in other variances		125,000
	\$	550,000

The type and the amount of staff training available to Hydro employees in 2000 tended to vary across all departments. Similar seminars were offered in both 2000 and 1999, with additional training programs related to diesel plant operators, Reliability Centered Maintenance, Work Protection code and JD Edwards.

The increase in “payroll and municipal taxes” is primarily due to an increase in payroll tax as a result of increased salaries and a slight increase in municipal taxes.

As noted previously in the report, the cost of personal protective clothing has been removed from “employee expenses” and reallocated to the object code for “safety equipment and supplies”, as a result employee expenses has decreased.

With respect to the variances noted above, we have obtained explanations and performed additional analysis where appropriate.

Capitalized expenses

Capitalized expenses for 2000 were \$7.852 million as compared to \$8.537 million for 1999 and \$8.667 million in 1998.

The breakdown of capitalized expenses for the three years is as follows:

	2000	1999	1998
Salaries	\$ 7,218,993	\$ 8,173,343	\$ 8,194,967
Fleet expense	502,400	255,218	381,387
Travel direct work orders	131,110	108,145	90,700
	\$ 7,852,503	\$ 8,536,706	\$ 8,667,054

The costs incurred in 2000 and allocated to capitalized salaries are made up of more than 25 projects. However, a large portion of these allocations can be attributed to six main projects: upgrading work on TL217, the Lower Churchill River project, service extension and upgrading in the central and northwest regions, Granite Canal development, and lightning arrestor replacement of TL206. While the number of capitalized projects has increased over 1999 the amount of capitalized salaries has dropped by 11.7%. This decrease in costs is primarily due to a reduction in the amount of internal forces required for capital projects related to P2000 and the Lower Churchill River Project. Decreases for these projects are partially offset by higher involvement of internal forces in the Granite Canal Project.

The decrease in capitalized salaries has been partially offset by the increase in the cost of capitalized fleet expenses of approximately \$247,000. This increase in costs or usage of fleet vehicles is a result of the type of capital projects in progress. The projects ongoing in 2000 required more extensive use of vehicles and equipment, furthermore, in 1999 the Company contracted more outside forces to perform the fieldwork.

The methodology employed by Hydro with respect to capitalizing expenses is outlined below. This methodology has not changed during 2000.

Capitalized salaries include the salaries and benefits of Company employees whose time is charged directly to capital projects, as well as, departmental and non-departmental overhead. The benefits component is determined by applying a pre-determined percentage to the gross salaries, which are capitalized directly. The departmental overhead component is allocated to the capital projects as a percentage of direct salaries and benefits depending on the employees' responsibilities. Finally, the non-departmental overhead component includes costs of departments which are not directly related to the capital program but which are considered necessary to support the various capital projects throughout the year. The non-departmental overhead charge is determined by applying a pre-determined percentage to the total cost of capital projects as per the work orders.

Fleet expense and travel direct work orders encompass fleet costs and costs associated with smaller work orders related to the Company's distribution system. These costs are capitalized using standard rates developed by the Company.

All categories of capitalized expenditures other than capitalized direct salaries are allocated to work orders using percentages or standard rates developed by the Company. These allocations are intended to ensure that capital projects are adequately charged with the cost of support functions such as accounting and finance, engineering, and other such expenses which cannot be directly charged to specific capital projects.

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For 2000, the percentages used to capitalize fringe benefits and overhead costs were as follows:

Benefits (% of direct salaries)	35.9%
Departmental overhead	
Non-field (% of direct salaries and benefits of engineers and office staff)	37.6%
Field (% of salaries and benefits of crews)	19.8%
Non-departmental overhead (% of work order total costs)	6.0%

Intercompany charges

Intercompany charges to CF(L)Co. for 2000 have decreased by \$439,100 or 20.8% compared to 1999. The breakdown of intercompany charges by department is as follows:

	2000	1999	1998
Production	\$ 226,864	\$ 792,042	\$ 715,390
Finance	430,496	345,557	495,858
Transmission and Rural Operations	73,247	20,000	20,000
Internal Audit	10,670	87,055	87,055
Management	40,694	184,020	135,379
Human Resources and Legal	<u>887,979</u>	<u>680,355</u>	<u>806,389</u>
	<u>\$ 1,669,950</u>	<u>\$ 2,109,029</u>	<u>\$ 2,260,071</u>

