

FINAL ARGUMENT



**An application to the
Board of Commissioners of Public Utilities**

Proposed Power Rates
To be charged by
Newfoundland & Labrador Hydro
To
Newfoundland Power,
Island Industrial Customers and
Rural Customers

January 2002





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1 **INTRODUCTION**

2
3 On May 31, 2001, Newfoundland and Labrador Hydro (“Hydro”) filed an
4 Application (the “Application”) under the *Public Utilities Act*, R.S.N. 1990, c. P-47,
5 seeking approval of the following:
6

- 7 1. Under Section 70 of the Act, changes in the rates to be charged for the
8 supply of power and energy to its Retail Customer, Newfoundland
9 Power (“NP”), its Rural Customers and its Industrial Customers, to be
10 effective January 1, 2002;
11
12 2. Under Section 71 of the Act, the Rules and Regulations applicable to
13 the supply of electricity to Rural Customers;
14
15 3. Under Section 71 of the Act, the contracts setting out the terms and
16 conditions applicable to the supply of electricity to Island Industrial
17 Customers; and
18
19 4. Under Section 41 of the Act, its proposed 2002 Capital Budget.
20

21 **Legislative Framework**

22
23 The Application was the first filed by Hydro since legislative amendments
24 became effective in January, 1996 which made Hydro fully subject to the
25 jurisdiction of the Board. Hydro is now a regulated public utility under the *Public*
26 *Utilities Act* and is subject to the provisions of the *Electrical Power Control Act*,
27 1994, S.N. 1994, E-5.1 (“EPCA”). Prior to 1996, the Board’s jurisdiction with
28 respect to Hydro was limited to making recommendations to the Lieutenant
29 Governor-in-Council following a referral on rates to be charged to Hydro’s Retail
30 Customer and its Rural Customers.

1 The principal amendments to the *Hydro Corporation Act*, R.S.N. 1990 c. H-16,
2 and the EPCA relevant for this point are as follows:

- 3
4 1. Section 21 of the *Hydro Corporation Act* was repealed. This section
5 had stated that, notwithstanding anything to the contrary contained in
6 the *Public Utilities Act*, the Board had no jurisdiction over Hydro.
7
- 8 2. Section 17 of the *Hydro Corporation Act* relating to expropriation was
9 repealed and replaced with a section that contained provisions relating
10 to such matters as Hydro's depreciation policies, the Rate Stabilization
11 Plan (the "RSP"), the rate base for Hydro under the *Public Utilities Act*,
12 foreign exchange losses, etc.
13
- 14 3. Section 3 (1) (c) (ii) of the *The Electrical Power Control Act*, R.S.N.
15 1990 c. E-5, which had provided that Hydro was to recover its forecast
16 cost for the supply of power provided by it and "a margin of profit
17 sufficient to achieve and maintain a sound financial position so that it is
18 able to achieve and maintain a sound credit rating in the financial
19 markets of the world" was repealed.
20
- 21 4. Section 3 (a) (iii) of the EPCA was proclaimed in force which provides
22 that Hydro is now entitled to earn "a just and reasonable return as
23 construed under the *Public Utilities Act* so that it is able to achieve and
24 maintain a sound credit rating in the financial markets of the world".
25 Under section 80 of the *Public Utilities Act*, Hydro, like any other public
26 utility, is now entitled to earn a "just and reasonable return" as
27 determined by the Board on the rate base as fixed and determined by
28 the Board".
29

30 The response to NP-75 (a) sets out all the legislative amendments that were
31 made in 1996 and is attached as Schedule "A" for ease of reference.

1 The effect of the amendments outlined above, and in Schedule “A”, among other
2 things, is to make Hydro subject to the same provisions of the *Public Utilities Act*
3 and the EPCA as the other electrical utility in the Province, NP. These
4 amendments, taken together, reflect the view expressed by Hydro throughout the
5 hearing that it is now intended to operate as a fully regulated utility, similar to an
6 investor-owned utility.

7
8
9 **Significant Events Before the Board Since Last Rate Referral**

10
11 Hydro’s last referral to the Board with respect to rates charged NP and Rural
12 Customers took place in 1991 under *The Electrical Power Control Act*, since
13 repealed. The Board in its Report dated April 13, 1992, (the “1992 Report”)
14 recommended that the rates to be charged to its retail customer, NP, continue to
15 be 45.31 mills per kWh. Other recommendations were made as well. All
16 recommendations set out in this report were accepted by the Lieutenant
17 Governor-in-Council, except those with respect to rates charged Isolated Rural
18 Customers for consumption in excess of 700 kWh per month and preferential
19 rates charged to certain Rural Customers.

