

DELIVERED BY HAND

January 21, 2002

Board of Commissioners
of Public Utilities
P.O. Box 21040
120 Torbay Road
St. John's, NF A1A 5B2

Attention: Ms. Cheryl Blundon
Board Secretary

Ladies & Gentlemen:

Re: Newfoundland and Labrador Hydro 2001 General Rate Review

Enclosed are 17 copies of Newfoundland Power's Brief of Argument.

An electronic and paper copy will be forwarded to each registered intervenor directly.

We trust the enclosed are in order.

Yours very truly,

Peter Alteen
Corporate Counsel
& Secretary

Encl.

Board of Commissioners
of Public Utilities

January 21, 2002

Page 2 of 2

c. Ms. Maureen P. Greene, Q.C.
Newfoundland and Labrador Hydro

Ms. Janet Henley Andrews, Q.C. and Mr. Joseph S. Hutchings, Q.C.
c/o Stewart McKelvey Stirling Scales

Mr. Dennis Browne, Q.C.
Browne Fitzgerald Morgan & Avis

Mr. Edward M. Hearn, Q.C.
Miller & Hearn

Mr. Dennis Peck
Town of Happy Valley-Goose Bay

Mr. Martin Lockyer
Patterson Palmer Hunt Murphy

IN THE MATTER OF the *Public Utilities Act*, R.S.N. 1990 Chapter P-47 (the “Act”);
and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for approvals of (1) Under Section 70 of the Act, changes in the rates to be charged for the supply of power and energy to its Retail Customer, Newfoundland Power, its Rural Customers and its Industrial Customers; (2) Under Section 71 of the Act, its Rules and Regulations applicable to the supply of electricity to its Rural Customers; (3) Under Section 71 of the Act, the contracts setting out the terms and conditions applicable to the supply of electricity to its Industrial Customers; and (4) Under Section 41 of the Act, its 2002 Capital Budget.

**Brief of Argument
of Newfoundland Power**

Gillian Butler, Q.C. and Peter Alteen
Counsel to Newfoundland Power Inc.

January 21, 2002

**An Explanatory Note
on References**

Newfoundland Power's brief of argument contains numerous references to oral testimony recorded in the daily transcripts of proceedings. The page and line references contained in Newfoundland Power's brief refer to the pdf. version of the transcripts of proceedings not the paper condensed copy provided on a daily basis in the hearing room.

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A INTRODUCTION

The Application before the Board under sections 70 and 71 of the *Public Utilities Act* is the first general rate application for Hydro since 1992. The history recited in paragraph 9 of Hydro's Application indicates that the Application is involuntary.

As revised, Hydro's Application seeks increases effective January 1, 2002 sufficient to recover an additional \$17.4 million in rates and it proposes that approximately \$12.8 million of this be recovered from Newfoundland Power's 217,000 island customers. This translates into a base rate increase of approximately 3.5%.

Further, Hydro proposes that the projected operation of the Rate Stabilization Plan will result in Newfoundland Power's customers bearing a further price increase of 3.4% on July 1, 2002.

If approved, the overall result to Newfoundland Power's customers is a proposed price increase in the year 2002 of approximately 7%, or \$26 million, which is very large by recent regulatory standards.

It is well acknowledged that Hydro's Application (and its request for \$17.4 million in increased rates) is focused on the price of No. 6 fuel, a commodity whose price is extremely volatile and over which Hydro has little control. However, it is also clear that Hydro's **controllable** expenses alone have increased by \$16 million, or 19 %, between

1997 and forecast 2002. This is twice the rate of inflation and these expenses are not materially affected by the price of fuel. This \$16 million amounts to 92% of the \$17.4 million increase in base rates sought by Hydro in this proceeding.

Newfoundland Power submits that this Application is not simply about the price of No. 6 fuel, although this is a substantial issue before the Board. It is about the balancing of the competing interests of consumers and investors through the application of regulatory principles for a utility the operations of which have not been examined for 10 years and have never before been subject to the full rigor of the regulatory legislation.

Newfoundland Power submits that these facts, and others, necessitate moderation and a graduated approach to the regulation of Hydro's rates over the near term. This is consistent with Hydro's proposal and, put another way, Hydro's Application represents a first step in Hydro's "fully regulated" status.

In addition to addressing Hydro's Capital Budget, Newfoundland Power's Argument makes specific recommendations to the Board relative to regulatory review, operating expenses, financial targets and rates issues including the Rate Stabilization Plan. Consistent with a graduated approach, Newfoundland Power asks the Board to approve rates for Hydro at a lower level than proposed in Hydro's Application and asks that it establish reasonable policies for the effective future regulation of Hydro.

B. REGULATORY POLICY FRAMEWORK

B.1 General

The Regulatory Policy of this province is established primarily by the *Electrical Power Control Act, 1994* and the *Public Utilities Act*. In general, however, the Pre-filed Testimony in support of Hydro's Application focuses on only one of approximately ten relevant regulatory policies stated in the governing legislation.

Hydro states that it has chosen to migrate to a market based return on equity over time seeking only a return on equity of 3% in the test year. Hydro specifically requests that the Board address longer-term financial targets for Hydro and send a clear signal to financial markets of the world regarding Hydro's future returns on equity.

Reference: Pre-filed Evidence, Wells, pp. 13-17

Section 3 (a) (iii) of the *Electrical Power Control Act, 1994* provides as follows:

3. It is declared to be the policy of the province that
 - (a) the rates to be charged, either generally or under specific contracts, for the supply of power within the province.....
 - (iii) should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under the Public Utilities Act so that it is able to achieve and maintain a sound credit rating in the financial markets of the world.....

Section 80 of the *Public Utilities Act* states as follows:

80. A public utility is entitled to earn annually a just and reasonable return as determined by the board on the rate base as fixed and determined by the board..."

Newfoundland Power accepts that the financial position of Hydro is a legitimate matter of regulatory policy which must be addressed by the Board. Further submission on that issue is found in this Argument at Section E. In considering Hydro's first general rate Application, however, Newfoundland Power submits that the Board must apply **all** relevant regulatory policy considerations and not just those contained in Section 3 (a) (iii) of the *Electrical Power Control Act, 1994* and section 80 of the *Public Utilities Act*.

Newfoundland Power submits that there are two prominent regulatory policies which must be addressed by the Board in its determination of this Application. These two matters are operational efficiency and rate discrimination.

B.2 Operational Efficiency

Section 3 (b) of the *Electrical Power Control Act, 1994* provides, in part, as follows:

3. It is declared to be the policy of the province that
 - (b) all sources and facilities for the production, transmission and distribution of power in the province should be managed and operated in a manner
 - (i) that would result in the most efficient production, transmission and distribution of power,

- (ii) that would result in consumers in the province having equitable access to an adequate supply of power,
- (iii) that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service,.....

This aspect of regulatory policy is, in Newfoundland Power's submission, not specifically raised in the Hydro Application; but it should be specifically addressed in the Board's Order. Further submission on this issue is found in this Argument in Section C.2.

B.3 Rate Discrimination

Section 3(a)(i) of the *Electrical Power Control Act, 1994* provides as follows:

- 3. It is declared to be the policy of the province that
 - (a) the rates to be charged, either generally or under specific contracts, for the supply of power within the province
 - (i) should be reasonable and not unjustly discriminatory....

Section 73 of the *Public Utilities Act* states:

- 73. All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the board may by regulation declare what shall constitute substantially similar circumstances and conditions."

It is Newfoundland Power's submission that the current levels of cross-subsidization which result in Hydro's Labrador Interconnected customers and Newfoundland Power's customers paying a forecast total of \$31.7 million in subsidies in the test year has significant discriminatory aspects. Future direction of this issue is a matter of regulatory

policy which the Board must address in considering Hydro's Application. Further submission on this issue is found in this Argument in Section F.

B.4 Conclusion

?? The overall duty of the Board is to balance the competing interests of consumers, on the one hand, and the investors in the utility on the other hand. This essential balance is not fundamentally altered by the fact that the equity investor in Hydro is the Provincial Government, although this fact may complicate the balance somewhat.

?? Newfoundland Power submits that the regulation of Hydro requires the application of all relevant policies and imperatives contained in the regulatory legislation, not simply those relating to investors' returns. Two such considerations in this case are improving Hydro's operational efficiency and managing the discrimination which arises from subsidies in rates.

C. TEST YEAR COSTS

C.1 Fuel Costs

C.1.1 General

Hydro's fuel cost is principally made up of No. 6 fuel which is burned at Holyrood. Diesel fuel which is, for the most part, used in Hydro's isolated diesel generators is the other material component of Hydro's annual fuel costs.

Hydro's test year 2002 forecast for the cost of No. 6 fuel to be embedded in rates is approximately \$77.4 million (\$104.2 million, less \$26.8 million RSP deferral per 1st Supplementary Evidence, Roberts, Schedule 1A). This is an increase of approximately \$39.5 million from Hydro's 1992 final cost of service forecast of approximately \$37.9 million which is the amount currently embedded in Hydro's base rates.

Reference: Pre-filed Evidence, Roberts, Schedule 1

The cost of No. 6 fuel for Hydro in the test year is primarily dependent upon 3 factors.

The primary factor which affects Hydro's annual cost of No. 6 fuel is the actual price of the fuel itself. Hydro is proposing to embed an assumed purchase price for No. 6 fuel for 2002 of \$20/bbl. in base rates. This will result in base rates reflecting fuel cost of \$21.20/bbl. (representing a blend of year-end 2001 inventory at cost and forecast 2002

purchases at \$20/bbl.) This compares to the current cost of approximately \$12.50/bbl. which is embedded in base rates.

Reference: NP-43
NP-221

A second factor which affects Hydro's annual cost of No. 6 fuel is the volume of fuel actually consumed. This, in turn, is a function of the annual production of Hydro's interconnected hydraulic plants. Island interconnected production is predominantly hydraulic and has very low variable costs. Holyrood production which has a much higher variable cost is used, to the extent necessary, to meet the system load not capable of being served by hydraulic production. For this reason, the forecast of hydraulic production for the test year can have a significant impact on Hydro's revenue requirement because a relatively low hydraulic production forecast assumes a greater proportion of system energy needs will be met in the test year by more expensive thermal production.

The final primary factor which affects Hydro's annual No. 6 fuel cost is the conversion or efficiency factor for production at Holyrood. This factor is typically expressed in kWh/bbl and is reflective of the forecast efficiency at the generating plant. Hydro is proposing to use a conversion factor of 610 kWh/bbl for Holyrood production for the 2002 test year.

Hydro's forecast of diesel fuel price changed during the course of this proceeding a number of times and is the only other material issue related to Hydro's proposed test year fuel costs.

This *Fuel Costs* section of Newfoundland Power's submission will deal separately with each of the primary factors affecting the price of No. 6 fuel and Hydro's diesel fuel price forecast.

C.1.2 Price of No. 6 Fuel

History of No. 6 Fuel Price

During Hydro's last Rate Referral in 1991, the Board recommended a price of \$12.50/bbl. as the price of No. 6 fuel to be included in the base rates. From 1992 to 2001, the actual average cost ranged between \$14.29/bbl. in 1992 and \$35.04/bbl. in 2000. Customer rates have been partially shielded from the impact of the increased actual fuel price because hydrology has been significantly above normal.

Reference: IC-22
Pre-filed Evidence, Wells, p. 2

Hydro's Proposal

In its Application, Hydro seeks to calculate its revenue requirement for the test year based on an assumed purchase price of \$20/bbl. for No. 6 fuel. The \$20/bbl. is below the most recent purchase price for No. 6 fuel of \$24.10/bbl. and below Hydro's revised forecast average purchase price of \$25.91/bbl.

Reference: Transcript, January 9, 2002, p. 16, lines 19-22
2nd Supplementary Evidence, Henderson, p. 1

The reason for Hydro proposing a price below the expected price is to reduce the rate increase that will be required of customers.

Reference: Pre-filed Evidence, Osmond, p. 3, lines 7-9

While Hydro proposes to assume a fuel price of \$20/bbl. for purchases during 2002, the average blended production cost assumed for 2002 in determining revenue requirement and the RSP balances is proposed to be \$21.20/bbl.; not the \$20/bbl. assumed purchase price (NP-43 and NP-221). This \$21.20/bbl. blended price for 2002 may be modified slightly as a result of Hydro's actual 2001 fuel purchases.

Hydro is forecasting to use approximately 3.5 million barrels of No. 6 fuel for producing power during 2002 (NP-17). Therefore, for each dollar per barrel increase in fuel price in base rates, the revenue requirement increases by approximately \$3.5 million. An increase of \$7.50/bbl. in No. 6 fuel cost from \$12.50/bbl. to \$20/bbl. will therefore result in an additional \$26 million in fuel costs being recovered in base rates (i.e., \$7.50 x \$3.5 million). This increase is a significant improvement from the current recovery of fuel costs in base rates.

The estimated increase in the Retail RSP recovery rate to Newfoundland Power on July 1, 2002 will increase the purchased power cost to Newfoundland Power by approximately 6% in addition to any base rate increase approved by the Board on this Application. The corresponding increase to consumers flowing from the RSP will be approximately 3.4%.

(Pre-filed Evidence, Osmond, pp. 2-3). This amounts to approximately \$13 million in additional fuel cost recovery in total rates paid by consumers.

Increasing the price of No. 6 fuel in base rates to \$20/bbl., together with the operation of the RSP on July 1, 2002 will result in annual fuel cost recovery improving by approximately \$40 million after July 1, 2002. (i.e., \$26 million/yr. increase from base values plus approximately \$13 million/yr. increase in RSP recovery).