These charges are for the provision of services in accordance with a Services Agreement between Hydro and CF(L)Co. Based on a recommendation in our report for the 1999 Annual Review, Hydro reviewed and updated their methodology for allocating intercompany costs. In the internal report prepared by Hydro on this issue, they document the change in methodology as compared to the 1992 study. Under the new methodology, Hydro utilizes specific work orders in most situations to capture the actual costs of providing services to CF(L)Co. As per the report, costs recoveries such as salary and overhead charges are determined as follows using the JD Edwards integrated suite of applications and a Lotus Notes Time Reporting application:

- a) Departments track salaries, overtime, temporary wages and employee expenses through time reporting.
- b) Departments use the percentage calculated from the time reporting to allocate other costs such as membership dues and conferences.
- c) Interest and depreciation costs for Hydro Place are based on the equivalent complement percentage. This percentage is used to allocate the costs of providing administrative services such as telephone, maintenance materials, janitorial, etc.

- d) "Information Systems and Telecommunication" costs are allocated based on the ratio of personnel computers assigned to CF(L)Co. to the total number of personal computers corporate-wide. This percentage is applied to computer costs and software acquisition and maintenance cost accounts.
- e) All specific costs are recorded directly into the CF(L)Co. accounting system.

As noted above, the recovery of costs for services provided to CF(L)Co have decreased overall by \$439,100 from 1999. This decrease is made up of wide fluctuations in costs as indicated in the table above. There is a significant decrease in the production and management departments, which is partially offset by the increase in charges from the transmission and rural operations and human resources departments. The change in approach and methodology for allocating intercompany costs makes it difficult to compare intercompany charges to prior years. However, since these costs recoveries are now based more on actual documentation and less on management judgment, it should provide a more accurate picture of true costs. We concur with Hydro's comments in their report that these changes make the recoveries less subjective and more verifiable than in previous years.

This change in methodology should be reviewed and assessed by the Board during the scheduled rate hearing. We will undertake a more detailed review of the methodological changes implemented by Hydro and present our findings in our rate hearing report.

Fuels

In 2000 fuel expense increased overall by \$7,458,000 or 21.24% over 1999. The cost of Bunker "C" increased by approximately \$20,283,000 over 1999, however net of RSP recoveries, this fuel only increased by approximately \$49,000. The reason for the large variation is attributed to the increase in average price of fuel consumed. In both 2000 and 1999, Hydro consumed approximately 1,593,000 barrels, but the average price in 2000 rose from \$18.18 per barrel to \$30.92 per barrel.

The hydraulic production and load variation components of the Rate Stabilization Plan provide an increase of \$5,283,000 in comparison to 1999. The adjustment for hydraulic production (or water variation) is consistent with the increase in actual hydraulic production in 2000 of approximately 4.5%, however, the impact of this increase is partially offset by a special adjustment in 1999 relating to spilled energy which was banked in 1998 for an industrial customer. The adjustment for load variation is consistent with the increase in energy sales. Energy sales (excluding Hydro Quebec Recall) were up 483 GWh (7.7%) in 2000 in comparison to 1999. The increase in energy

sales in 2000 was the result of adverse weather conditions in the fall, which increased Newfoundland Power's need for more energy to meet consumer demand and also the Iron Ore Company of Canada increased production after experiencing a slow down in 1999 that occurred throughout the industry. Sales to these companies increased by a total of 367 GWhs in 2000. All variations relating to the Rate Stabilization Plan are calculated using actual results for the year in comparison to the 1992 cost of service data.

Another significant contributor to the increase in the fuel expense category is the variance in diesel fuel for rural operations. This category increased by \$2,351,000 primarily due to a rise in the average cost per litre of fuel.

Power purchased

The Company's purchased power expense increased by \$2,176,000 in 2000 (excluding the Hydro Quebec Recall). This increase is due to a credit balance in 1999 of \$1,745,000 relating to secondary energy and an increase of approximately \$1,155,000 relating to additional power purchased from a number of suppliers to allow Hydro to fill its excess sales demand over that generated. These increases were partially offset by a decrease of \$859,000 in capacity expansion.