20
21 While this is Hydro’s first General Rate Application since the 1992 Report, other
22 significant matters have been addressed by the Board since then which are
23 relevant for the current Application as follows:

- 24
25 1. On June 26, 1992, Hydro referred to the Board a proposed cost of
26 service methodology, and in its report dated February 13, 1993, (the
27 “1993 Report”) the Board made a number of recommendations
28 concerning the cost of service methodology, including the
29 recommended methodology to be used by Hydro in its next rate
30 application. Hydro has adopted the recommendations in the 1993
31 Report as the basis for its current Application.

1 2. On April 27, 1993, the Lieutenant Governor-in-Council referred to the
 2 Board under Section 12 of the then EPCA , the issue of rates to be
 3 charged Rural Customers. The Board issued a first report dated
 4 October 10, 1995 (the “1995 Report”) which was subsequently revised
 5 and a separate report issued July 29, 1996, (the “1996 Report”) setting
 6 out a number of recommendations on the policies to be used in setting
 7 rates to be charged Rural Customers. These recommendations were
 8 considered by Hydro in filing the current Application.

9
 10 3. On January 31, 1996, the Lieutenant Governor-in-Council, under
 11 Section 5 of the EPCA referred to the Board the issue of the rates to
 12 be paid by Rural Customers in the area from L’Anse au Clair to Red
 13 Bay upon the completion of the transmission line connecting this area
 14 with the Lac Robertson Hydroelectric Project in Quebec. The Board
 15 issued a report dated July 12, 1996, which was subsequently accepted
 16 by the Lieutenant Governor-in-Council, which recommended that the
 17 rates to be charged these customers be the rates charged by Hydro to
 18 its Rural Island Interconnected Customers. This recommendation was
 19 incorporated by Hydro in this current Application.

20
 21 4. By Order No. P.U. 12 (1996-1997) dated March 4, 1997, the Board
 22 ordered that the rates charged NP and Rural Customers be adjusted to
 23 reflect savings arising from the implementation of the Value Added
 24 Tax. By Order No. P.U. 20 (1997-1998, dated March 5, 1998) the
 25 Board ordered the rates charged Island Industrial Customers be
 26 adjusted as well to reflect savings arising from the implementation of
 27 this tax.

28
 29 5. On November 19, 1999, Hydro applied to the Board for an interim
 30 order to reduce the rates charged its Island Industrial Customers to
 31 reflect the provisions in the EPCA on the elimination from their rates of

1 the portion of the subsidy associated with serving Rural Customers.
2 Order No. P.U. 23 (1999-2000), approved interim rates for Island
3 Industrial Customers until November 30, 2000. Subsequently, Order
4 No. P.U. 25 (2000-2001) extended the interim rates until December 31,
5 2001 and Order No. P.U. 30 (2001-2002) approved such interim rates,
6 until such time as the Board issues a final Order arising from this
7 current Application.

- 8
- 9 6. The Board has issued orders approving annual capital budgets of
10 Hydro filed with the Board since Hydro became fully regulated, as
11 required by Section 41 of the *Public Utilities Act*.

12

REVENUE REQUIREMENT

1
2
3 Hydro's 2002 revenue requirement as of October 31, 2001, as shown on
4 Schedule 1A to the Supplementary Evidence of J. C. Roberts, dated October 31,
5 2001 ("Schedule 1A") was \$323.3 million, including the IOCC revenue
6 adjustment. The regulated revenue requirement is then shown on Exhibit JAB-1,
7 (Rev 2) p. 1, attached to the 3rd Supplementary Evidence of J. Brickhill, dated
8 October 31, 2001, as \$320.7 million. The proposed revenue requirement for
9 2002 is composed of the following major categories of costs: depreciation, fuel,
10 power purchased, other costs (generally referred to as controllable costs),
11 interest and margin or return on equity. Non-regulatory costs incurred by Hydro
12 have been excluded from the determination of the revenue requirement
13 submitted for approval. Similarly, revenue received from unregulated activities
14 has been excluded from the regulated revenue requirement of \$320.7 million.
15 Each major category of cost will be reviewed in this section of the Argument.

Regulated/Unregulated Revenues and Costs

16
17
18
19
20 The first issue to be addressed in dealing with the proposed 2002 regulated
21 revenue requirement is the consideration of how it is determined in light of the
22 fact Hydro has both regulated and unregulated activities.

23
24 Hydro's regulated activities have been defined and clarified at various times
25 throughout the hearing. The pre-filed evidence of John Roberts stated that the
26 proposed revenue requirement included all components on Schedule 1 attached
27 to this evidence but excluded non-regulatory costs (donations and costs related
28 to Muskrat Falls), the effect of export sales by Hydro to Hydro-Quebec and
29 Hydro's investments in subsidiary companies (p. 1, lines 26-28 and p. 2,
30 lines 1-2). It went on to say that because the cost of service allocates costs to a
31 non-regulated Labrador Industrial Customer (the Iron Ore Company of Canada),

1 the projected margin from this customer was included in the revenue requirement
2 calculation. (p. 2, lines 2-4).