For each dollar per barrel increase in the No. 6 fuel price, the revenue requirement of Hydro increases by \$3.5 million. Therefore, if base rates were set to recover \$26/bbl. (i.e., approximately equal to Hydro's revised forecast provided by Mr. Henderson at p. 1 of his 2nd Supplementary Evidence), Hydro's revenue requirement would increase by an additional \$21 million (i.e., \$6 per/bbl. times 3.5 million barrels).

Reference: 1st Supplementary Evidence, Brushett, pp. 5-6

This \$21 million would be in addition to the approximately \$40 million improvement in fuel cost recovery which would occur following July 1, 2002 as a result of Hydro's adoption of a \$20/bbl. fuel cost for 2002 and operation of the Retail RSP.

The Overall Reasonableness of Hydro's Proposal

Newfoundland Power's expert witness Mr. Brockman believes Hydro's proposal is reasonable. He states:

“In the circumstances of this proceeding, Hydro’s proposal to incorporate a \$20/bbl. fuel cost in base rates is a reasonable enough balance of the need to improve fuel cost recovery and provide rate stability.”

Reference: Pre-filed Evidence, Brockman, p. 11, lines 23-25

No other expert that presented evidence is suggesting a price other than the \$20.00/bbl. for calculation of the revenue requirement.

Fuel price forecasts are only forecasts, and particularly volatile ones at that. No one knows what price Hydro will actually pay for No. 6 fuel in 2002. If the price remains high, increased regulatory review of the RSP (which is dealt with at length in Section D of this submission) is available to the Board to deal appropriately with variations from the input values assumed in the RSP. If the actual price paid in 2002 turns out to be less than Hydro’s latest forecast, the \$21.20/bbl. may well be reasonably accurate.

It is a fair observation, however, that the price of No. 6 fuel appears to be declining. At October 31, 2001, Hydro was forecasting a 2002 price for No. 6 fuel of \$28.46/bbl. By December 12, 2001 that forecast was \$25.91/bbl., a reduction of 9% in less than 2 months.

Reference: 2nd Supplementary Evidence, Henderson, p. 1

Including a price of 2002 purchase of No. 6 fuel of \$20/bbl. does not necessarily mean the balance in the RSP will increase. Past experience indicates that hydrology also has a

marked effect on the balance in the RSP. From 1992 to 2000 the price of fuel in base rates was \$12.50/bbl. At times during that period, the price of No. 6 fuel was more than twice the \$12.50/bbl. However, because Hydro experienced higher than average hydrology over that period, the annual amount of No. 6 fuel required for thermal production was less than anticipated (Pre-filed Evidence, Wells, p. 2, lines 6-19). The balance in the Retail RSP at year-end 2000 was approximately \$23 million (IC-73, December 2000 Report), not an exceedingly high balance considering the average price of \$12.50/bbl. in base rates was significantly below the cost of No. 6 fuel for most of the 9 years from 1992 to 2000 (IC-22).

The projected revenue recovery mill rate for the Retail RSP will collect approximately \$20 million for the period July 1, 2002 to June 30, 2003 (PUB-81, p. 2 of 3). Therefore, even if there are additional charges to the Retail Plan either because of a fuel price above \$20/bbl. or a drier than normal year, the charges to the RSP (including interest) would have to exceed the \$20 million collected through the RSP recovery mill rate in order for the balance in the Retail RSP to increase.

This \$20 million Retail RSP recovery for the period July 1, 2002 to June 30, 2003, is approximately equivalent to about \$5.70/bbl. ($\$20,000,000 \div 3,500,000 = \5.71). When considered together with the \$21.20/bbl. effective price of No. 6 fuel in base rates proposed by Hydro, retail consumers' total rates will reflect recovery of approximately \$26.90/bbl. of fuel costs after July 1, 2002.

C.1.3 Hydraulic Production Forecast for the Test Year

Hydro's Forecast

The Application reflects an estimate of hydraulic production for the test year 2002 of 4,271.7 GWh in Average Annual Energy.

Hydro's hydraulic production forecast for 2002 is low compared to recent history. (Pre-filed Evidence, Brockman, p. 13). Based on the response to NP-141, a change in hydraulic production forecast of 100 GWh will result in a change in test year revenue requirement of \$3.3 million.

Hydro's Methodology

Hydro maintains its hydraulic production forecast is based on the long-term average of the "full historic reliable record" of inflow data. This is the method which Hydro has used in the past. Hydro did not evaluate other methodologies to forecast its hydraulic production.

Reference: Pre-filed Evidence, Henderson, p. 10, lines 24-25
Transcript, October 10, 2001, p. 36, lines 86-102

The detailed method is explained in response to NP-44(c) and is summarized in the following calculation:

$$\begin{array}{r}
 \text{Average Historic Inflows} \\
 \text{minus Fisheries Release Requirements} \\
 \text{minus Average Spill} \\
 \hline
 \text{equals Useful Water per plant} \\
 \text{times Conversion Factor per plant} \\
 \hline
 \text{equals Average Energy per plant}
 \end{array}$$

The average energy per plant is totalled to obtain the forecast of hydraulic energy for the test year.

At first glance, Hydro's approach may appear to be an exact science. However, as the evidence indicates, judgment plays an important role in the calculations as it affects the duration of the time series utilized in each step of the calculation.

Average Historic Inflows are calculated using 50 years of inflow data in calculating the average for Bay D'Espoir and Upper Salmon, 73 years of inflow data for Hinds Lake, 70 years of inflow data for Cat Arm and 47 years of inflow data for Paradise River.

Fisheries Release Requirements and Average Spill are forecast using Hydro's 25-year time period reflecting the age of the plant.

Conversion Factor is forecast based on 9 years experience for Bay D'Espoir, 8 years for Upper Salmon, Hinds Lake and Cat Arm, and 11 years for Paradise River.

Reference: IC-169

The selection of different time periods for any of these inputs would yield different results.

Weaknesses in Hydro's Forecast Methodology

Hydro's methodology for forecasting hydraulic production for the test year has several weaknesses.

1. The data series used in determining the average includes both pre-plant and post-plant inflow data treated as a continuous data series. Exhibit NP-3 shows that the average hydraulic inflows for the Bay D'Espoir, Cat Arm and Hinds Lake reservoir systems are 3,978 GWh for the pre-plant data used in the data series (i.e., years 1950-1966) and 4,452 GWh for the post-plant data used in the data series (i.e., years 1967-2000). The 474 GWh difference between pre-plant and post-plant data is significant.

Mr. Henderson suggested the significant difference was because the period 1950-1966 was dry. (Transcript, October 10, 2001, p. 37, lines 29-30). However, Mr.

Henderson also acknowledged that the method used to determine inflows for the pre-plant data was different than the method used to determine inflows for the post-plant data. (Transcript, October 9, 2001, p. 14, lines 73-76).

The source of the inflow values for the pre-plant data was feasibility studies prepared for the Bay D'Espoir development and in this case the data obtained was based on flow rates obtained from gauging stations on the river (Transcript, October 9, 2001, p. 14, lines 61-72). However, the inflow values for post-plant data have been back-calculated using a completely different methodology which sums all reservoir outflows in addition to accounting for changes in storage (Transcript, October 9, 2001, p. 15, lines 24-61). Mr. Henderson did not review the basis for the pre-plant data to determine if the pre-plant data was accurate for purposes of estimating normal hydraulic production (Transcript, October 10, 2001, p. 37, lines 58-65).

Given the significant differences in the average inflows for the pre-plant and post-plant data and the fact that Hydro has conducted no review to determine if the data sets are comparable, no basis exists to assume that the full data set of inflows constitutes a continuous time series for purposes of data analysis.

Hydro has not conducted any analysis to determine the *reliability* of pre-plant data. Hydro acknowledges differences in the methods to calculate inflows for each data

set. Given this, and the significant difference in pre-plant and post-plant data, the presumption of reliability of data for test year purposes is not justified.

2. Hydro proposes to use inflow data from as long a record as possible for forecasting hydraulic production for the test year (Transcript, October 9, 2001, p. 30, lines 3-8). In other words, Hydro proposes to use a cumulative average in estimating the test year hydraulic production forecast. With a cumulative average, the very old data (which was obtained using less technologically advanced methods of data collection) is never dropped out of the data set. Hydro currently uses 50 years (i.e., for Bay D'Espoir) and based on the current method, in 2050 Hydro will base their forecast on 100 years of inflow data for Bay D'Espoir (Transcript, October 9, 2001, p. 30, lines 80-82).

Mr. Henderson agreed that the continued lengthening of the data set diminishes the effect of a trend in inflows (Transcript, October 9, 2001, p. 31, lines 14-21).

The 30-year average for each year for the period 1988-2000 provided in Exhibit LBB-4 of Mr. Brockman's 1st Supplementary Evidence presents an increasing trend in historical inflows. Trends of inflows should impact the test year forecast, as the test year forecast is an attempt to estimate what is most likely to occur in the test year. Minimizing the effect of any trend in hydrology does not give the best estimate of hydraulic production in the test year.

Environment Canada bases its climate “normal” on a moving average data set (based on 30 years of data and updated every 10 years). Newfoundland Power submits that the continued use of a cumulative average minimizes the effects of trends in hydrology when estimating hydraulic production for the test year.

3. Mr. Henderson testified that the main spillway at the Bay D’Espoir plant has only spilled a couple of times since 1984. Both spills were huge (Transcript, October 10, 2001, p. 33, lines 49-68) and thus would have a significant impact on the average spill. Henderson testified that the spills occurred in 1999 and 2000 (Transcript, October 10, 2001, p. 34, lines 24-25), two of the wettest years on record. Hydro would not expect to spill water at the main spillway at Bay D’Espoir during a normal water year (i.e., the test year) and, therefore, those spills should be excluded from the calculation of the test year spill estimate.

Proposed Alternative

Mr. Brockman recommended that the use of a 30-year moving average should be the basis for determining the test year hydraulic forecast.

“A moving average method would better reflect technological improvements in data collection, as well as more accurately represent recent historical inflows.” (1st

Supplementary Evidence, Brockman, p. 2, lines 13-15). Mr. Brockman also stated: “A 30-year period is long enough to minimize volatility in the average but recent enough to reflect changes in inflow patterns” (1st Supplementary Evidence, Brockman, p. 2, lines 19-

21). The use of the 30-year average better reflects the trend of increasing inflows (as shown in Exhibit LBB-4). The difference between the 30-year average and Hydro's production forecast may be due to a change in climate or may relate to measurement problems with the older data.

Exhibit U-Hydro #17 (Revised) indicates that using the 30-year average rather than the longer term average proposed by Hydro would represent a more accurate means of forecasting hydraulic production for 13 of the last 22 years (or approximately 60% of the time) and for 9 of the last 11 years (or approximately 80% of the time).

Reference: Transcript, December 3, 2001, p. 29, lines 26-37

Impact on Revenue Requirement of Proposed Alternative

Hydro's original hydraulic production forecast for the test year of 4,272 GWh omitted data for the year 2000; its revised forecast is 4,285 GWh. Hydro has agreed to embody its revised forecast in the final cost of service which will reduce its revenue requirement by \$400,000.00. Mr. Henderson also acknowledged that Mr. Brockman's proposal (use of a 30-year average adjusted for fisheries release requirements and spills) would provide a forecast of 4,425 GWh. Mr. Henderson also testified that the impact of using this approach would be a total reduction in revenue requirement of approximately \$4.6 million.

Reference: Supplementary Evidence, Henderson, pp. 2-3

Hydro's Concerns With the Proposed Alternative

Mr. Henderson, in his 1st Supplementary Evidence, page 3, lines 5-21, outlined three reasons why he considered the use of a 30 year rolling average to be inappropriate for forecasting hydraulic production. Each of these is addressed below:

1. If Hydro did not use all the years of record, Hydro would be "Planning operation of the power system ignoring the driest period of inflows, which would place energy supply at an increasing risk".

Mr. Henderson testified that this statement was referring to the effect of price elasticity on system operations. Mr. Henderson admitted that such effects would be marginal and that he had not quantified them (Transcript, October 10, 2001, p. 8, lines 11-17). Hydro's response to NP-310 indicated the use of a 30-year average "will not have a significant impact on the system".

2. Mr. Henderson also expressed a concern that the 30-year average would introduce "additional volatility in the forecast". Mr. Henderson's concern was due to the fact that the 30-year average is more sensitive to changes in inflows from one year to the next than the long-term average. The fact that the 30-year average is more sensitive to recent trends is actually a strength when trying to estimate hydraulic production for the test year. Mr. Henderson stated the hydrology is cyclical.

Reference: Transcript, October 9, 2001, p. 30, lines 89-91

3. Mr. Henderson's third concern was that if Hydro did not use all the years of record, Hydro would be "forecasting our power system energy supply under conditions contrary to the accepted practices of other predominantly hydroelectric power producing utilities in Canada". In response to NP-304, Hydro provided responses to the survey of utilities conducted. But, under cross-examination, Mr. Henderson admitted that no two utilities forecast hydraulic production the same way and that no other utility he knows does it the same way as Hydro. Particularly, he was not able to say that other hydro-electric power producing utilities use the full historic record for rate-making purposes.

Reference: Transcript, October 9, 2001, p. 28, line 53 to p. 29, line 1

In response to Mr. Henderson's evidence, Mr. Brockman also filed supplementary evidence addressing the survey conducted by Hydro on this practice (2nd Supplementary Evidence, Brockman, pp. 1-4). Mr. Brockman reviewed the responses to Hydro's survey and also contacted New Brunswick Power and Nova Scotia Power. Mr. Brockman concluded that there is neither a Canadian standard for the number of years of data used nor a Canadian standard for the methodology used to forecast hydraulic production for ratemaking.