The credit included in 1999 secondary energy was the result of the reversal of an accrual that was recorded in 1998 for banked energy for Abitibi Price. In 1999, it was determined that the energy was no longer required and the accrual was reversed. The cost of secondary energy purchased in 2000 was \$6,065.

During 2000, the generation of hydraulic and thermal energy increased by 4.5% and 5.7% respectively over 1999, however this production was still insufficient to meet sales demand. Approximately 2,523 GWh's was purchased in 2000 of which 1494 GWh's related to the Hydro Quebec Recall. The increase in the expense is primarily due to the power purchased from the non-utility generators and CF(L)Co

The Company purchased 161 GWh's of power from two non-utility generators at a cost of approximately \$10.9 million as compared to 156 GWh's of power at \$10.4 million in 1999. The cost variance of approximately \$536,000 is the result of an increase in the average cost per GWh from 1999 for Star Lake and the Algonquin Project. In 2000 the average cost per GWh was \$67 and \$70 respectively compared to \$66 and \$69 in 1999. Also, 868 GWh's was purchased from CF(L)Co. as compared to 645 GWh's in 1999. This represented an increase of approximately \$619,000.

The decrease in capacity expansion of \$859,000 is due to a major repair job that was completed in 1999 on the Synchronous Condenser #1 at the Wabush Terminal Station. Hydro was required to pay 53.6% of the cost of the repair as per Clause 5.01 of the Power Contract.

We note that power purchased expense includes an amount of \$1.3 million paid to Abitibi Price in Stephenville for the right to interrupt a portion of their power supply should Hydro need the power to meet its own demand. A ten year contract has been signed between Hydro and Abitibi to this effect. This contract was signed in 1994 and has a cancellation clause, which requires a three year notice.

Interest

Interest expense for 2000 increased slightly compared to 1999, showing an overall increase of \$1 million or 1%. This increase is primarily attributable to a decline in the amount of interest earned on investments, sinking funds and the rate stabilization plan. This increase was largely offset by the amount of interest capitalized during construction.

The following is a summary of interest expense for 2000 and 1999:

(millions)	2000	1999
Gross interest	\$95.0	\$95.0
Debt guarantee fee	10.7	11.0
Amortization of debt discount and financing costs	1.1	1.3
Foreign exchange losses	1.0	1.0
	107.8	108.3
Less:		
Interest earned	(8.1)	(12.0)
Interest attributable to CF(L)Co share purchase	(1.8)	(1.1)
Interest capitalized during construction	(3.7)	(2.0)
	\$94.2	\$93.2

Revenue Requirement

Scope: Verify Hydro's reconciliation of net income to revenue requirement for 2000. Review and assess the reasonableness of adjustments in the calculation of revenue requirement.

Reconciliations of Net Income to Revenue Requirement for the years 1998 to 2000 have been provided in Schedule 3 of our report. Our review of the revenue requirement reconciliation for 2000 included examining support for the adjustments and assessing the reasonableness in comparison to prior years.

In 2000, Hydro introduced a new revenue requirement adjustment relating to interest expense and revised the reported revenue requirement for prior years. This interest adjustment is an increase to interest expense relating to "interest avoided" on regulated operations. Hydro's rationale for this adjustment is that due to the increased cash flow from the sale of recall power to Hydro Quebec, the Company was able to pay down its short-term debt and thus reduce or save \$2.675 million of interest expense in 2000. The 1999 and 1998 revenue requirement were adjusted by \$2.148 million and \$0.117 million respectively for calculated interest savings in those years. In addition to the interest adjustment, Hydro revised the calculations of the cost of recall power purchased. These revisions, which more accurately reflect the cost of recall power, had the effect of decreasing the profit contribution from recall power by \$244,000 and \$386,000 in 1998 and 1999 respectively.

We have reviewed the calculations of interest avoided as prepared by Hydro. We believe the rationale and approach used by Hydro with regard to this interest adjustment should be reviewed in more detail considering the scheduled rate hearing and the potential impact on the 2002 test year revenue requirement. We will undertake to analyze this issue further and report on our findings in our rate hearing report to be filed with the Board.