3

4 The response to IC-259 (a) lists the non-regulated activities of Hydro:
5 investments in subsidiary companies, sales of power and energy to Hydro-
6 Quebec, sales of power and energy to IOCC, donations and costs related to
7 Muskrat Falls in Labrador. The rationale for excluding the costs and revenues
8 associated with these activities is set out in the response to IC-259 (b). Also
9 excluded from regulated activities is the Labrador Hydro Project.

10

11 Mr. Roberts further clarified this issue in cross-examination by counsel for NP
12 (Transcript, November 14, pp. 31-34). He explained that the subsidiary
13 companies whose costs and revenues are excluded are: Churchill Falls
14 (Labrador) Corporation Limited; Twin Falls Power Corporation Limited; Gull
15 Island Power Company Limited; and Lower Churchill Development Company
16 Limited. He also explained the exclusion from regulated activities of the impact
17 of sales of power and energy to Hydro-Quebec (Transcript, November 14, p. 31)
18 and the exclusion of donations and costs associated with Muskrat Falls
19 (Transcript, November 14, p. 32, lines 4-9).

20

21 Mr. John Browne, on behalf of NP, suggested in his evidence (pre-filed, p. 13,
22 lines 8-10; Transcript, November 1, p. 34, lines 47-51) that it would be
23 appropriate for Hydro to submit a clear written definition of what constitutes its
24 regulated operations. Hydro submits that it has, in fact, submitted a definition at
25 this hearing as outlined above. The fact that what constitutes Hydro's regulated
26 operations are understood was recognized by Mr. Brushett, the Board's financial
27 consultant, in cross-examination by NP when he stated:

28

29 *"I think the Board probably already has a pretty clear understanding*
30 *of what the non-regulated activities of Hydro are ...*

31

1 *I think there certainly is an understanding of what is regulated and*
2 *not regulated”)*

3 (Transcript, January 8, p. 22, line 94 and p. 23, lines 1-9)

4

5 Mr. Browne went further and recommended that Hydro maintain separate
6 accounting records and produce separate financial reports for its regulated
7 operations (pre-filed evidence, p. 13, lines 5-7; Transcript, November 1, p. 34,
8 lines 37-42). Hydro submits that this is not necessary as the non-regulated
9 revenues and expenses can be clearly identified and tracked within Hydro’s
10 existing financial system. Mr. Roberts explained how this occurs through the
11 existing system in reference to donations (Transcript, November 14, p. 33, lines
12 2-11). Also, Mr. Osmond explained how the costs can be segregated within the
13 existing system (Transcript, November 19, p. 22, lines 47-54). Mr. Brushett in his
14 evidence explained that Hydro can identify and segregate these costs now and it
15 is unnecessary to have separate records. (Transcript, January 8, p. 22, lines 37-
16 57).

17

18

19 **Depreciation**

20

21 The first major category of costs in the revenue requirement listed on Schedule
22 1A is depreciation which for 2002 is forecast to be \$31.7 million. This amount
23 was calculated in accordance with Hydro’s current depreciation policies and the
24 changes to those policies proposed in the Application as described in this
25 section.

26

27 A Depreciation Policy Study was completed for Hydro by KPMG in 1986 and
28 formed part of Hydro’s 1989 Rate Referral. An update of this study was finalized
29 in 1998, again by KPMG. Copies of the 1986 and 1998 studies were filed in
30 response to NP-55. The major findings of the 1998 study which are proposed to
31 be adopted in this Application were as follows:

- 1 1. The sinking fund method of depreciation continues to be appropriate
2 for hydraulic generating plants, transmission lines and substations,
3 while the straight line method of depreciation continues to be
4 appropriate for thermal generating plants, vehicles, general plant and
5 telecontrol equipment.
6
 - 7 2. Certain approaches were recommended with respect to estimating and
8 accounting for the net salvage value of assets as outlined on pp. 10-11
9 of the pre-filed evidence of Mr. Roberts.
10
 - 11 3. The estimated service lives of capital assets were generally within the
12 ranges assigned by other electric utilities. However, the service lives
13 of passenger cars, snowmobiles and pickup trucks should be
14 extended. Engineering condition surveys were recommended to be
15 conducted for the thermal generating plants approaching the end of
16 their presently estimated service lives.
17
18 Condition surveys were completed as recommended by the 1998
19 KPMG Study. Hydro's internal engineering staff undertook the survey
20 and recommended that Holyrood Thermal Units 1 and 2 and the
21 Hardwoods and Stephenville Gas Turbines have an additional service
22 life of at least another twenty years.
23
 - 24 4. Hydro's current approach to depreciating prime assets is appropriate,
25 however, Hydro should consider coding its units of property in such a
26 manner that it will be easy to determine the total number of like units
27 and their total acquisition costs, by installation year, or in total.
28
- 29 Hydro is proposing that the recommendations made in the 1998 Study be
30 approved by the Board.