In response to NP-306, Hydro stated "it is necessary to link the planning of the operation of the power system and the forecast used for setting rates to ensure consistency". Mr. Brockman does not believe it is necessary for Hydro to use the same number of years

and the same method for calculating hydraulic production for ratemaking purposes as they use for planning and operations. In his 2nd Supplementary Evidence, he stated, at pp.4-5:

“I see no reason to link ratemaking, planning, and operations in that way. In fact, I see good reasons not to. Hydraulic systems are usually planned to meet energy requirements in the driest years. This is a reliability consideration that ensures continuous supply during years of drought. It is prudent to be more conservative in planning hydraulic systems than in forecasting production for ratemaking purposes, because the effects of occasionally being wrong in ratemaking are reversible (particularly with the existence of an RSP), while the effects of being wrong in planning are more severe.

For this reason, Hydro already uses a different hydraulic forecast methodology for system planning than for operations planning. Hydro’s forecast of annual hydraulic firm energy production for system planning purposes is more conservative than their forecast of hydraulic production for operating purposes.”

Hydro has attempted to create a link between its hydraulic generation forecast for rate-setting purposes and its planning/operations forecast. However, no evidence has been presented to indicate that this is standard industry practice (in fact, Hydro’s own survey seems to indicate otherwise) and no reasonable argument has been put forth to demonstrate the necessity of such a link.

None of the concerns raised by Hydro present any substantial impediment to the Board’s adoption of Mr. Brockman’s proposal to adopt a more accurate methodology for estimating hydraulic production for ratemaking purposes.

C.1.4 Conversion/Efficiency Factor for Holyrood

Hydro is forecasting consumption of approximately 3.5 million barrels of No. 6 fuel during 2002 to generate electricity at Holyrood. The average kWh output from the use of a barrel of oil depends on the efficiency at the generating plant. The higher the output of a generating unit the greater its efficiency (Transcript, October 9, 2001, page 34, lines 35-36). The 2002 forecast of the average kWh output per barrel of No. 6 fuel used in forecasting fuel costs is referred to as either the fuel conversion factor or the fuel efficiency factor. A higher fuel conversion factor results in lower fuel costs as less fuel is required to obtain the same energy.

The rates set in 1992 were based on a fuel conversion factor of 605 kWh/bbl. of No. 6 fuel. Hydro is proposing the use of 610 kWh/bbl. as the fuel conversion factor for determining fuel costs for the 2002 test year (Pre-filed Evidence, Henderson, p. 13, lines 7-8). In response to NP-262, Hydro indicated that the impact in the test year of a 2% variation in the fuel efficiency factor at Holyrood would change revenue requirement by approximately \$1,500,000.00 (based on \$20/bbl.). Therefore, a 2% increase in the fuel efficiency factor (or an increase in the factor by approximately 12 kWh) would reduce revenue requirement by \$1.5 million.

Mr. Henderson explained in his Pre-filed Evidence, at pp. 3-4, that there have been a number of significant changes at the Holyrood generating facility specifically intended to improve reliability, efficiency and environmental performance. They were:

- (i) exciter replacements on Holyrood units 1 and 2;

- (ii) electro-hydraulic control (EHS) replacement on Holyrood unit 2;
- (iii) Installation of on-line performance monitoring at Holyrood;
- (iv) Boiler control and station service control replacement on Holyrood unit 3;
- (v) New water treatment plant at Holyrood; and
- (vi) Upgrade of the wastewater facility and other environmental improvements at Holyrood.

Mr. Henderson also explained that the on-line efficiency monitoring system “is a controllable losses computer program that monitors critical steam-electric generator system measurements and gives information to the operator where control changes can be made to improve the unit’s efficiency”.

Reference: Pre-filed Evidence, Henderson, p. 5, lines 2-4

The improvements Hydro has made at Holyrood would lead one to expect an improvement in efficiency. Hydro uses the same fuel efficiency factor in the RSP calculations as it uses in calculating fuel costs for the test year. The RSP monthly reports provided in response to IC-73 show a fuel efficiency factor of 605kWh/bbl. Therefore, in years when Hydro achieves a higher fuel efficiency factor than approved in its test year assumptions, the savings achieved are increased profit to Hydro. This provides an incentive for Hydro to be conservative when forecasting the fuel efficiency factor in the test year.

Mr. Henderson explained the nature of the fuel conversion factor as a:

“normalized efficiency factor that would apply over a wide range of circumstances which would be wet and dry years, low and high level production at Holyrood. So we don’t forecast the Holyrood efficiency for the test year. What we do is we present an efficiency which is the historical average of what we experienced at Holyrood which, if you have a long enough period of time, should reflect what you would do at Holyrood under a variety of circumstances, high production years, low production years, and so on.”

Reference: Transcript, October 10, 2001, p. 21, lines 82-96

However, Hydro’s fuel conversion calculation is based on a five-year period (1996-2000) when hydrology was significantly above normal. Higher hydraulic production results in lower thermal production at Holyrood and, in turn, a lower efficiency factor at Holyrood. The table below provides the actual fuel efficiencies and actual thermal production by year for the period 1996-2000, an estimate for 2001 and the test year forecast for 2002.

Year	KWh/bbl	Thermal Production (GWh)
1996	611.0	1,406.49
1997	629.5	1,530.85
1998	618.8	1,262.59
1999	577.1	919.15
2000	609.6	968.30
2001 Estimate	633.0 (Brushett)	2,184.0
2002 Forecast	610.0	2,162.43

The highest **actual** efficiency factor for the period was 629.5 kWh/bbl. achieved in 1997, which was also the year of the highest actual thermal production. The forecast thermal production for 2002 is approximately 600 GWh or 40% higher than thermal production in 1997. Yet the test year efficiency factor is approximately 20 kWh/bbl. less than the factor achieved in 1997.

The efficiency factor of 609.6 kWh/bbl. achieved in 2000 when production was less than half that forecast for 2002 is basically the same efficiency factor being used in forecasting 2002 fuel costs. This fact alone clearly indicates that the test year fuel conversion factor is too low and Hydro's fuel cost forecast is correspondingly too high.

The estimated fuel conversion factor for 2001 of 633 kWh/bbl. provided in Mr. Brushett's supplementary evidence is based on 10 months actual data and two months forecast data. The revised forecast production is similar to the thermal production forecast for 2002.

Reference: NP-51
NP-45
1st Supplementary Evidence, Brushett, p. 3, lines 13-15

Mr. Brushett does not support Hydro's use of an efficiency factor of 610. He states:

"Based on information provided by Hydro for the first ten months of 2001, the thermal production level in 2001 is likely to be more representative of an average hydrological year."

and

“Since 2001 thermal production is more representative of an average hydrological year, then the efficiency factor of 633 kilowatt hours per barrel may be a better proxy for the forecast efficiency at Holyrood in the test year 2002.”

Reference: 1st Supplementary Evidence, Brushett, p. 3, lines 1-3 and 17-19
Transcript, January 8th, 2002, p. 14, lines 77-97 and p. 15, lines 1- 2

The use of an efficiency factor of 633 kWh/bbl. instead of Hydro’s proposed 610 kWh/bbl. amounts to an increase in the efficiency factor by 3.8%. NP-262, indicates that a 2% increase amounts to a savings of \$1.5 million so a 3.8 % increase amounts to a reduction in revenue requirement by almost \$3 million in the test year (based on \$20/bbl.).

C.1.5 Diesel Fuel Price

Hydro’s Application reflects test year diesel fuel costs of approximately \$6,808,000.

Reference: 1st Supplementary Evidence, Roberts, Schedule 1A, line 11

Mr. Henderson indicated that this test-year forecast could be reduced by \$300,000 as a result of the revised fuel forecast filed in December 2001.

Reference: Transcript, January 9, 2002, p. 16, lines 51-58

C.1.6 Conclusion

- ?? **The Board should accept Hydro's proposal to use a purchase price of \$20/bbl. for No. 6 fuel for the test year.** The proposal when considered in conjunction with the operation of the Retail RSP on July 1, 2002 will result in improved fuel cost recovery of approximately \$40 million on an annual basis or \$26.90/bbl after July 1, 2002. This exceeds Hydro's latest forecast price of \$25.91 in the test year and represents a measured first step in improving Hydro's fuel cost recovery in a recessionary environment where fuel prices appear to be declining. In fact, after July 1, 2002 retail consumer rates will reflect approximately \$26.90/bbl. in fuel cost recovery.
- ?? **The Board should order Hydro to use a 30 year moving average of historical inflows to calculate average hydraulic production for test year revenue requirement purposes.** U-Hydro #17 (Revised) clearly indicates that such a methodology is more accurate than the method currently proposed in the Application. Adoption of this methodology will reduce test year revenue requirements by approximately \$5 million which is the sum of the \$400,000 and \$4.6 million referred to at page C-14.
- ?? **The Board should require Hydro to use a fuel efficiency factor of 633 kWh/bbl. to better reflect the expected thermal production at Holyrood in the test year.** An increase in the fuel efficiency factor to 633 kWh/bbl. will reduce test year revenue requirements by \$2.85 million.

?? **The Board should reduce Hydro's diesel fuel forecast of October 31, 2001 by \$300,000 to reflect the revised fuel forecast** presented in 2nd Supplementary Evidence, Henderson, December 12, 2001.

C.2 Other Costs

C.2.1 General

Beyond costs directly associated with production, Hydro has proposed other test year costs of \$99.275 million, an increase of 14.5% over the previous test year actual expenditures of \$86.666 million. In this category, Newfoundland Power deals with two main issues: specific test year costs that Hydro has over-estimated and general operating efficiency. Specific test year costs that Newfoundland Power will address are: labour, employee future benefits, capitalized expense, hearing cost deferrals and non-regulated costs.

Reference: Pre-filed Evidence, Roberts, Schedule 1, column c, line 30
Pre-filed Evidence, Roberts, Schedule 1A, column f, line 30

C.2.2 Over-estimated Costs

C.2.2.1 Labour

Hydro budgets for salaries based on positions and not people. At any point in time, a number of positions will be vacant due to various factors and for the test year Hydro estimates its vacancy allowance at 2.5%. It therefore estimates a vacancy allowance of \$1 million for the test year 2002.

Reference: NP-4, p. 2 of 3

However, Hydro historically has not reached its full staff complement and, over the period 1997-2000, over-budgeted salaries by an average of 4%. A 4% vacancy allowance would amount to \$1.8 million in the test year.

Reference: Grant Thornton Financial Consultants Report, 2001 General Rate Hearing, August, 15, 2001, p. 25
Transcript, September 25, 2001, p. 6, lines 9-13

In NP-255(a) Newfoundland Power requested Hydro's rationale for the 2.5% in light of the 4% historical number. Hydro indicated only that the adjustment was based on expectations of vacancies, and did not provide details. Mr. Wells admitted under cross-examination that the vacancy allowance was arbitrary.

Reference: Transcript, September 25, 2001, p. 6, lines 22-25 and 40-50

Hydro's proposed test year vacancy allowance of 2.5% is subjective and materially less than recent actual experience. If Hydro based the test year vacancy allowance on the period 1997 – 2000, it would result in a decrease in Hydro's revenue requirement in the test year by \$0.8 million.

C.2.2.2 Employee Future Benefits

Hydro's Application proposes a shift from the cash to an accrual basis of accounting for post-employment benefits following a recently released CICA standard. The cost for ratepayers is an additional \$1 million in revenue requirement in the test year.

Reference: Transcript, November 15, 2001, p. 8, lines 16-17

Mr. Browne, on behalf of Newfoundland Power, indicated that the move to the accrual basis of accounting on this issue is not mandatory. This was confirmed by Mr. Brushett as well.

Reference: Transcript, November 1, 2001, p. 36, lines 82-90
Transcript, January 8, 2002, p. 29, lines 75-80

As indicated in the evidence of Mr. Browne, the timing of the switch is a matter which can and should be left to the Board. His Pre-filed Evidence, at pp. 32-33, outlines the criteria to be used by the Board.

Although the move from the cash to the accrual basis of accounting for employee future benefits is acceptable from a financial accounting perspective, the impact to customers is significant. Given the size of the increase proposed in Hydro's Application, now may not be the time to adopt this accounting change for rate-setting purposes.

C.2.2.3 Capitalized Expense

Capital projects are allocated a certain portion of operating expenditures, the majority of which are salaries associated with construction. By capitalizing such expenses, Hydro reduces its operating expenses.

On January 8, 2002, Mr. Brushett confirmed that the effect of underestimating capitalized expense in the test year is to increase Hydro's actual return on equity. For example, in 1992, Hydro's actual capitalized expenses were \$1.225 million higher than their 1992 test year forecast. Looking at this fact in isolation, this increase resulted in increased profits for Hydro of \$1.225 million.

Reference: Transcript, January 8, 2002, p. 25, line 79 through p. 26, line 26

Hydro 's forecast of capitalized expense in the test year is low.

Mr. Brushett acknowledged that Hydro's estimate of capitalized expense in the test year is lower than it has been in the 10 years (1992 – 2001) with the exception of 1993 and 1996. Further, he confirmed that Hydro's capitalized expense as a percentage of capital expenditures is also projected to be much lower in the test year than any other year noted.

Reference: Transcript, January 8, 2002, p. 26, lines 27-73
Transcript, January 8, 2002, p. 27, lines 71-74

Hydro's method of calculating capitalized expense is subjective. Newfoundland Power uses a method of determining its capitalized expense which has been approved by the Board. The method being used by Hydro has not received Board approval. Mr. Brushett recommends that the Board require Hydro to have a full review of capitalized

expense similar to Newfoundland Power's review following which the Board would be in a position to address/approve Hydro's methodology.