The largest adjustments to the revenue requirement were to eliminate \$13.331 million in energy sales to Hydro Quebec and \$4.424 million in power purchased from Upper Churchill. These adjustments, which first began in 1998 under a three-year contract with Hydro Quebec, changed slightly in 2000 once NF & Labrador Hydro reached its revenue cap of \$78.9 million in May. Based on the contract, Hydro was able to purchase power from Upper Churchill at the mil rate of \$2.7202 per MWh and resell it to Hydro Quebec at \$23.90/ MWh. The contract also stated that if the revenue cap was achieved before the end of the three year contract then all power sold above the cap would be for the same price that NF & Labrador Hydro purchased the power (i.e. \$2.7202/MWh). On March 9, 2001, a new contract was negotiated with Hydro Quebec to extend the original agreement to March 31, 2004. Under this agreement the revenue cap is set at \$97.53 million and all power purchased from Upper Churchill is set at \$2.5426/MWh and sold to Hydro Quebec at \$23.90/MWh. As in the previous contract all power sold to Quebec after the aggregate amount of \$97.53 million shall be sold for the purchase price.

In 2000, donations and management contributions of approximately \$132,000 have been eliminated from revenue requirement as per the Board's direction.

In addition, costs of \$4,000 related to Muskrat Falls have also been eliminated as they relate to the development of the Lower Churchill, a project which is non-regulated and therefore does not impact Hydro's revenue requirement.

These above noted adjustments combine to decrease the margin (earnings) per Schedule 3 by \$11.446 million.

Depreciation

Scope: *Review Hydro's rates of depreciation and assess their compliance with the 1986 Peat Marwick Depreciation Policy Study. Assess reasonableness of depreciation expense.*

Our procedures with respect to depreciation were focused on reviewing the rates of depreciation used and assessing their compliance with the 1986 Peat Marwick Depreciation Policy Study and also on assessing the overall reasonableness of depreciation expense.

During 2000 Hydro reported depreciation expense of \$35.5 million as follows:

<u>Location</u>	<u>Asset Class</u>	<u>Net Cost</u>	<u>Method</u>	<u>2000 Expense</u>
Hydro	Hydraulic stations Terminal stations Transmission lines	\$1,005.6 million	Sinking Fund	\$9.7 million
Hydro	All other classes	<u>205.7 million</u>	Straight Line	<u>25.8 million</u>
		<u>\$1,211.3 million</u>		<u>\$35.5 million</u>

The majority of Hydro's high dollar value capital assets are depreciated using the sinking fund method. As noted above this method is applied to hydraulic stations, terminal stations and transmission lines which account for approximately 83% of the net cost of all capital assets. Depreciation on the remaining classes of assets is calculated using the straight line method.

Under the sinking fund method, depreciation is very low in the early years of an asset's life and increases with time such that it is very high in the final years. The underlying rationale in support of this methodology by Hydro is that the combined charge of depreciation plus interest on the long term debt required to finance the asset should be equal over the short and long term to minimize fluctuations in operating income. The straight line method results in equal amounts of depreciation being charged to each period/year over an asset's useful life.

In completing our procedures, we recalculated depreciation for both depreciation methods on a test basis and compared the estimated service lives used in the calculations to the 1986 Peat Marwick Depreciation Policy Study. We also reviewed the interest rates used in calculating sinking fund depreciation for reasonableness.

In our 1997 report we provided the Board with the alternatives, observations and recommendations included in a depreciation study conducted by KPMG LLP. The final report relating to this study is dated October 7, 1998. In its rate application now before the Board, Hydro has requested approval for proposed changes in its depreciation policies, which are based on certain recommendations flowing from this 1998 depreciation study. These proposed changes will need to be reviewed in detail during the scheduled rate hearing.

As a result of completing our procedures, no significant discrepancies were noted and therefore, we report that depreciation expense for 2000 appears reasonable.