1 As well, Hydro undertook condition surveys of the transmission lines affected by
2 the Avalon upgrade of transmission lines to determine the impact, if any, the
3 upgrades had on the original estimated service lives of these transmission lines.
4 The recommendation of the surveys is that these transmission lines have revised
5 service lives of 50 years once the upgrade is completed. Hydro requests
6 approval of the extended service lives for these transmission lines commencing
7 in 2002.

8

9 The net changes in cost for 2002 arising from these changes in depreciation
10 policies for each of Hydro's customer classes are outlined in the response to IC-
11 29. As well, the impact of using the proposed changes in the depreciation
12 methodology is outlined in the response to NP-58, which shows a decrease in
13 depreciation expense of \$3.1 million, if the proposed changes are implemented.
14 Mr. Brushett in his evidence confirmed that the proposed changes in Hydro's
15 depreciation policies are reasonable and should be approved (Transcript,
16 January 9, p. 8, lines 62-66).

17

18

19 **Fuel**

20

21 The second major category of expense in the revenue requirement for 2002
22 listed on Schedule 1A is fuel which is forecast to be \$85 million (excluding the
23 RSP amount). This category is made up of a number of individual accounts, the
24 most significant of which are the cost of No. 6 fuel utilized at Holyrood and the
25 cost of diesel fuel. The amount included in the October 31, 2001 revenue
26 requirement for No. 6 fuel on Schedule 1A is \$104.2 million. This number was
27 subsequently revised in the second supplementary evidence of R. J. Henderson
28 dated December 12, 2001 to be approximately \$92.1 million (p. 2, line 10).

29

30 The forecast cost of No. 6 fuel for 2002 is dependent on the 2002 fuel price
31 forecast, the 2002 production forecast from the Holyrood Thermal Generating

1 Plant and the fuel conversion factor for the Holyrood Plant. The 2002 production
2 forecast from the Holyrood Plant is dependent on the 2002 forecast load and
3 forecast hydraulic production as the Holyrood thermal production meets the bulk
4 of the difference between the forecast load and forecast hydraulic production.

5
6
7 **No. 6 Fuel – Price**

8
9 The fuel oil price forecast used for 2002 for No. 6 fuel, (2.2% sulfur), used at the
10 Holyrood Plant is based on forecast prices provided by an external consultant.
11 Hydro retains the services of the PIRA Energy Group of New York, an
12 internationally recognized company, for its petroleum product market analysis
13 and price forecasting. To this forecast Hydro applies its forecast of exchange
14 rates. At the time of the original filing on May 31, 2001, the expected average
15 price for No. 6 fuel for 2002 was \$28.38 (Cdn.) per barrel (pre-filed evidence
16 R. J. Henderson, p. 13, Line 29). This was revised in the second supplementary
17 of R. J. Henderson dated December 12, 2001, to \$25.91 per barrel (Cdn.) (p. 1,
18 line 12). In his evidence of January 9, 2002, Mr. Henderson stated that the
19 January price forecast was “pretty much identical”, to what was filed on
20 December 12, 2001 (Transcript, January 9, 2002, p. 15, lines 47-53) and advised
21 that the price (not the forecast) as of January 7 was \$26.58 (Cdn.) (Transcript,
22 January 9, p. 15, lines 60-62).

23
24 Hydro proposes that the amount of \$20.00 (Cdn.) per barrel be used for No. 6
25 fuel in the base rates to be set in this proceeding with the difference between the
26 \$20.00 included in base rates and the amounts actually paid for No. 6 fuel being
27 accounted for through the RSP. No party has suggested that a lower price be
28 used for No. 6 fuel in the base rates. Hydro submits that all of the evidence
29 clearly establishes that the price to be used in base rates should be no less than
30 \$20.00 (Cdn.) per barrel.