Reference: Transcript, January 8, 2002, p. 27, line 75 to p. 28, line 20

For the five-year period from 1997-2001, Hydro's average capitalized expense was \$7.8 million. Hydro's test year forecast shows only \$6.1 million.

Reference: Transcript, January 8, 2001, p. 26, lines 67-73
NP-16, p. 2 of 2

C.2.2.4 Hearing Cost Deferrals

Between the date of filing of its initial Application (May 2001) and the Supplementary Evidence of Mr. Roberts on October 31, 2001, Hydro chose to seek deferral of certain rate hearing costs from 2001 (\$2 million) and amortize them over a two-year period.

Reference: Supplementary Evidence, Roberts, Schedule 1A, line 33
PUB 75
Transcript, November 15, 2001, p. 10, lines 1-16

Mr. Roberts indicated that approximately \$0.5 million of the \$2 million amount represents expenses which Hydro proposed to bear in its original submission to the Board. Only \$1 million represented third party costs such as those of the Board and the Consumer Advocate.

Reference: Transcript, November 15, 2001, p. 11, lines 51-56

In Order No. P.U. 36, the Board allowed Newfoundland Power to defer external hearing costs incurred in 1998 of \$1.15 million over a three-year period.

The costs deferred in that case included only the costs billed to Newfoundland Power relating to the Board and consumer advocate. No internal or external costs incurred by Newfoundland Power, including costs of Newfoundland Power's consultants or expert witnesses were deferred. Only \$1 million of the \$2 million requested deferral by Hydro meets this test.

It would be consistent with past regulatory practice of this Board to permit deferral of only "costs billable by the Board including approved intervenor costs" currently forecast by Hydro to be \$1 million.

Reference: PUB-75

C.2.2.5 Non-regulated Costs

In the revenue requirement calculation, Hydro has excluded from regulated costs, contributions and donations made for charitable purposes.

Reference: PUB-56.1, p. 4 of 4

These are not the only costs, however, that should be considered as non-regulated expenditures. Specifically Hydro should be excluding the costs of Bay D'Es poir street lighting donation and advertising.

Bay D'Espoir Street Lighting

Hydro's justification for including Bay D'Espoir street lighting costs in regulated accounts stems back to 1978. No other towns received a similar grant.

Reference: NP-188, p. 2 of 2

Hydro's circumstance has changed significantly since 1978, including the fact that they are now subject to regulation by this Board. Hydro's rural operations run at a significant deficit. In addition, granting benefits to one community and not others is inherently discriminatory.

Advertising Costs

In Order No. P.U. 7 (1996-97), page 103, paragraph 10, the Board ordered that Newfoundland Power's regulated expenses for advertising be limited to matters relating to conservation, safety and consumer information. There is a question whether the corporate communication plan included in the revenue requirement would meet this test.

Mr. Brushett recommended this expense be treated as unregulated. It was unclear in Hydro's evidence what was the nature of the communication plan.

Reference: NP-286
Transcript, November 16, 2001, p. 18, line 68 through p. 19, line 90
Transcript, November 19, 2001, p. 22, line 85 through p. 23, line 26

C.2.3 Operating Efficiency

Hydro is obligated under section 3 (b) (iii) of the *Electrical Power Control Act, 1994* to manage and operate in a manner that results in power being delivered to customers in the province at the lowest possible cost consistent with reliable service. Simply put, they are obligated to operate in an efficient manner.

In Grant Thornton's 1999 Annual Financial Review of Newfoundland & Labrador Hydro, the Board was advised on page 40 to be diligent in their review of Hydro's forecast of test year expenses based on the following assessment.

"Overall, we have observed some significant variances between original budgets and actual results for the 1998 and 1999 fiscal years. While Hydro has provided reasonable explanations for variances, this does not necessarily provide comfort for the Board in terms of budgeted or forecast expenses for a test year."

Mr. Brushett confirmed that this conclusion also applies to Hydro's 2002 forecast as well.

Reference: Transcript, January 8, 2001, p. 19, line 91 through p. 20, line 32

Throughout the course of the hearing considerable attention was focused on Hydro's controllable costs. Hydro's history in 1997 and the test year are compared below:

Controllable Operating Costs Summary		
		Percentage Change
1997	2002	2002 vs. 1997
83,421,000 ¹	99,275,000 ²	19.0%

¹ per NP-3, page 2 of 3, line 29

² per JCR, Schedule 1A, line 30, column F

The graph presented on page 28 of Mr. Wells' pre-filed testimony indicates that CPI during the 1997 to 2002 time period grew by approximately 8%. Hydro's costs are therefore estimated to have grown at a rate of 2.4 times the CPI (19.0/8).

Mr. Brushett indicated that operating costs per kWh as portrayed in the Grant Thornton 2001 General Rate Hearing report Exhibit 5D-1 could be a measure of efficiency for Hydro. Applying the 1997 measure of productivity to the year 2002, operating costs for the test year 2002 would have been \$9 million lower.

Reference: Transcript, January 8, 2001, p. 21, line 13 through p. 22, line 22

Hydro has not demonstrated that it has made measurable efficiency improvements to satisfy the obligations in the *Electrical Power Control Act, 1994*. If the Board wishes to provide an incentive to Hydro to become more efficient, Mr. Brushett confirmed that a

productivity allowance would be appropriate. He suggested that 1 to 1.5% would be his recommendation.

Reference: Supplementary Evidence, Grant Thornton, p. 4, line 11 through p. 5, line 3

1.5 per cent of total other operating costs of \$99.275 million is approximately \$1.5 million.

C.2.4 Conclusion

?? **The Board should reduce Hydro's revenue requirement for 2002 as follows:**

Increase vacancy allowance from 2.5% to 4%	\$800,000
Postpone move to accrual basis of accounting for employee future benefits for rate setting purpose	1,000,000
Increase capitalized expense forecast to equal the five-year historical average.	1,700,000
Reduce hearing costs to be deferred (1,000,000 ? 2 years)	500,000
Remove Bay D'espoir street lighting and communication plan costs from regulated accounts	<u>135,000</u>
Total reduction of revenue requirement	<u>\$4,135,000</u>

?? In order to provide an incentive for efficiency, **the Board should order a productivity allowance of 1.5% of the adjusted other operating cost in the revenue requirement of \$99.275 million, or \$1.5 million.**

C.3 Interest Costs

C.3.1 General

In this section Newfoundland Power addresses the effect on Hydro's test year forecast of interest on three items. They are the proposed common dividend, the interest adjustment related to recall sales and the failure to include any allowance for interest on customer billing.

C.3.2 Interest Caused by Common Dividend

In Section E of this Argument, Newfoundland Power addresses the appropriate financial targets for Hydro including the impact on those targets of Hydro's proposed dividend in the test year, 2002.

Hydro has proposed a \$70 million dividend which has the impact of increasing interest expense in the revenue requirement in the test year by approximately \$1.7 million. This is nearly 10% of the \$17.4 million rate increase requested by Hydro. If instead a dividend consistent with the Hydro's stated policy of paying 75% of earnings is paid in the test year, the effect is to reduce the proposed revenue requirement by approximately \$1.5 million.

Although Newfoundland Power accepts that government, as shareholder, has every right to do as it wishes with respect to a dividend requested by Hydro, Newfoundland Power submits that the dividend proposed to be paid in the test year is excessive from a

ratemaking perspective. It not only contravenes Hydro's dividend policy but also results in deterioration of the debt/equity financial target that Hydro has put forward as appropriate.

Reference: Transcript, September 24, 2001, p. 36, lines 6-20
Grant Thornton Financial Consultants Report, 2001 General Rate Hearing,
August, 15, 2001, p. 11
NP-72
NP-205
Transcript, November 19, 2001, p. 27, lines 9-31

C.3.3 Recall Sales

Hydro has increased its interest expense for regulatory purposes in the test year by \$0.8 million suggesting that its short-term borrowing requirements are notionally reduced as a result of cash flow received by Hydro from the non-regulated sales of recall energy to Hydro Quebec.

Reference: Grant Thornton Financial Consultants Report, 2001 General Rate Hearing,
August, 15, 2001, p. 10-11
PUB-56, p. 2 of 4, line 32

While he supports this notional adjustment, Mr. Brushett acknowledged that the Board has approved neither the adjustment itself nor the methodology used to calculate it.

Reference: Transcript, January 8, 2002, p. 24

C.3.4 Interest on Overdue Accounts of Rural Customers

Prior to January 1, 2002, Hydro did not charge interest on overdue accounts for its rural customers but confirms that it will do so effective January 1, 2002. Hydro has not included any allowance in the test year for interest which it will receive on customers' account balances. Any such allowance would decrease the additional revenue Hydro would require from rates.

Reference: Transcript, November 19, 2001, p. 45, line 95 to p. 47, line 2

Hydro maintains that it was not able to estimate the amount of interest income it will receive in the test year because of its past practice of not charging interest on overdue accounts. This position is unreasonable in light of Hydro's ability to calculate a notional adjustment for interest associated with the income from non-regulated recall sales at the expense of ratepayers.

Using projected revenues and historical information available from its JD Edwards System, Hydro should be able to estimate a reasonable amount of interest to reduce its revenue requirement in the test year.

Reference: Transcript, January 8, 2002, p. 33, lines 22-33

C.3.5 Conclusion

- ?? **Newfoundland Power submits that interest expense in the test year should be decreased by \$1.5 million, representing interest on the excess dividend.**

- ?? **Newfoundland Power submits that the \$0.8 million recall sales interest adjustment should be disallowed by the Board for ratemaking purposes.**

- ?? **In the event that the Board does approve an adjustment, the methodology used to calculate the adjustment should be approved by the Board and should be based on accurate assumptions** on the receipt of income from Hydro Quebec and the payment of dividends to the Province of Newfoundland.

- ?? **The Board should require Hydro to reduce the revenue requirement in the test year to reflect an estimate of interest to be paid by its rural customers on overdue accounts.**

C.4 Capital Expenditures

C.4.1 General

To provide its consumers with safe and reliable service as required by the *Public Utilities Act*, an electric utility must invest capital in electrical system assets. The regulatory least cost policy objective set out in the *Electrical Power Control Act, 1994* requires that such capital expenditures are managed so as to minimize their impact on rates.

Newfoundland Power's primary submissions with respect to Hydro's test year capital budget relate to (1) the standards for justification of capital expenditures and (2) the adjustment of test year revenue requirements to account for Hydro's historical management of its annual capital expenditure program.

C.4.2 Capital Expenditure Justification Standards

Section 3 (b) (ii) of the *Electrical Power Control Act, 1994* requires that utilities manage their facilities in a manner that enables power to be delivered to consumers at the least cost. To achieve this, capital expenditure decisions must be made on the basis of a proper analysis of all of the associated costs.

In its presentation of the 2002 Capital Budget, Hydro states:

"The majority of projects included in Hydro's 2002 Capital Budget have no formal cost benefit studies supporting the decisions to proceed."

Reference: Application, Capital Budget, page B-6

While Newfoundland Power accepts that the utility's legal obligation to serve its customers may justify a capital expenditure where there are no reasonable alternatives, it submits that for many capital expenditure requirements there are available options. Where options exist, the obligation to provide electrical service at the least cost requires that they be subjected to cost analysis.

In Order No. P.U.6 (1991), the Board established standards for the justification of capital expenditures by Newfoundland Power. In keeping with what the Board termed "analysis generally accepted in finance for over 15 years", the Board ordered that Newfoundland Power prepare a detailed net present value analysis of its Customer Service System using an incremental cost/benefit approach and submit a report of its analysis to the Board.

The Board further ordered that, in future, any material capital expenditure by Newfoundland Power should be evaluated using a net present value methodology and that this analysis together with its supporting justification should be available to the Board upon request.

Reference: Order No. P.U. 6 (1991), p. 26-33 and p. 83

Newfoundland Power submits that the Board cannot be assured that Hydro's capital expenditures adhere to the least cost standard unless Hydro employs similar standards of analysis in justifying its capital expenditures.

Mr. Reeves addressed p. B-6 of Hydro's Capital Budget Application, which sets out the Corporation's policy relative to the requirement of a cost benefit analysis. He agreed that decisions by Hydro to proceed with significant capital projects were not always supported by formal cost benefit studies where the Corporation concluded that safety or reliability of service to customers would be jeopardized if the project did not proceed.

Mr. Reeves addressed the six specific factors considered by Hydro in assessing whether a project could be said to fall into the general category of "safety or reliability of service", and confirmed that they are as follows:

1. To protect human life
2. To meet projected customer load demands
3. To prevent imminent interruption of customer service
4. To comply with regulations and standards
5. To protect Hydro's assets against loss or damage
6. To maintain power system reliability and availability.

Reference: Transcript, October 3, 2001, p. 21, lines 61-96 and p. 22, line 81 to p. 22, line 15

Merely proposing a capital project on the basis of “safety or reliability of service” is not conclusive as to whether the costs of the project are justified. Hydro’s six assessment factors are too broad to provide, in and of themselves, reasonable satisfaction of the regulatory least cost imperative. Safety and reliability issues may well not yield a positive result in a net present value analysis, yet still be justified. However, in such cases the Board should be satisfied that the expenditures are least cost when compared to alternative means of achieving the regulatory objectives of safety or reliability. Such justification will often require some degree of cost analysis.