Rate Stabilization Plan

Scope: *Conduct an examination of the changes to the Rate Stabilization Plan to assess compliance with Board directives.*

Our examination of the Rate Stabilization Plan (RSP) for 2000 included reviewing the adjustments and components of the Plan in 2000 and assessing their reasonableness and compliance with Board directives. We also assessed the reasonableness of the interest charged and credited to the Plan during the year.

Schedule 5 of our report summarizes the changes in the RSP for the three years from 1998 to 2000. The fuel variation adjustment of approximately \$29.4 million represents the most significant change in the plan in 2000. This increase is the direct result of the cost of oil per barrel in 2000. Hydro's consumption of oil has remained very consistent with 1999, but the actual cost of oil per barrel was as high as \$36.00 in December 2000 compared to \$12.50 from the 1992 cost of service study. Another significant change in 2000 is the water variation adjustment of approximately \$16.6 million. This adjustment partially offsets the increase in the plan attributable to fuel costs. The water variation adjustment represents a savings to the plan arising because hydraulic production during the year was higher than the level forecast in 1992 cost of service.

Based upon our review, we report that the adjustments made to the RSP in 2000 are reasonable and it has been operating in accordance with Board directives.

Deferred Charges

Scope: *Conduct an examination of the changes to deferred charges and assess their reasonableness and prudence in relation to sales of power and energy.*

The following table shows the transactions in the deferred charges account from 1997 to 2000:

(000)'s	Balance Dec./97	Net Add.	Amort.	Balance Dec./98	Net Add.	Amort.	Reclass	Balance Dec./99	Net Add.	Amort.	Balance Dec./00
Studies and software	\$439	\$429	(\$271)	\$597			(\$597)				
CF(L) Co.	8	335	-50	\$293	1,564	-379		\$1,478	-2	-383	\$1,093
Realized foreign exchange losses	96,278			\$96,278				\$96,278			\$96,278
Unrealized foreign exchange losses											
Discounts and issue costs on long term debt	12,795	2,738	-1,574	\$13,959	10	-1,274		\$12,695		-1,140	\$11,555
	<u>\$109,520</u>	<u>\$3,502</u>	<u>(\$1,895)</u>	<u>\$111,127</u>	<u>\$1,574</u>	<u>(\$1,653)</u>		<u>\$110,451</u>	<u>(\$2)</u>	<u>(\$1,523)</u>	<u>\$108,926</u>

During the year there were no additions to deferred charges.

Foreign Exchange Losses

Total deferred foreign exchange losses remained unchanged between 2000 and 1999 at \$96.278 million.

As noted in our previous reports, section 17(4) of the Hydro Corporation Act (as amended by Bill 35) states that for purposes of the Public Utilities Act (including Subsection 80(2)), the foreign exchange losses as at December 31, 1994 were considered to be reasonable and prudent expenses of Hydro and therefore properly chargeable to operating account. Section 17(3)(e) establishes the period of amortization for these losses to be 40 years commencing in the year when Hydro's rates are first altered under the Public Utilities Act. If Hydro was to commence amortizing the foreign exchange losses based on the 1999 balance noted above, the annual amortization to be included in the revenue requirement would be \$2.4 million.

In 2000 Hydro accrued \$1 million towards its foreign exchange losses consistent with prior years and in compliance with the Board's recommendation from the 1992 hearing.

Based on the results of our procedures, nothing has to come to our attention to indicate that the changes to deferred charges are imprudent or unreasonable in relation to sales of power and energy.

Cost Control/Productivity Initiatives

Scope: Review Hydro's initiatives and efforts with respect to productivity improvements, rationalization of operations and expenditure reductions. Obtain update on current activities and inquire as to any future initiatives currently being evaluated.

The Company has undertaken a number of initiatives to explore the possibility of future savings and increased productivity. In our 1999 report, we noted a number of initiatives that the Company was in the process of implementing. An update on the progress of these initiatives as provided to us by Hydro senior management is outlined below.

Joint Steering Committee (Coordination of Utility Activities)

This is a joint committee consisting of union representatives from Hydro and Newfoundland Power. The Committee was established in early 1997 to review potential opportunities for co-ordination that could result in lowering the overall cost of providing electrical service. The overall mandate of the Steering Committee is to advise and make recommendations to the utilities based on reviews that are carried out on their behalf.