1 There have been suggestions throughout the hearing that the price should be set
2 closer to the forecast price. This, of course, would result in higher base rate
3 changes for all customers and lower RSP adjustments than forecast by Hydro.
4 Hydro's pre-filed evidence indicated that if Hydro were to use the price projected
5 at the time of filing, May 31, 2001, of approximately \$28.00 per barrel for No. 6
6 fuel, the general rate increase required for NP on January 1, 2002, would have
7 been 16%, rather than the 6.7% originally requested that results if \$20.00 per
8 barrel is used. (Pre-filed evidence, D. Osmond, pp. 2-3). During the hearing,
9 additional information was provided on the impact on base rates and the RSP
10 balances of using different forecast prices than \$20.00 (Cdn.) for No. 6 fuel. The
11 response to PUB-82 indicates, using the most recent data, what the base rates
12 and RSP balances would be in 2002 using \$20, \$22, \$24 and \$26, respectively
13 (all in Cdn. \$) as the forecast price of No. 6 fuel.

14

15 Hydro, in finalizing this Argument, considered the impact of including more than
16 \$20.00 (Cdn.) in determining the No. 6 fuel costs in the base rates for 2002 and
17 concluded that, in light of the impact it had on base rate changes, \$20.00 (Cdn.)
18 was still appropriate, with the difference, between the \$20.00 and actual prices
19 paid being accounted for through the RSP. This, though, is a matter of judgment
20 and Hydro leaves to the Board the issue of whether the price used in base rates
21 should be higher than \$20.00 (Cdn.) per barrel. As noted above, no party
22 suggested at the hearing it should be lower.

23

24 Hydro submits that an increase from the current \$12.50 Canadian per barrel in
25 the current base rate is required to reflect the increases in No. 6 fuel costs that
26 have occurred since the original price of \$12.50 was set in 1992. Hydro further
27 submits it is reasonable to use \$20.00 (Cdn.) per barrel as proposed by Hydro.

28

1 **Forecast Holyrood Thermal Generation**

2

3 The second factor which influences the cost of No. 6 fuel in any year is the
4 amount of Holyrood thermal generation. The forecast for thermal production is
5 determined by subtracting the forecast hydraulic generation available to meet the
6 projected load and power purchases from the forecast load. To forecast the
7 hydraulic generation in the test year, Hydro used the long term average hydraulic
8 production. This was one of the contentious issues during the hearing, despite
9 the fact that Hydro's proposal to determine hydraulic generation was the same as
10 used in all previous rate referrals by Hydro.

11

12 As explained by Mr. Henderson (Transcript, October 9, p. 13, lines 62-63), Hydro
13 used a simple average of all the available years of hydrological records to
14 determine the forecast hydraulic generation in 2002, the test year. For example,
15 for the Bay d'Espoir Plant, records are available from 1950 with the plant having
16 gone in-service first in 1967. Mr. Henderson explained in his evidence the
17 reasons for the use of these records:

18

19 *"Again, because it was the length of record we had and what we*
20 *are trying to do here is come up with the long-term average energy*
21 *producing capability of the facility and so we used the available*
22 *record that we had to come up with that average because weather*
23 *patterns and all of that, like I said earlier, I don't know how a*
24 *change over time, generally speaking, the longer the records you*
25 *have, the better indication you have of what the long-term*
26 *prospects are of the plant for in terms of average energy capability*
27 *so we have gone back to the longest record that we have that is*
28 *reliable."*

29

(Transcript, October 9, p. 22, lines 85-95)

30

31 Newfoundland Hydro surveyed other utilities that have a significant percentage of
32 hydro generation to determine their practices regarding the use of historic
33 records and Mr. Henderson summarized the survey in his evidence:

34

35 *"this is our, I guess, historic precedent of the way we did it, and in*
36 *other jurisdictions, they use their methods, but one of the*

1 *consistencies that we found in going through the survey, was that*
2 *everybody used their full hydraulic record. They did not go... and*
3 *this is where really, why we did the survey, was to find out whether*
4 *anybody was making changes to 30-year rolling averages, and that*
5 *was why we did the survey, because we thought it a very strange*
6 *thing to be cutting it off for a 30-year rolling average, and when we*
7 *did the survey we found everybody in, no matter what method they*
8 *used, they used their full reliable record to determine their expected*
9 *production. They may use it in different manners, they may use it*
10 *in simulations, they may use a number of different tools that are*
11 *available to people, but generally... well in all cases, not just*
12 *generally speaking, in all cases, they were using their full reliable*
13 *record and not making any arbitrary cut-off to say the more recent*
14 *years are more relevant to the forecast.”*

15 (Transcript, October 9, p. 28, lines 66-83)

16
17
18 Further, on p. 29 of the October 9 transcript, Mr. Henderson stated:

19
20
21 *“What we did do is we asked their people, their engineering people*
22 *who are involved with this type of work, whether they used their full*
23 *record in developing their forecast and they do. They don’t go and*
24 *say, you know, the 1950’s and 1960’s aren’t relevant. They will use*
25 *whatever they have available, and in some cases that may be only*
26 *25-years of reliable record for their purposes and in other cases*
27 *that may be 70 or 80-years, and it varies from plant to plant, and*
28 *facility to facility.”*