In Hydro’s 2002 Capital Budget, Newfoundland Power submits that the costs associated with two proposed projects require more thorough cost analysis. These projects involve the replacement of Hydro’s very high frequency (VHF) radio system and the replacement of the diesel generator and the refurbishment of associated facilities at Harbour Deep.

VHF Radio

Hydro’s 2002 Capital Budget Application seeks approval of \$8.6 million for the replacement of its VHF radio system. The proposed replacement is one component of Hydro’s broader Telecommunications Plan. The only comprehensive report provided to the Board to date on Hydro’s Telecommunications Plan was dated June 17, 1997, at which time Hydro’s plans were limited to replacement of portions of the VHF Radio system in the year 2000. In its 2002 Capital Budget Application, however, Hydro has proposed to replace the entire VHF radio system.

Reference: Transcript, November 9, 2001, p. 16, lines 17-23 and 47-72

The expenditure associated with the VHF radio system was originally estimated at \$1.269 million, representing replacement of the switching system only. At that time, the VHF project was one component of a total Telecommunications Plan estimated at \$23.1 million.

Reference: PUB 46.0, lines 12-14

The \$1.269 million has increased to \$8.7 million in Hydro's October 31, 2001 submission. The \$8.7 million is now one component of a Telecommunications Plan anticipated to now cost a total of \$36.6 million.

Reference: PUB-46.0, p. 2 of 5
U-Hydro #14

Hydro's 1997 Telecommunications Plan contemplated capital expenditures of \$23.1 million, however; it now appears that \$36.6 million of expenditure is anticipated. This increase of \$13.5 million, or approximately 58%, is significant. Hydro has maintained no "formal cost benefit analysis" is necessary. It defies any notion of least cost management of electrical system investment that no cost justification was attempted by Hydro for the original Plan nor the materially more expensive current version.

Reference: NP-117
NP-231

Newfoundland Power submits that justification of an expenditure such as the proposed VHF radio system clearly warrants cost analysis of the viable alternatives.

Replacement of Diesel Generators in Rural Areas

Newfoundland Power has a direct interest in Hydro's policy regarding the replacement of diesel generators in isolated rural areas. The rates paid by Newfoundland Power's customers ultimately recover approximately 87% of the deficit which arises from the operation of Hydro's rural systems.

Given the amounts involved, changes in Hydro's diesel replacement criteria ought to be subject to detailed analysis, indicating the costs and benefits of alternatives.

The application of Hydro's current policy resulted in Hydro's proposal, set out at page B-46 of Hydro's Capital Budget Application, to replace the diesel unit at Harbour Deep at a proposed cost of \$282,000. At p. B-57 Hydro describes a proposal to upgrade the building at Harbour Deep by constructing a new diesel hall and refurbishing the existing hall to serve as a control room/office/washroom at an additional cost of \$515,000. Total improvements to the Harbour Deep diesel facility in 2002 amount to \$797,000.

Reference: Transcript, October 1, 2002, p. 30, lines 6-38

In NP-230, Hydro stated, at lines 18-19, that the “continuing debate” concerning relocation of Harbour Deep residents has resulted in the previous deferral of the proposed upgrades, and also stated, at lines 23-27, that other alternatives (including containerization of the units) would allow use of the units and switchgear at another location. However, containerization of the diesel unit itself would not affect Hydro’s proposal for construction of the new building and refurbishment of the existing building, which is the most expensive part of the Harbour Deep proposal.

In light of the well-known desire of most of the residents to move from the community, Hydro’s proposal to spend \$515,000 of the proposed \$797,000 on improvements to buildings is suspect. Hydro’s proposal to replace the unit itself at a cost of \$282,000 which is linked to the change in the replacement criteria for its diesel units, highlights the need for Board evaluation of material proposed changes in Hydro’s policies affecting capital expenditures.

Reference: Transcript, October 1, 2001, p. 30, lines 46-80

Where capital expenditures such as diesel generator replacement are made pursuant to a policy, that policy ought to be justified by the proponent. The justification must disclose the forecast costs associated with the policy implementation and weigh such costs against the forecast customer benefits.

C.4.3 Test Year Capital Budget

In its 2001 report on Hydro, Grant Thornton observed that Hydro's "capital budgets, on average, are overbudgeted by approximately 15%." Grant Thornton concluded (based on discussions with Hydro officials) that, on a project basis, Hydro is probably under spending by approximately 5% and that the remaining 10% variance was likely due to delays and carryovers.

The result of spending less than the forecast of capital expenditures in a test year results in an overstatement of rate base which, in turn, increases revenue requirements.

Assuming a 15% reduction in Hydro's original forecast of capital expenditures for 2002 would result in a reduction in revenue requirement of approximately \$328,000. This amount would change as a result of changes in Hydro's proposed 2002 capital budget since the original filing.

Reference: NP-258

For ratemaking purposes, it is essential that Hydro's forecast (both operating and capital) is as accurate as possible. Newfoundland Power submits that there are steps that can and should be taken by this Board to improve Hydro's performance in this area.

Mr. Reeves gave evidence in relation to Hydro's Transmission and Rural Operations Division which accounted for almost 50% of the Corporation's capital budget. The

comparisons of budgeted and actual expenditures are shown in Hydro's response to NP-97, pages 1-10.

On average, Transmission had been overbudgeted by 20% and Rural Systems had been overbudgeted by 26% during the 9-year period. Mr. Reeves admitted that, if Hydro's budget in these two significant areas was overstated for the test year 2002, this would affect customer rates.

Reference: Transcript, October 1, 2001, p. 26, lines 83-91

Mr. Reeves gave three reasons for what he admitted to be overbudgeting and the transcript of the proceedings of October 1, 2001 at page 28, lines 74-101 and page 29 lines 1-32 reflects his evidence on the pattern of overbudgeting which is apparent in the response to NP-97.

First, Mr. Reeves explained that some capital projects are cancelled for good reason.

Reference: Transcript, October 1, 2001, p. 28, lines 31-43

Second, Mr. Reeves cited "multi-year" projects, which would have 'carry-over' effects on Hydro's capital budget. With respect to the impact of carry-overs, one would expect that

over a 9-year period (as reflected in NP-97) such a carry-over effect would correct. However, overall, Hydro was over budget in the entire period covered by NP-97.

Reference: Transcript, October 1, 2001, p. 28, lines 77-94

Third, Mr. Reeves addressed Hydro's budgeting inaccuracy and admitted that it had been noted within Hydro. He confirmed that budget accuracy was a concern and that Hydro had taken corrective action to ensure that what was budgeted is actually spent. He testified as to specific steps that had been taken by Hydro prior to the rate hearing.

Reference: Transcript, October 1, 2001, p. 29, lines 2-32

With respect to this third reason, one would expect that the steps outlined would lead to an increase in the level of capitalized expense in the test year. Hydro is forecasting a low level of capitalized expense in the test year relative to its historical experience.

The evidence is clear that Hydro has a history of overestimating capital expenditures. The Board's order in this matter should impose a reduction in Hydro's revenue requirements to appropriately reflect this historical trend.

C.4.4 Conclusion

Newfoundland Power makes the following submissions with respect to capital budget matters:

Capital Expenditure Justification

- ?? Newfoundland Power submits that **all material capital expenditures proposed by Hydro should be subjected to cost-benefit analysis, except where there are no reasonable alternatives to the proposed expenditures.**

- ?? **The cost-benefit analysis should, where appropriate, use net present value analysis to recognize the time value of money, should include an analysis of all incremental costs and benefits associated with the project, including operating and maintenance costs, and should include justification of key components such as discount rates and other assumptions employed.**

- ?? **Capital project justification should also include a discussion of the qualitative factors contributing to the decision to proceed with a project.**

- ?? With respect to Hydro's proposed 2002 capital expenditures, Newfoundland Power submits that:
 - (1) **the Board should order that Hydro provide a full cost-benefit analysis justifying its proposed replacement of its VHF radio system in the context of its overall Telecommunications Plan, an updated version of which the Board should order Hydro to file; and**

- (2) **the Board should order that Hydro provide a full cost-benefit analysis of its policy for the replacement of diesel generation units,** including the recent change in criteria regarding the number of overhauls.

Capital Budget Inaccuracy

?? Newfoundland Power submits that **the Board should reduce Hydro's 2002 revenue requirements to reflect Hydro's historical experience in underestimating annual capital expenditures by 15%.** Based upon Hydro's original proposed 2002 capital expenditures, this would result in a reduction in test year revenue requirements of \$328,000, consisting of a \$267,000 reduction in interest and a \$61,000 reduction in depreciation.

C.5 Summary of Test Year Costs

Newfoundland Power submits that Hydro's forecast 2002 test year costs filed on October 31, 2001 of \$323.261 million should be reduced by \$16.413 million. In addition, the revenue requirement should be reduced further by an amount representing forecast interest paid by rural customers on overdue accounts.

The table below summarizes the adjustments by cost category that Newfoundland Power recommends be made to Hydro's 2002 forecast test year costs in revenue requirement. An explanation of each category of adjustments follows immediately after the table.

**Newfoundland and Labrador Hydro
2002 Forecast Test Year Costs in Revenue Requirement
(\$000)**

	As Filed ¹	Adjustments	Adjusted
Depreciation	31,665	(61)	31,604
Fuel	85,035	(8,150)	76,885
Power Purchased	15,100	-	15,100
Other Costs	91,643	(5,635)	86,008
Interest	91,821	(2,567)	89,254
Margin/Return on Equity	<u>7,997</u>	<u>-</u>	<u>7,997</u>
Revenue Requirement	<u><u>323,261</u></u>	<u><u>(16,413)</u></u>	<u><u>306,848</u></u>

¹ Supplementary Evidence Roberts, Schedule 1A, p. 1 of 4

Summary of Adjustments to 2002 Forecast Revenue Requirement (\$000)

Depreciation

61 To adjust depreciation to reflect a 15% reduction in Hydro's forecast capital expenditures in the test year.

Fuel

400 To correct the forecast hydraulic production for omitted data for the year 2000 in Hydro's calculation of the long-term average.

4,600 To adjust forecast hydraulic production to a 30 year moving average of historical inflows.

2,850 To reduce the fuel consumption forecast by adjusting the fuel efficiency factor in the test year to a factor that is consistent with the expected thermal production at Holyrood in the test year.

300 To reduce the price of diesel fuel to the revised fuel forecast presented on December 12, 2001.

8,150

Other Costs

800 To reduce salaries and fringe benefits to reflect a vacancy allowance consistent with historical experience.

1,000 To reduce salaries and fringe benefits and maintain the accounting of employee future benefits on a cash basis rather than moving to an accrual basis.

1,700 To increase capitalized expense to a value consistent with an historic five-year average.

500 To reduce deferred hearing costs to be consistent with past regulatory practice.

135 To remove Bay D'Espoir street lighting and communication plan costs from regulated accounts.

1,500 To provide for a productivity allowance of 1.5% of other operating costs in the revenue requirement.

5,635

Interest

1,500	To reduce interest expense in the test year by the cost of financing the amount of the \$70 million dividend that is greater than Hydro's stated dividend policy.
800	To remove the adjustment to interest expense related to notional interest savings on short term borrowings resulting from recall energy sales.
<u>267</u>	To adjust interest expense to reflect a 15% reduction in Hydro's forecast capital expenditures in the test year.
<u>2,567</u>	

D. THE RATE STABILIZATION PLAN

D.1 General

The Retail RSP is forecast to have a balance due from customers of \$60.4 million at year end 2001. This balance is the result of a number of factors, the most prominent of which is the \$12.50/bbl. price of No. 6 fuel which has been embedded in Hydro's base rates since 1992. The \$12.50/bbl. price was not revisited or reviewed for 9 years during which time Hydro's average price of No. 6 fuel exceeded \$12.50/bbl. in **every** year.

Reference: PUB-81.0, p. 2 of 3
IC-22

While Hydro has been regulated since 1996, the Retail RSP balance has reflected a balance owing from customers prior to this. As the current balance in the RSP has effectively accumulated over the 7 year period from 1994 through 2001, it is not possible to return Hydro's fuel recovery to equilibrium in the test year. This goal requires a gradual and moderated approach.

D.2 The Increasing Retail RSP balance

The Retail RSP currently has a forecast balance for December 2002 of \$64.9 million.

The increase in the balance is dependent upon forecasts of 2002 hydraulic production and No. 6 fuel prices which may or may not materialize.

Reference: PUB-81.0, p. 3 of 3

The Hydro Application proposes that the cost of No 6 fuel reflected in the RSP calculation be increased from \$12.50/bbl to \$20/bbl. This is a 60% increase in the amount of fuel recovery in base rates.

Mr. Brockman addressed Hydro's proposal in his pre-filed testimony. He indicated that on the basis of \$20/bbl, Hydro was forecasting an RSP increase to Newfoundland Power of 6-7% as of July 1, 2002. However, even with the forecast 6-7% increase, Hydro was still forecasting large year-end balances in the Retail Plan until at least December 2004.

Reference: Pre-filed Evidence, Brockman, p. 11, lines 5-21

Mr. Brushett accepted that "the most significant factor contributing to the increasing balance in the RSP is the cost per barrel of No 6 fuel". However, he was not prepared to recommend that the Board embed into the operations of the RSP a price per barrel different than that proposed by Hydro in its Application.

Reference: Supplementary Evidence, Brushett, p. 5, lines 26-27
Transcript, January 8, 2002, p 10, lines 49-56

The Retail RSP has a cap of \$50 million. In its Application, Hydro seeks to increase the cap to \$100 million.