It was indicated by management in 1999 that most of the review of the Joint Steering Committee has been conducted, however, a report was not finalized. According to an update provided by management, there were some minor opportunities for change identified and implemented, however towards the end of the process there was little value added in finalizing a written report.

Reliability Centered Maintenance (RCM) Approach for Transmission and Rural Operations

This approach to maintenance places the emphasis on reliability, therefore not all of the systems would be treated the same with respect to the frequency of maintenance. It is believed that this approach would result in a more effective maintenance program and result in an efficient use of resources in the maintenance area.

In our 1998 report, we indicated that Hydro had completed a RCM pilot in the transmission, distribution; and diesel generation areas, and that an implementation team would be trained in the RCM process, templates would be drafted and the analysis of Hydro's systems would be scheduled to start in September 2000.

Based on correspondence from Hydro officials, this initiative is in the development stage and should be fully implemented on schedule. It was also indicated that the cost savings and/or productivity improvements will not be realized until after full implementation.

Diesel Plant Operation Review

A review of the isolated diesel operation systems resulted in an initiative to move to a new classification called Diesel System Representative (DSR). This change should help enhance efficiencies and reduce costs in the rural operations. This initiative started in 1998 and should be fully implemented by 2001. According to Hydro officials, the training program is on schedule for full DSR operations of the isolated diesel systems by December 31, 2001.

Based on recent correspondence from Hydro officials, the cost savings and productivity improvements resulting from this initiative will be realized due to reduced travel requirements and a multi-skilled approach to maintenance.

TRO – Review of Work Processes and Practices

The work processes and practices within TRO were reviewed to determine the most effective and efficient way of providing services. Hydro completed an extensive review of how it deploys lineworker crews in relation to their current transmission and distribution lines. As a result of this review, they have reorganized their current lineworker crews so they can operate more efficiently and cost-effectively.

Based on recommendations resulting from this review, Hydro announced a realignment of certain staffing. On February 15, 2001, Hydro's announcement indicated that they were adjusting their operations and that forty-one positions would be eliminated.

As part of the annual review process, we will monitor the results of the above initiatives and obtain an update from the Company during the 2001 review and inquire as to any future initiatives that are being evaluated. We will also inquire about these and any future initiatives as part of our review in preparation for the 2001 fall rate hearing.

Contributions in Aid of Construction (CIAC's)

Scope: *Review a sample of Contribution in Aid of Construction (CIAC) calculations for accuracy and compliance with approved policy.*

Our procedures in this area included the following:

- review the implementation of the undertakings of Hydro in respect of the revised CIAC policy as ordered in P.U. 4 (1997-98); and
- review a sample of CIAC calculations for accuracy and compliance with approved policy.

As part of our review, we have held discussions with Mr. Barry Brophy of Hydro regarding the Company's CIAC policies and procedures and we have selected and reviewed documentation supporting a sample of five (5) CIAC calculations prepared during 2000.

Based on the results of our inquiry and review of documentation, we noted that the Board's requirements for the approval, review and calculation processes as specified in P.U.4 (1997-98), are being complied with. However, certain observations were noted during our review which are noted below for your information:

- Hydro essentially uses a manual system to monitor all CIAC quotes. The Company did implement a spreadsheet system in 1997 that is updated on a regular basis for new CIAC quotes. Mr. Brophy indicated that any CIAC quotes prior to 1997 are more difficult to accumulate due to the previous filing system. The most significant deficiency resulting from the manual system is the manual calculation of the individual quotes. However, to compensate, Hydro requires the manual calculations be checked and approved by the appropriate supervisor. No calculation errors were found in the sample quotes. In 2001, Hydro obtained a copy of Newfoundland Power's computerized CIAC program. This software is expected to be implemented sometime during the 2001 year.
- P.U. 4 (1997-98) suggests residential and seasonal CIACs may be reviewed after a period of 24 months from the date of service to determine whether the residential or seasonal service has been designated properly. The coordinator of the CIAC process has tried to take the responsibility in performing these reviews however, due to time constraints he has not been able to set up a formal review policy, instead he reviews when possible the annual consumption reports for seasonal residents who request to be billed as permanent residents.
- We also noted that P.U. 4 (1997-98) suggests for Hydro to make all reasonable efforts to identify refunds to existing customers when additional customers are connected to an already existing line extension. In 1998 Hydro staff implemented an informal annual review process to identify these changes. The CIAC database (spreadsheet) was sorted by region at head office and a listing of all CIAC quotes were sent to the