29 (lines 4-12)

30
31
32 Much was made as to whether the utilities surveyed had been asked about the
33 length of the hydraulic record used for rate setting purposes. However,
34 Mr. Henderson testified that the utilities surveyed had been asked what purposes
35 they used the full historic record for and none had identified exclusions e.g. not
36 used for rate purposes. He stated:

37
38 *“We asked these people what the averages are used for. They*
39 *said that these averages are used for financial planning, rate-*
40 *setting purposes, a whole range of things, okay ...”*

41 (Transcript October 10, p. 11, lines 59-62)

1 Mr. Brockman, on behalf of NP raised the issue of the appropriate length of the
2 hydrological record to use and in his pre-filed evidence suggested a rolling 30-
3 year moving average (Supplementary evidence, September, 2001, p. 2, line 19).
4 In his second Supplementary Evidence, dated November 2001, Mr. Brockman
5 questioned Hydro's analysis of the survey results and said he could find no
6 Canadian standard for the number of years or the methodology used for
7 forecasting hydraulic production for rate making purposes (p. 4, lines 3-7).
8 During cross-examination, Mr. Brockman confirmed that he was unaware of any
9 utility that used a 30-year rolling average as proposed by him in his pre-filed
10 evidence (Transcript, December 3, p. 38, lines 4-5).

11
12 The impact of using the shorter period of 30-years would increase the average
13 hydraulic production forecast and consequently reduce the forecast thermal
14 generation for 2002. As indicated in the response to NP-141, the impact in
15 dollars is approximately \$3.3 million per hundred gigawatthour variance from
16 forecast. This would reduce the revenue requirement in the test year. However,
17 it should be noted that any difference between actual production and the forecast
18 goes into the RSP and would be recovered over time, with the end result being
19 that the customers will pay for actual production used.

20
21 The real question, therefore, is what is the most reasonable forecast of hydraulic
22 generation that should be used for setting base rates. Hydro submits that, as in
23 all past rate referrals, the best forecast of what can be produced on average from
24 Hydro's facilities is that determined from the longest data record available, unless
25 there is clear evidence that the data is unreliable or that the climate in
26 Newfoundland is changing. No evidence has been submitted by any party to
27 allow the Board to conclude the data used is unreliable or that the climate is
28 changing.

29
30 Hydro states that having considered all issues raised by the parties throughout
31 the hearing, it is still of the view that the best estimate to use for the forecast of

1 hydraulic production is that determined from the use of all available historic
2 records as used in the past by Hydro and as submitted in the current Application.
3 Hydro would point out that, from a financial perspective, it is revenue neutral with
4 respect to the actual time period or forecast used because of the operation of the
5 RSP. It is taking the position that the full historic record should be used to
6 determine hydraulic production because it believes it is the most reasonable
7 approach and reflects historic experience. Hydro would point out that the
8 adoption of a shorter period of hydrological data to determine hydraulic
9 production than recommended by Hydro could impact the RSP balances as
10 projected in PUB-81. This does need to be considered when the Board is
11 determining the appropriate level of the cap on the retail portion of the RSP.

12

13

14 **Efficiency Factor- No. 6 Fuel**

15

16 Another factor which affects the amount of thermal production to be used for the
17 2002 test year, is the efficiency factor or the fuel conversion factor for a barrel of
18 No. 6 fuel oil. In 1992, the conversion factor for a barrel of No. 6 fuel oil burned
19 at the Holyrood Thermal Plant was set at 605 kWh/bbl. Hydro is proposing that
20 this be increased for 2002 to 610 kWh/bbl, as stated in the pre-filed evidence of
21 R.J. Henderson (p. 13, lines 8-10). The increase is proposed by Hydro to reflect
22 efficiency improvements experienced since an on-line efficiency monitoring
23 system was placed in operation at the Holyrood Plant in 1995, which is described
24 on p. 5, lines 1-4 of the pre-filed evidence of Mr. Henderson.