Mr. Brockman indicated that raising the cap on Hydro's retail RSP "gives Hydro little or no incentive to operate efficiently. If the cap is raised, Hydro would have significantly less reason to come back to the Board to justify substantial cost increases, as a higher cap would allow Hydro the opportunity to avoid a general rate review for a longer time."

Reference: Pre-filed Evidence, Brockman, p. 9, lines 7-10

His recommendation was to:

"...leave the cap on the Retail Customer's portion of the RSP that can be automatically flowed through to consumers at \$50 million, but allow Hydro to book up to \$100 million into the account. If at any time the RSP balance goes over the \$50 million, Hydro can either decide to let its shareholders pay the cost (as a fully regulated utility might do), or it can apply to the Board for a hearing to justify increased cost recovery within the context of Hydro's total costs."

Reference: Pre-filed Evidence, Brockman, p. 9, lines 14-20

Mr. Brushett's supplementary prefiled testimony of December, 2001 outlines three potential options for the Board's consideration on this point:

"Approve the \$100 million cap for the retail plan

Approve an increase in the cap between \$50 million and \$100 million

Leave the cap at \$50 million and decide on how the excess is to be recovered"

Reference: Pre-filed Supplementary Evidence, Brushett, p. 7, lines 24-26

Of these three, he recognized that the third was similar to the recommendation being presented by Mr. Brockman on behalf of Newfoundland Power.

Reference: Transcript, January 8, 2002, p. 32, lines 29-63

Mr. Brushett indicated that he was prepared to recommend a cap of \$65 million in light of the current balance and the projection for the year end 2002. While he did not have an updated projection for 2003 he had no basis to suggest that it would exceed the 2002 projected year-end balance.

Reference: Transcript, January 8, 2002, p. 31, lines 63-71

An increase of the Retail RSP cap to \$60-65 million, the forecast year end 2001 balance, is in Newfoundland Power's view practically inevitable given that the year end 2001 balance represents fuel costs already incurred by Hydro.

D.3 Dealing with the Retail RSP Balance

Mr. Brockman recommended increased regulatory review of the Retail RSP:

“The RSP account allows Hydro to recover costs without coming to the Board for review, even when those costs change in a material way. This is because the deferral and flow-through are both now essentially automatic.”

Reference: Pre-filed Evidence, Brockman, p. 8, lines 21 -23

“In present circumstances, where Hydro has not had a rate case for 8 years, and proposes to migrate to commercial returns, it seems that greater, rather than lesser, regulatory oversight will be necessary ...”

Reference: Pre-filed Evidence, Brockman, p. 9, lines 10-12

Mr. Brushett recommended that the Board order a limit of three years for the next review.

Reference: Transcript, January 8, 2002, p. 31, line 91 to p. 32, line 2

Hydro's proposal to embed a 2002 \$20/bbl No. 6 fuel price in base rates and the July 1, 2002 operation of the Retail RSP will result in an increased test year fuel cost recovery for Hydro of approximately \$40 million (see p. C-5 of *Fuel Costs*). This is substantial progress along the lines of increased fuel cost recognition in rates for the test year.

Given that both No. 6 fuel costs and Hydro's hydraulic production can be volatile on a year to year basis and the Retail RSP balance remains high, increased frequency of regulatory review of the Retail RSP will be necessary if the Board is to maintain regulatory control over consumer rates. The volatility and relatively large balances involved make forecasting the Retail RSP operation past the test year extremely risky.

Depending upon actual 2002 hydraulic production and No. 6 fuel prices experienced by Hydro, the actual Retail RSP balance at year-end 2002 may be more or less than Hydro's current forecast. The prudent course for the Board in dealing with this

uncertainty is to require Hydro to report on actual 2002 experience early in 2003 and to assess whether a short hearing to modify Retail RSP recovery is necessary to ensure further progress in bringing Hydro's fuel cost recovery into equilibrium. Such modifications could include, amongst other things, revisions to fuel price or acceleration of cost recovery from the current 3 year declining balance methodology. This type of approach permits the Board to ensure recovery of Hydro's actual fuel costs occurs in a reasonable timeframe without the hazard of dealing with forecasts. It is this forecasting hazard which, in effect, has resulted in the creation of the current large balance in the Retail RSP.

D.4 Rate Stabilization Plan Allocations

Mr. Osler on behalf of the Industrial Customers concluded that there were "significant inconsistencies and improper operation of the RSP since the Board last reviewed Hydro in 1992", which caused him to recommend the Board "recalculate and restate the RSP back to 1992" making three significant adjustments.

Reference: 2nd Supplemental Evidence, Osler, p. 8, lines 19-29

Further, Mr. Osler's testimony suggested that "for 2000 alone, the impact is expected to be a credit to the IC RSP on the order of \$1.5 million".

Reference: 2nd Supplemental Evidence, Osler, p. 9, lines 1-2

Mr. Osler's recommendation lacks a solid basis in the record of this proceeding.

Hydro's operation of the RSP has been consistent since 1986.

Reference: Transcript, November 30, 2001, p. 17-32
IC-284(e)

Mr. Osler's recommendation is also suspect on regulatory and legal grounds. From a regulatory perspective, recalculation and restatement of the RSP back to 1992 amounts to retroactive ratemaking and is contrary to the prospective form of regulation applicable to Hydro, even as expressed by Mr. Osler.

Reference: 2nd Supplemental Evidence, Osler, p. 6, line 23-25

Section 17(1)(b) of the *Hydro Corporation Act* provides:

17. (1) The corporation shall.....

(b) adopt and maintain the rate stabilization plan of the corporation on the basis reflected in the audited financial statements of the corporation for the year ended December 31, 1994,

until the Board of Commissioners of Public Utilities otherwise orders under the *Public Utilities Act*

This provision would prohibit the type of retroactive changes to the RSP recommended by Mr. Osler.

D.5 Conclusion

- ? **The Retail RSP large deficit balance is primarily the result of the use of the price of \$12.50/bbl. for No. 6 fuel for an extended period.**

- ?? **Hydro's proposal to increase the cost of No. 6 fuel in the Retail RSP to \$20/bbl. is a 60% increase in fuel cost recovery in base rates.**

- ?? **Given that increases in fuel cost recovery will result in a significant consumer rate increase in 2002, the appropriate way to deal with any changes in the Retail RSP balance during 2002 is to revisit the Retail RSP early in 2003.** The Board should assess the necessity of modifications to Retail RSP recovery early in 2003 when the 2002 balance is known and continue to annually assess the fuel cost recovery through the Retail RSP.

- ?? **No basis exists to reallocate past allocations as between the Retail and Industrial RSPs.**

E. FINANCIAL TARGETS

E.1 General

There was a great deal of evidence before the Board concerning the appropriate financial targets for Hydro as a fully regulated corporation. In the past, the Board approved a target debt/equity rate for Hydro of 80/20, and the appropriate earnings level was determined in terms of interest coverage.

Reference: Report of the Board to Minister of Mines & Energy, April 13, 1992, Part III Summary of Recommendations, paragraphs 13 and 16

The position of Hydro, as stated by Mr. Wells, is that “the normal financial targets for a utility operating as a commercial entity would be, as our financial experts have advised, a debt/equity ratio of 60/40 and a ROE of 11% to 11.5%”. Further, he stated that “As a result, the target of a 80/20 debt /equity ratio, at least in the short-term and until there is a change in public policy, should suffice instead of the arguably normal requirement of a 60/40 debt/equity ratio.”

Reference: Pre-filed Evidence, Wells, p. 14, lines 7-9 and lines 20-22

There are two primary components to be addressed under the heading of Financial Targets, namely the appropriate return on equity (ROE), and the appropriate debt/equity ratio for the test year.

E.2 Return on Equity

In its Application, Hydro sought only a 3% ROE on the basis that it could not justify a higher return in the current climate of the Application. Clearly the Board's job has been somewhat simplified by Hydro's decision not to seek a market return on equity in rates.

Reference: Pre-filed Evidence, Wells, p. 13-17

The 11-11.5% ROE was proposed by Hydro in the context of it being a longer term financial target and Mr. Wells stated that it was essential that the Board send a clear signal to the financial markets of its views on a normal ROE for Hydro in the future.

Reference: Pre-filed Evidence, Wells, p. 15, lines 7-10

While it was acknowledged through virtually all witnesses that a 3% ROE would not be acceptable for Hydro in the future, the only evidence called before the Board was in relation to an appropriate ROE **at this time**.

Reference: Pre-filed Evidence, McShane, pp. 52-56
Pre-filed Evidence, Hall, pp. 7-9
Pre-filed Evidence, Kalymon, pp. 7-13

Newfoundland Power believes that while Hydro has suggested that its ROE should be in the range of 11-11.5% in the future, the Board can and should only address the rate of return which is appropriate **at this time**. The Board should not explicitly or implicitly

rule on an acceptable **future** ROE for Hydro, particularly if it is determined in the context of **today's** financial market conditions. While Newfoundland Power accepts that an otherwise acceptable ROE for Hydro at this time would be higher, Hydro has chosen to seek only 3% and indicating this fact alone in its Order should be sufficient to address Mr. Wells' concern of the message being sent to the financial markets.

E.3 Target Debt/Equity Ratio

Newfoundland Power accepts the evidence of the numerous expert witnesses before the Board that the target 80/20 debt/equity ratio as provided for by this Board in the past is sufficient for Hydro as long as it remains a Crown Corporation with its debt guaranteed by the Province of Newfoundland. No plan to achieve the long-term 60/40 debt/equity ratio requested by Hydro has been put before this Board. In fact, the five year financial plan submitted in response to IC-98 sees Hydro achieving only an 82/18 debt/equity ratio by the year 2005.

Reference: Transcript, September 25, 2001, p. 32, lines 37-42
Transcript, October 29, 2001, p. 10, lines 45-51
Transcript, November 13, 2001, p. 30, lines 65-71

Contributing to the fact that Hydro is not achieving the 80/20 debt/equity target in the test year is the size of dividends proposed. The dividend proposed for the test year will have a detrimental effect on the Corporation's debt/equity ratio causing it to deteriorate to 83/17 in the test year which is inconsistent with not only Hydro's stated financial

goals, but also the evidence of its expert witnesses respecting an appropriate debt/equity ratio.

Reference: Pre-filed Evidence, Brushett, p. 11
Pre-filed Evidence, McShane, p. 23, line 28 through p. 25, line 24
Transcript, September 24, 2001, p. 34, lines 63-83

On November 24, 1995, Hydro's Board of Directors approved a dividend policy, consistent with the opinion of Scotia McLeod, of 75% of net operating income provided that it did not cause deterioration in the existing debt/equity ratio. On May 12, 2000, the policy was revised to "75% of net operating income before recall sales plus 100% of income from recall sales after due consideration of the impact of payment on the debt/equity ratio of the corporation."

Reference: IC-276
NP-169

Hydro has proposed a dividend of \$70,000,000 in the test year amounting to 730% of net operating income. To be consistent with Hydro's policy, the dividend to be paid in the test year, 2002, would amount to only \$7,200,000. In addition to the deterioration of Hydro's debt/equity ratio, the proposed dividend will cost electricity consumers \$1.7 million.

Reference: NP-72(c)

According to Mr. Wells there is uncertainty in terms of whether \$70 million is the amount of dividend that will actually be paid.

Reference: Transcript, September 28, 2001, p. 26, lines 22-29

Newfoundland Power accepts that government as shareholder has every right to do as it wishes in relation to a dividend requested of Hydro, particularly since the government is the guarantor of Hydro's debt. However, to the extent that the dividend in excess of Hydro's stated policy negatively impacts on an otherwise reasonable capital structure approved by this Board, electricity consumers should not have to bear additional costs. Disallowing the dividend in excess of the 75% policy for rate setting purposes and deeming a capital structure as if the excess dividend had not been paid is consistent with both the objectives of least cost service and Hydro's stated financial goals.

Such a course also allows the management of Hydro to determine the appropriate capital structure of Hydro, which is the responsibility of management, not the Board. Hydro has significant unregulated operations which might have very legitimate impacts on managements' view of an appropriate capital structure.

Hydro's proposed longer-term financial targets include a 60/40 debt/equity ratio. In the absence of a concrete plan of how Hydro intends to achieve this target, and an examination of the related customer impacts, the Board cannot and should not endorse

the movement towards it. There is no evidence to indicate that attainment of this target would be in the best interest of electricity consumers.

E.4 Conclusion

- ?? An 80/20 debt equity ratio, as previously ordered by this Board, is appropriate for Hydro at this time.**

- ?? The Board should disallow the dividend in excess of the 75% policy for rate setting purposes and deem a capital structure as if the excess dividend has not been paid.**

- ?? The Board should approve Hydro's request for a 3% ROE but refrain from ruling either explicitly or implicitly on Hydro's acceptable future ROE.**

- ?? The Board should refrain from endorsing movement towards Hydro's longer-term debt/equity targets of 60/40 in the absence of a concrete plan to get there.**

F. THE RURAL DEFICIT

F.1 General

Four of Hydro's rural electrical systems do not generate sufficient revenues to cover their respective cost of service. The total forecast deficit for these 4 rural systems for the test year is \$31.7 million. The respective contributions of each system to this deficit and the ratio of revenue to cost is as follows:

Hydro System	Deficit (\$000)	Revenue to Cost Ratio (%)
Island Interconnected	8,673	78
Island Isolated	7,368	15
Labrador Isolated	14,252	23
L'Anse au Loup	<u>1,400</u>	<u>45</u>
Total	<u>31,693</u>	<u>55</u>

This deficit is proposed to be allocated in the test year to Newfoundland Power and Hydro's Labrador Interconnected System customers as follows:

Customer	Deficit Allocation (\$000)
Newfoundland Power	27,616
CFB-Goose Bay Secondary	65
Labrador Interconnected	<u>4,012</u>
Total	<u>31,693</u>

Reference: Exhibit JAB-1, Revision 2, p. 3 of 94

Cost recovery in Hydro's rural electrical systems creates a substantial deficit, 87% of which is ultimately covered by Newfoundland Power's customers. This is a significant issue to Newfoundland Power.