applicable region to be reviewed. Any required adjustments were forwarded to staff at Head Office for updating. However, during 2000, Hydro decided to abandon its annual review process since it was proving to be a slow and non-productive practice. Therefore, in lieu of the annual review process, Hydro's head office has instructed the regional technicians for all new quotes, to review the requested area for possible adjustments to previously accepted CIAC quotes prior to the calculation of a new CIAC. While this process has delegated all authority to the regional offices, without any type of assessment of the work in place all accountability has been removed.

- All customers are to be advised of the conditions relating to refunds of CIACs. Four of the five of the customers selected in our sample were advised of these conditions in writing.
- Hydro does not include sketches with the customer letters. However they are maintained in the file for Hydro's review.

Based on our discussions, we believe that the shortfalls in Hydro's procedures are partially due to the manual process. The onus is on the regional technicians who perform the fieldwork to ensure that they have their sketches precise and their line measurements exact. Also, it is the responsibility of the regional offices to ensure all CIAC quotes are documented, filed and reported to Head Office. However for 2001, the installation of a computerized CIAC should solve many of these present problems.

In addition to the shortfalls noted above, the 1999 review revealed several other concerns that fell outside the general need of a computerized system. It was concerns such as poorly organized files and lack of documentation that became part of our focus during the 2000 review. Based on our review of five CIAC quotes in 2000, we noted that each of the files were very detailed, containing a written request from the customer, appropriate sketches of the area to calculate a correct quote, letters to interested parties outlining the details of the quote; and the necessary approval from supervisors. Since these files contained complicated CIAC calculations, all copies of the documentation was held at head office and may explain the orderly fashion in which the files were prepared. However, one of the employee's responsible for running the CIAC program at head office informed us that he has recently returned from a mini-training session in the central region with representatives from other regions as well, instructing them on how to maintain a CIAC file. He also provided to each of them a sample of what should be included in a CIAC file.

We recommend in the preparation of CIAC quotes, all employees should follow a standardized set of policies and procedures in order to maintain consistency. We also recommend all CIACs quotes should contain a written request for service and documentation regarding refunds should be provided to all customers. Finally, Hydro should develop a standardized form that is required to be completed by the appropriate personnel at the regional offices, in a timely manner, indicating their review of the annual CIAC quote listing provided to them by the Head Office. This will ensure that the CIAC's are being reviewed on an annual basis.

Based on the results of our inquiry and review of documentation, we noted that the Board's requirements for the approval, review and calculation processes as specified in P.U.4 (1997-98), are being complied with. However, we have noted a number of observations and provided several recommendations for improvement in the CIAC process.

During the 2001 annual financial review we will continue to review a sample of the CIAC quotations prepared in 2001, including the administrative processes to ensure the Company is in compliance with the Board Order.

Review Findings Requiring Follow-up

Appendix A

Review Findings Requiring Follow Up

The following is a list of items related to our observations/findings during our review which require follow-up or action on behalf of the parties indicated.

Newfoundland and Labrador Hydro

- The Company should consider the implementation of our recommendations relating to the preparation and maintenance of the CIAC quotations. (Ref. Pg. 37-39)

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- During the annual financial review for 2001, compare Hydro's staffing levels and salary costs for 2000 and 2001 using Hydro's calculation of full time equivalent positions (FTE's). (Ref. Pg. 15).
- Follow up in the cost control/productivity initiatives and inquire as to any future initiatives currently being evaluated. (Ref. Pg. 36)
- During the annual financial review for 2001, review a sample of the CIAC quotations prepared in 2000, including the administrative processes to ensure the Company is in compliance with Board Order P.U. 4(1997-98). (Ref. Pg. 37-39)

*Board of Commissioners of Public Utilities
Newfoundland and Labrador Hydro 2000 Annual Review*