25

26 In cross-examination, Mr. Henderson explained the basis for the fuel conversion
27 factor for No. 6 fuel as follows:

28

29 *"The conversion factor is a variable, I guess, that would depend, if*
30 *you get the exact production that you forecast, it will be higher,*
31 *okay. I grant you that, but what we do with the conversion factor is*
32 *try again to come up with an average that will be applicable over a*
33 *wide range of operating levels at Holyrood. So if you take a*

1 *particular year with a high production level, then you will get a*
2 *higher conversion factor, but then as you vary, pluses and minuses*
3 *around the average production here at Holyrood, production will go*
4 *up and down and what we're trying to do with this 610 kilowatthours*
5 *per barrel is try to come up with an average conversion factor that*
6 *would apply in those extremes and what happens is when you go,*
7 *you only can go so far up and you can go way down... you saw in*
8 *the previous page that went down to 570. So we're trying to strike*
9 *a balance that balances those, the resulting production at Holyrood*
10 *from wet and dry years so that you come up with an average*
11 *conversion factor for Holyrood, not one that is perfectly fitted to the*
12 *forecast year, because again this is a factor that goes into the Rate*
13 *Stabilization Plan that has, you know, pluses and minuses in it for*
14 *variances in hydrology."*

15 (Transcript, October 9, p. 34, lines 79-100).
16
17

18 Other parties have questioned whether 610 kWh/bbl is the most reasonable or
19 best-estimate of the fuel conversion factor to be used in the test year. Hydro
20 submits that it is. As noted above, it takes into account recent improvements in
21 efficiency control monitoring at the Holyrood Plant and recent experience. The
22 response to NP-51, which shows the actual fuel conversion achieved in the
23 period 1992 to 2000, shows an average conversion factor over this period of
24 605.7 kWh/bbl. If the average of 1996-2000 is used, the period since the
25 efficiency improvements have been implemented at Holyrood, the simple
26 average is 609.2 kWh/bbl. Hydro, therefore, submits that the fuel conversion
27 factor proposed by Hydro is a reasonable one to use on a go-forward basis.

28
29 In Mr. Brushett's supplementary evidence of December 13 on p. 3 the impact on
30 the 2002 revenue requirement of various conversion factors is shown. However,
31 this evidence did not address the potential variability in the conversion factor for
32 high hydraulic production and the resultant impact on Hydro's net income. The
33 analysis of different conversion factors must also address this and was
34 highlighted in the cross-examination of Mr. Brushett where he agreed that if a
35 year like 1999 repeats itself, Hydro could potentially have no net income.

36 (Transcript, January 8, 2002, pp. 15-16).

1 The response to NP-262 provides information with respect to the impact on
2 Hydro of changes in the fuel conversion factor. It states that a 2% reduction
3 would result in a conversion factor of 597.8 kWh/bbl which would result in a
4 reduction of Hydro's net income of approximately \$1.5 million. If 633 kWh/bbl
5 were used to set rates as referred to by Mr. Brushett on p. 3 of his December 13
6 evidence, and if Hydro were to experience the same type of year as in 1999,
7 when the conversion factor was 577 kWh/bbl, the resultant impact for Hydro
8 would be an 8.8% reduction in the conversion factor which results in a \$6.6
9 million reduction in Hydro's net income. It should be noted that the proposed
10 regulated return on equity for the 2002 test year is only \$5.6 million. (JAB
11 Schedule-1 (Rev 2) p. 1 of 94).

12

13 It can be seen from the above that the choice of the conversion factor for No. 6
14 fuel burnt at the Holyrood Plant can have a dramatic impact on Hydro's net
15 income and the RSP. In these circumstances, the most reasonable estimate of
16 what can be achieved over a period of time is what should be used for the
17 conversion factor. When rates are set, they are expected to remain in effect for
18 longer than one year. In these circumstances, when rates are set on a go-
19 forward basis, the conversion factor chosen should be representative of what can
20 be expected to be achieved based on experience over a reasonable period of
21 time. This was Hydro's position in all past referrals and it was accepted by the
22 Board in those referrals.

23

24 Hydro submits that the conversion factor of 610 kWh/bbl for No. 6 fuel oil is the
25 most reasonable one to use for the basis of setting rates commencing in 2002.

26

1 **Diesel Fuel**

2

3 The second largest component of the fuel expense category shown in
4 Schedule 1A is diesel fuel, which was, as of October 31, 2001, forecast to be
5 \$6.8 million in the test year. As with No. 6 fuel oil, the cost of diesel fuel is
6 determined by applying forecast fuel prices to the fuel quantity requirement. The
7 forecast price for diesel fuel prices is also based, like No. 6 fuel, on forecasts
8 provided by PIRA. The forecast was updated by R.J. Henderson (Second
9 Supplementary Evidence, December 12, 2001, p. 2) to reflect a current forecast
10 from PIRA. Due to the reduction in the forecast price of diesel fuel, the forecast
11 cost of diesel fuel for 2002 is decreased by \$300,000 (R.J. Henderson
12 Supplementary Evidence, p. 3, lines 2-3 and Transcript, January 9, p. 16, lines
13 51-56). It should be noted that the current estimate provided in the December
14 12, 2001 Supplementary Evidence of R. J. Henderson is the most current
15 estimate of diesel fuel expenses for 2002. It reflects fuel already purchased in
16 2001 and stored for the winter season at plants that will not receive fuel
17 deliveries until the spring of 2002.