In this proceeding, Newfoundland Power raises three issues respecting the rural deficit, namely reducing the deficit through increased rates, progress on deficit reduction and allocation of excess revenue from CFB Goose Bay. Each of these issues is addressed below.

F.2 Reducing the Deficit Through Increased Rates

In addition to the general rates applicable to the Isolated Systems, Hydro also offers preferential rates to certain customers in these isolated areas. A list of the fishplants, churches and community halls who benefit from the current subsidy is provided in CA-154.

Following the 1995 Inquiry by the Board into Rural Rates and the Board's determination that all general service customers in the isolated areas be treated equally, Hydro was ordered to provide a plan at its next general rate application for phasing out preferential rates and subsidized government rates.

Reference: Report of the Board to Minister of Mines & Energy Concerning Rural Electrical Service, July 29, 1996, p. 32

As they currently exist, rates for government agencies and departments would have to increase by approximately 280% in order to achieve full cost recovery.

Reference: Pre-filed Evidence, Osmond, p. 12, lines 10-11

Except for a “first step” proposal to phase in cost based rates for Provincial and Federal Government departments and agencies by 20% in the test year, Hydro has not provided a plan for phasing out these rates. Instead, Hydro has indicated an intention to provide such a plan at its next general rate application intended to be brought in the year 2003 with a view to achieving total cost recovery over five years beginning in 2004.

The result of governments paying full cost of service is an additional \$2 million in revenue to Hydro.

Reference: Pre-filed Evidence, Osmond, p. 9, lines 15-19 and p. 12, lines 13-24
NP-35
NP-150

The result of Hydro’s proposal for approval of only a 20% increase to Government agencies and departments is a reduction of only \$136,119 in revenue requirement for the test year.

Reference: Pre-filed Evidence, Hamilton, Table 2, p. 9 (2nd Revision) filed in 2nd Supplementary Evidence, Hamilton

While the only proposal before the Board in this Application is for the implementation of a 20% increase to Government rates, Hydro accepts that it is open to this Board to expedite cost recovery from those government agencies and departments. One means

of achieving expedited recovery would be through annual adjustments to the government rates.

Reference: Transcript, November 28, 2001, p. 24, lines 60-65
Transcript, November 26, 2001, p. 15, lines 70-86

In its Application, Hydro has not proposed any movement for the phase-out of preferential rates to fish plants, churches, schools, and community halls. NP-152 indicates that Hydro's revenues will increase by \$600,000 once the phase-out of non-government preferential rates is complete (i.e., \$2.6 million in total - \$2.0 million for government agencies).

Reference: Pre-filed Evidence, Osmond, p. 9, lines 7-9, p. 12, lines 20-25
NP-152

NP-150 indicates that Hydro is not proposing to start the phase-out of preferential rates because the magnitude of rate increases would be significant. Mr. Brickhill agrees it will be difficult to phase out preferential rates without significant rate increases.

Reference: Transcript, November 26, 2001 p. 39, lines 1-5 and 24-27

F.3 Deficit Reduction

The responses to RFIs and the exhibits filed during the course of the hearing suggest that tracking Hydro's progress in reducing the rural deficit is difficult at best. Primarily this results from the application of different costs of service over the period 1993-2002.

Reference: NP-34
NP-215
IC-1
Transcript, November 19, 2001, p. 39, lines 83-92

Mr. Roberts was unable to cite an example of an investment or a proposal that did not proceed because of Hydro's conclusion of its impact on the rural deficit.

Reference: Transcript, November 14, 2001, p. 24, lines 72-79

Mr. Brockman stated:

"I see no economically justifiable reason for having a long term goal of serving any class of customer at 20% - 50% of their cost of service. I recommend that Hydro be required to implement a plan with the Board to begin eliminating these subsidies within the next 5 years."

Reference: Pre-filed Evidence, Brockman, p. 27, lines 1-4

In his pre-filed testimony, the Board's expert Dr. Wilson recommended that the Board consider developing an evidentiary record regarding the extent to which the rural deficit should be reduced and the extent to which universal service should be subsidized.

Reference: Pre-filed Evidence, Wilson, p. 8, lines 18-20 and p. 9, line 1

F.4 Excess Revenue from CFB Goose Bay

The rates charged by Hydro to CFB Goose Bay result in an excess of revenue from allocated cost in the cost of service of approximately \$3.75 million. Hydro's Application proposes treating this excess revenue as a credit to the cost of service of the other non-Industrial Labrador Interconnected customers.

Reference: Exhibit JAB-1 (2nd Revision), p. 3 of 94, lines 4-5
Pre-filed Evidence, Osmond, p. 14, lines 14-25

Without exception, all experts who addressed the point concluded that this excess revenue should be applied to reduce the rural deficit. Even Mr. Brickhill, the author of Hydro's cost of service studies, indicated that he was unable to defend the judgment to apply the excess solely as a credit to the Labrador Interconnected system.

Reference: 1st Supplementary Evidence, Osler, p. 21, lines 14-19
Pre-filed Evidence, Wilson, p. 33
Transcript, November 26, 2001, p. 39, lines 80-93 and p. 40, lines 1-20
Transcript, November 29, 2001, p. 35, lines 77-95 and p. 36, lines 1-36
Transcript, December 3, 2001, p. 6, lines 26-77
Transcript, December 7, 2001, p. 1, lines 49-92 and p. 2, lines 1-16

F.5 Conclusion

?? **Newfoundland Power submits that the Board require Hydro to file a proposal on the phase-out of preferential rates.** The Board should consider implementing an annual adjustment mechanism to apply in expediting cost recovery from government agencies.

- ?? **The Board should order that the rural deficit be reduced by \$2 million for ratemaking purposes to reflect full cost recovery from Hydro's government customers in isolated areas.**

- ?? **Newfoundland Power submits that Hydro be required to report annually to the Board on its progress in the management of the rural deficit.** This will develop an evidentiary record regarding the extent to which the deficit can and should be reduced.

- ?? **The Board should order that excess revenue of \$3.75 million from CFB Goose Bay be applied to reduce the rural deficit.**

G. COST OF SERVICE ISSUES

G.1 General

In Order No. P.U. 25 (2000-2001) the Board ordered, in part, that Hydro use the generic cost of service methodology recommended by the Board in 1993 in creating its Application in this proceeding. As Hydro substantially complied with the generic cost of service methodology, there are relatively few cost of service issues to be resolved by the Board in this proceeding.

Two issues left unresolved by the 1993 Hydro generic cost of service proceeding were allocation of production demand costs and the rate form under which Hydro provides service to Newfoundland Power. Each of these issues is addressed in this section.

A third issue relating to the relative costing of the Interruptible "B" credit negotiated between Hydro and Abitibi Stephenville in 1993 and the generation credit historically provided to Newfoundland Power in Hydro's cost of service was raised by the Industrial Customers. It is also addressed in this section.

G.2 Allocation of Production Demand Costs

The issue before the Board in this area will affect the calculation of the cost of service and therefore the rates payable by Hydro's two primary classes of customers. When allocating production demand costs on the Island Interconnected system, Hydro's Application reflects the use of a 2 coincident peak (CP) methodology.

Reference: Pre-filed Evidence, Brickhill, p. 8, lines 11-12

The history of this issue stems back to the Board's Report of February 1993 on the generic cost of service methodology. At p. 24 of that report the Board expressed its preference for a multiple peak allocator:

“The Board recognizes that under a multiple peak allocator, class demands not necessarily coincident with the system annual peak would incur some allocated cost, which would in effect be a user-pay charge. A 1 CP allocation would entail no user-pay charge whatsoever. From this point of view, the Board considers that a multiple peak allocator could be preferable, depending in the level of user-pay charges therefrom.

On the other hand, the Board is aware that estimates of Hydro Rural class demands entail extensive analytical work, which raises questions as to the administrative feasibility of a multiple peaker allocator.

Recommendation 8:

That a 1 CP allocator be approved for interim use in the Island Interconnected system and that Hydro present to the Board at the time of its next rate hearing an analysis of the relationship between load factor and system reserve requirement, together with a recommendation regarding the number of peaks on which the CP allocator for generation demand costs should be based.”

The Board's concern with respect to the administrative feasibility of a multiple peak allocator for estimating demands for the Hydro Rural class demands seems to have been addressed, as Hydro has used a 2 CP allocator in its cost of service study filed in this proceeding. The question the Board has to address now is whether a 2 CP allocator or another multiple peak allocator is most appropriate. The evidence of the experts may be summarized as follows:

Mr. Brickhill recommends the use of 2 CP but is also satisfied with use of 1 CP.

Mr. Brickhill's recommendation is based on the report conducted by Hydro, filed in response to NP-135, that analyzed system data for the period 1990 to 1994 when the peaks were predominantly in the months of January and February.

Hydro did not update the analysis to reflect the years 1995 to 2000, in which the peaks in 4 of the 6 years occurred in either December or March.

References: Transcript, November 26, 2001, p. 32, lines 10-15
NP-157

Mr. Brickhill believes the actual month in which the peak occurs is not relevant, but what is important is that there are only two peak months (Transcript, November 26, 2001, p. 45, lines 33-44). However, the data from NP-157 for the period 1997-2000 shown below does not support Mr. Brickhill's conclusion that there are only two peak months.

Year	December	January	February	March	Range of 3 highest peaks	Range as a % of peak
1997	1185	1226	1208	1229	21 MW	2%
1998	1295	1289	1225	1121	70 MW	5%
1999	1265	1245	1139	1042	126 MW	10%
2000	1240	1219	1191	1097	49 MW	4%

For 1997, 1998 and 2000, there were at least three winter months with demands at or near peak. In 1997, the peaks in all 4 winter months were within 3.5% of peak. So in the last four years of data, only 1999 would be viewed as having two

peak months. Mr. Brickhill's conclusion of 2 peak months does not appear to be correct for the more recent years of system load data.

Mr. Brockman recommends the use of 4 CP for the following reasons:

- (i) the system peak can occur in any one of the four winter months and Hydro is unable to predict in which month the peak will occur;
- (ii) a single peak is not what determines the timing of generation additions under Hydro's LOLH planning criteria; and
- (iii) use of only 2 months for use in cost allocation is unstable because the choice of peak months in the test year can affect the cost sharing among customer classes. Hydro does not know in which 2 of the 4 months the peaks will occur.

References: 2nd Supplementary Evidence, Brockman, p. 9, lines 10-12
Pre-filed Evidence, Brockman, p. 23, lines 16-17
Transcript, December 4, 2001, p. 34, line 68 to p. 35, line 2

Mr. Bowman recommends 1 CP from a cost causality perspective and because Hydro uses 1 CP for allocating costs for its other systems. In response to NP-136, Hydro states its reason for using the coincident peak method in Labrador (rather than the AED method previously approved by the Board) was because the coincident peak method is appropriate for the Island Interconnected System. This circular argument of consistency in system allocation methods is not a valid basis for selection of a 1 CP allocator for the Island Interconnected System.

Mr. Bowman acknowledges 1 CP is more volatile. His pre-filed evidence states: “If the Board prefers a multiple CP allocator in order to avoid volatility, I recommend the use of 4 CP because it reflects the facts that four winter months all contribute to LOLH.”

Reference: Pre-filed Evidence, Bowman, p. 8, lines 12-16

Mr. Osler recommends 1 CP. His reason appears to be because peak month contributes more to the LOLH than the other three months combined. However, Mr. Osler also seems to acknowledge in the following statements that the use of 1 CP creates concerns over volatility:

“Looking beyond this application, the issue of stability with respect to a 1 CP approach could arise to the extent that variability in the month when the system Coincident Peak occurs is associated with materially different 1 CP allocators for the rate classes.”

Reference: 1st supplementary Pre-filed Evidence, Osler, p. 15 lines 31-32, p. 16 lines 3-4 and lines 31-33

On a practical basis, the choice of CP allocator for the test year has an effect upon the costs shared amongst Hydro’s Island Interconnected customer classes. It is relatively more advantageous to the Industrial Customers to utilize 1 CP and it is relatively more advantageous to Newfoundland Power to use multiple CPs.

Hydro’s responses to IC-244 (c) and (d) reflect the reduction in Newfoundland Power’s costs derived from using 3 CP and 4 CP allocators. Use of a 4 CP allocator reduces Newfoundland Power’s costs by \$365,000 in the test year.

G.3 Demand Energy Rate for Newfoundland Power

Currently an energy-only rate structure is used by Hydro in billing Newfoundland Power. The Board recommended that Hydro and Newfoundland Power review the implementation of a demand and energy charge pricing structure. After completing a review, agreement could not be reached on a demand energy rate acceptable to both companies primarily due to earnings volatility issues.

Reference: PUB-68

At least 3 experts who testified before the Board agreed that earnings volatility is a valid concern for Newfoundland Power with respect to implementing a demand energy rate.

Reference: Pre-filed Evidence, Brockman, p. 28, lines 20-22
Transcript, November 19, 2001, p. 18, lines 46-76
Transcript, November 20, 2001, p. 25, lines 72-80
PUB-68
Transcript, November 26, 2001, p. 35, lines 75-77
Transcript, November 30, 2001, p. 35, lines 6-8
Transcript, December 4, 2001, p. 24, lines 53-79

It is also suggested that increased volatility would be reflected in the utilities' cost of capital and rates to customers. While the increased volatility could be counter balanced by further adjustments to the rate stabilization mechanism, this would be contrary to the desired impact of a new rate structure.

Reference: Pre-filed Evidence, Brockman, p. 28, line 22 to p. 29 line 1
Pre-filed Supplementary Evidence, Brockman, p. 4, lines 17-20

For the following reasons, Mr. Brickhill's evidence indicates, it is the level of charges to Newfoundland Power that is important, not the structure of the rate:

1. "the two companies are effectively operating as an integrated whole with respect to generation";
2. "economic efficiency is achieved if Newfoundland Power's rates reflect marginal cost concepts"; and
3. "Newfoundland Power is not in a position to respond fully to Hydro's price signals, since its demand is derived from the demands of its customers."

Reference: Supplementary Evidence, Brickhill, p. 6, lines 1-11

In comparison to the Industrial Customers who are "end users", Newfoundland Power is not the end user. It is Newfoundland Power's customers who respond to price signals.

Reference: Pre-filed Supplementary Evidence, Brickhill, p. 6, lines 18-19
Transcript, November 26, 2001, p. 34, lines 58-73

Mr. Brickhill further explains:

"However, so long as the rate design used by Newfoundland Power to bill its customers reflects the proper recovery of demand, energy, and customer components of the total costs of service of Newfoundland Power, including its purchases from Hydro, there will not be an adverse impact on the load pattern, i.e., a wasteful use of demand caused by Hydro's energy-only rate for service to Newfoundland Power."

Reference: Supplementary Evidence, Brickhill, p. 9, lines 1-6

Newfoundland Power offers demand energy rates that are reasonably based on costs to its general service customers with demands of 10 kW or greater and in effect sends customers the correct price signal.

Reference: Pre-filed Supplementary Evidence, Brockman, p. 5, lines 1-2
Pre-filed Supplementary Evidence, Brickhill, p. 9, lines 1-5

The use of the energy only rate has not resulted in demand growth; Newfoundland Power's actual peak demands have not increased in the last decade and there is no evidence that a demand energy rate would change the rate design or demand growth of Newfoundland Power's customers.

Reference: Pre-filed Supplementary Evidence, Brockman, p. 12, lines 2-4
Transcript, November 19, 2001, p. 18, lines 4-27
Transcript, November 26, 2001, p. 35 lines 16-35
1st Supplementary Evidence, Brockman, p. 15, lines 19-20

In fact, the implementation of a demand energy rate may result in the wrong pricing signal being sent to Newfoundland Power. It could modify its production schedule, shift costs to other customers and result in a less than optimal use of resources.

Reference: Pre-filed Supplementary Evidence, Brickhill, p. 9, lines 8-26
Transcript, November 20, 2001, p. 24, lines 67 to p. 25 line 7

The proposed energy-only rate paid by Newfoundland Power covers marginal costs in the test year. The energy component of the Industrial rate does not cover marginal

costs in the test year. The rate structure for the Industrial Customers is not a concern as long as the load variation component exists in the Rate Stabilization Plan.

Reference: 1st Supplementary Evidence, Brickhill, p. 4, lines 14-31

The evidence before the Board supports the following conclusions in favour of maintaining the existing rate structure:

1. The current energy-only rate is based on the cost of service study and recovers all costs from Newfoundland Power;
2. The current energy-only rate structure, in conjunction with the rate stabilization plan, allows a more precise matching of revenue with costs; and
3. The energy-only rate reflects the marginal cost of providing service.

Reference: Pre-filed 1st Supplementary Evidence, Brockman, p. 4, lines 1-4
Transcript, November 19, 2001, p. 17, lines 39-68
Transcript, November 20, 2001, p. 23, lines 9-43
Transcript, November 26, 2001, p. 33, lines 5-39
Transcript, November 27, 2001, p. 23, lines 21- 23
Pre-filed Supplementary Evidence, Brickhill, p. 8, lines 12-31

Both companies have agreed that the current energy-only rate structure, when combined with the RSP mechanism, continues to be an appropriate rate form.

The existing rate structure meets the 3 primary criteria of a desired rate structure identified by Bonbright as follows:

1. Providing the required revenues;
2. The fair-cost apportionment objective; and
3. The optimum use or consumer rationing objective.

Reference: CA-181, pp. 17 – 18

G.4 Interruptible “B” vs. Generation Credit Costing

Hydro supplies electricity to Newfoundland Power without the benefit of a specific contract negotiated for a particular term of years. Hydro, however, supplies power to its Industrial Customers under the terms of individual contracts negotiated with each of these customers. Historically, the terms of these contracts have not been uniform. In this Application, Hydro proposes a uniform contract for its Industrial Customers.

Reference: Pre-filed Evidence, Osmond, p. 10, lines 18-20

One of the provisions of the standard Industrial Customer contract addresses Hydro’s ability to interrupt the service it otherwise provides to the customer. In general, this right to interrupt is subject to seven specific terms. For this right (whether or not the right is used), Abitibi Stephenville is paid the annual sum of \$1.3 million.

Reference: Transcript, January 10, 2002, p. 5, line 2 to p. 6, line 37

The Interruptible “B” credit was negotiated between Abitibi Stephenville and Hydro and became effective December 1, 1993. The basis for the level of the Interruptible credit was related to the benefit of deferring a gas turbine. This Interruptible “B” credit is

treated in the cost of service study as a production demand cost with the costs allocated to each class of service.

Reference: NP-133
Exhibit JAB-1, Rev. 2, p. 94 of 94

In comparison, peak demands for Newfoundland Power in the cost of service study are reduced by the amount of generation that Newfoundland Power makes available to Hydro on request. The amount of the demand reduction is referred to as the generation credit. Therefore, the peak demands for Newfoundland Power in the cost of service study make the assumption that Newfoundland Power runs all its available generation to minimize its peak. This is no different than the peak demands in the cost of service study for Abitibi Grand Falls equaling their total demand requirements net of their generation.

Reference: NP-125
NP-126

Hydro having the dispatch option on Newfoundland Power's generation facilities results in optimal utilization of both companies' generation facilities.

Reference: Transcript, November 26, 2001, p. 36, lines 44-64

Mr. Osler contends the difference in treatment of the generation made available by Newfoundland Power and the interruptible load is not appropriate.

Reference: 1st Supplemental Evidence, Osler, p. 18, lines 11-23

This Interruptible “B” credit is treated in the cost of service study as a production demand cost with the costs allocated to each class of service. If the generation credit was treated in the same way in the cost of service study, the vast majority of the cost would be charged to Newfoundland Power. Mr. Brockman testified this approach would effectively be unfair, as it would amount to Newfoundland Power paying Hydro for Newfoundland Power’s generation.

Reference: Transcript, December 4, 2001, p. 6, lines 40-68

Mr. Brockman and Mr. Brickhill agree that Hydro’s treatment of the generation credit and the Interruptible ‘B’ credit is fair to each party.

Reference: Transcript, December 4, 2001, p. 35, lines 40-43
Transcript, November 26, 2001, p. 37, lines 56-67

No alternate proposal on dealing with the Interruptible “B” credit vs. the generation credit has been put before the Board in this proceeding by Mr. Osler on behalf of the Industrial Customers.

G.5 Conclusion

?? Newfoundland Power submits a multiple peak allocator using 4 months is most appropriate when allocating production demand costs on the Island Interconnected System because it more fully reflects the LOLH planning

methodology that Hydro uses in determining generating plant additions.

?? **Newfoundland Power submits the existing rate structure between Hydro and Newfoundland Power remains appropriate in the current circumstances.**

?? **Newfoundland Power submits that no justification has been shown for the Board to alter the current treatment of the Newfoundland Power generation credit in Hydro's cost of service.** The Interruptible "B" credit available to Abitibi Stephenville is significantly different than the generation credit historically provided to Newfoundland Power in Hydro's cost of service.

H. REGULATORY REPORTING

H.1 Regulatory Reporting

Hydro is a corporation which undertakes both regulated and significant unregulated activities. Cost-effective regulatory control of Hydro over the long term requires transparent reporting of Hydro's results of regulated operations.

In the evidence in support of its Application, Hydro drew the distinction between its regulated and non-regulated business at numerous points (see, for example, Pre-filed Evidence, Hall, p. 2, lines 21-24). Nevertheless, it became somewhat confusing during the RFI stage and during the hearing itself to determine precisely what was and was not regulated. For example, Newfoundland Power's request for a reconciliation between Hydro's revenue requirement of \$322.3 million as shown in Schedule 1 to the Pre-filed Evidence of Mr. Roberts and the revenue requirements of \$318.8 million, \$319.9 million and \$317.5 million shown elsewhere in the Application resulted in clarification of certain impacts of non-regulated revenue on revenue requirement. During the hearing, it was acknowledged that clearer definition and segregation was possible.

Reference: Transcript, November 26, 2001, p.9, lines 56-68
NP-1

By creating a transparent regime for regulatory reporting, the Board ensures that it has the means to regulate Hydro on a cost effective basis. In addition, such an order will simplify future hearings.

Given that this is Hydro's first general rate application as a fully regulated public utility, it is appropriate that the Board's Order address issues of regulatory reporting.

Reference: Pre-filed Evidence, Browne, pp. 8 *et seq.*
Transcript, November 14, 2001, pp. 31 *et seq.*
Transcript, November 19, 2001, pp. 21 *et seq.*
Transcript, January 8, 2002, pp. 22 *et seq.*

H.2 Conclusion

?? The Board should order Hydro to maintain separate accounting records and produce separate financial results for its regulated operations.

?? The Board should order as part of such reporting, that Hydro file for the Board's review a clear definition of what is, and what is not, included in regulated operations.

?? The Board should order Hydro to file a policy on accounting for intercorporate transactions which applies to all related party transactions.

I. CONCLUSION

Hydro's Application seeks a total of \$17.4 million in additional revenue in 2002 and proposes that approximately \$12.8 million of this be recovered from Newfoundland Power's customers. This amounts to a consumer rate increase of 3.5%. Hydro also projects that the operation of the Rate Stabilization Plan will result in Newfoundland Power's customers bearing a further rate increase of 3.4% on July 1, 2002. **The total retail consumer rate increase proposed by Hydro for 2002 approximates 7%.**

This section of Newfoundland Power's Argument will provide the Board with an overview of how Hydro's proposed rate increase can be reduced.

Fuel

Hydro's Application proposes to embed a \$20/bbl. 2002 purchase price for fuel in base rates. This is a 60% increase over current base rate recovery. In addition, retail consumers will experience an increase in rates of 3.4% on July 1, 2002 through the Rate Stabilization Plan. This increase is principally related to the historic cost of No. 6 fuel. The total annual improvement in Hydro's fuel cost recovery will be approximately \$40 million after July 1, 2002.

Hydro's Application does not account appropriately for expected hydraulic production in 2002. Nor does the Application reflect a reasonable estimate of production efficiency at Holyrood. **Adjustments to Hydro's 2002 forecasts of hydraulic production and**

Holyrood fuel efficiency can reduce Hydro's 2002 revenue requirements from customers by approximately \$7.9 million a year.

Other Costs

Hydro proposes to spend \$99.3 million in operating costs in 2002. This represents a 19% increase in Hydro's operating costs since 1997. Hydro is required by the *Electrical Power Control Act, 1994* to efficiently manage its operations. Significant improvement can be made here. **Newfoundland Power submits that Hydro's controllable operating costs can be reduced by approximately \$5.6 million from its current forecast.**

Interest

Hydro proposes to spend approximately \$92 million in interest in 2002. **Newfoundland Power's submits that Hydro's 2002 interest expense can be reduced by over \$2.3 million for ratemaking purposes.** This would properly reflect Hydro's stated goal of achieving a 80/20 debt equity ratio for its regulated operations.

Capital Expenditures

Hydro's capital expenditures for 2002 are forecast to be \$41 million. It is Newfoundland Power's primary submission in this area that Hydro's cost justification for its more significant expenditures can and should improve.

The Rate Stabilization Plan

Newfoundland Power submits that this is not the time to consider eliminating the Rate Stabilization Plan.

The Retail Rate Stabilization Plan will have a balance due from consumers of approximately \$60.4 million as of year-end 2001. This balance has accumulated over a number of years and Newfoundland Power submits that a moderated and gradual approach to reducing it is appropriate. The operation of the Rate Stabilization Plan has been publicly reviewed by the Board only once in the past 10 years. Newfoundland Power is submitting that more frequent regulatory review is necessary given the potential consumer rate impacts of the current balance.

Rural Deficit

Hydro is proposing Newfoundland Power's customers pay approximately \$27.6 million of the \$31.7 million necessary to subsidize service provided by Hydro in rural portions of the Province. **Newfoundland Power submits that Hydro should eliminate the preferential rates it charges to governments and allocate excess recoveries over cost in its operations to reduce this deficit. These two items would reduce the rural deficit by approximately \$5.8 million.** Hydro should also report on an ongoing basis to the Board on its progress in managing its rural operations to ensure that the subsidy required of Newfoundland Power's customers is as low as it reasonably can be.

Summary

The Hydro rate increase originally proposed for January 1, 2002 is not justified. By adopting the submissions of Newfoundland Power, the Board would limit the total 2002 increase in retail consumer rates to the 3.4% Retail Rate Stabilization Plan adjustment on July 1, 2002.

RESPECTFULLY SUBMITTED

Gillian Butler, Q.C. and Peter Alteen
Counsel to Newfoundland Power Inc.
55 Kenmount Road
St. John's, NF A1B 3P6