18

19 No substantive issues were raised by any of the parties to the proceeding with
20 Hydro's forecast with respect to the diesel fuel price. Hydro submits, therefore,
21 that the Board approve the diesel fuel costs of \$6.5 million proposed by Hydro for
22 the 2002 test year.

23

24

25 **Power Purchased**

26

27 Power purchased is the third major category of expense listed on Schedule 1A
28 and it is forecast to be \$15.1 million for the 2002 test year. The arrangements for
29 the purchase of power and energy by Hydro are described in the original pre-filed
30 evidence of R.J. Henderson, pp. 5-6. In addition to the long-standing
31 arrangements with Corner Brook Pulp & Paper Limited and Abitibi-Consolidated

1 Inc., Grand Falls, described in Mr. Henderson's evidence, Hydro entered into
2 new arrangements since the last rate referral with two non-utility generators, the
3 Star Lake Hydro Partnership and Algonquin Power. Section 17(3)(c) of the
4 *Hydro Corporation Act* provides that all amounts paid by Hydro for this non-utility
5 generation are to be included within the expenses charged by Hydro to
6 customers.

7

8 Another major component of cost within the category of power purchased
9 pertains to the contract Hydro entered into in 1993 with Abitibi-Consolidated Inc.
10 (Stephenville). Under this contract Hydro has the right to interrupt up to 46 MW
11 of power during the winter peak period in exchange for which Abitibi
12 Consolidated Inc. receives an annual payment of \$1.3 million, plus additional
13 payments, if an interruption is made pursuant to the terms of the contract.

14

15 Also included in the category of power purchased, is the cost associated with the
16 purchase of secondary energy for the L'Anse au Loup system from the Hydro-
17 Quebec Lac Robertson plant and the cost of purchases from CF(L)Co for sales
18 by Hydro to customers in Labrador.

19

20 The purchase of power and energy from other suppliers to meet customers'
21 requirements is prudent and the associated costs are reasonable. No party at the
22 hearing has raised any issue on the appropriateness of these costs. Hydro,
23 therefore, submits that all the power purchased costs forecast for the test year
24 should be allowed.

25

26

27 **Interest**

28

29 The fourth major category of expense listed on Schedule 1A is interest which is
30 forecast to be \$91.8 million in 2002. Details have been provided throughout the
31 pre-filed evidence, through responses to information requests and through

1 examination of Hydro witnesses on the calculation of this interest expense for the
2 test year (see for example NP-87 (Revised)).

3

4 The only issue raised in the hearing by the parties relating to interest expense is
5 the treatment of the interest expense relating to the revenue from sales of
6 recalled energy to Hydro-Quebec. The evidence indicated that approximately
7 \$800,000 (\$964,000 as of the October 31st revision) is interest avoided by Hydro
8 related to recall revenue from the sale of this energy before the recall revenue is
9 paid to the Province. Interest is avoided because the availability of recall
10 revenue reduces the amount of money Hydro would otherwise have to borrow.
11 Recall revenue has been excluded from the determination of Hydro's revenue
12 requirement as it is revenue from a non-regulated activity (Transcript, November
13 19, 2001, p. 45, lines 80-90). As this recall revenue is excluded, Hydro's
14 regulated interest expense should be adjusted to include the amount which
15 Hydro avoids because of the recall revenue.

16

17 Grant Thornton in its 2001 Report reviewed the calculation of interest expense
18 and concluded that nothing had come to their attention to indicate interest costs
19 are unreasonable (p. 31). In cross-examination, Mr. Brushett confirmed that he
20 had reviewed the rationale for the increase in interest expense arising from an
21 adjustment for revenue from recall sales and found it appropriate. (Transcript,
22 January 8, p. 24, lines 20-26 and lines 36-43). Mr. Brushett recommended that
23 the Board approve this adjustment to interest expense (Transcript, January 8, p.
24 24, lines 47-55). Hydro submits that its 2002 forecast of interest expense should
25 be approved.

26

27 The only other issue with respect to interest expense arising during the hearing is
28 the treatment of the debt guarantee fee as part of the interest expense. The
29 Province guarantees Hydro's debt which allows Hydro to borrow at lower interest
30 rates than it could if it borrowed without such a guarantee. In exchange, Hydro

1 pays the Province a debt guarantee fee of 1% of its total outstanding borrowings
2 (see response to NP-77 for details of debt guarantee fee from 1992 to 2001).

3
4 The amount of the debt guarantee fee forecast for the 2002 test year is
5 approximately \$12 million (see, for example, response to NP-2, p. 2 of 2). The
6 provincial guarantee allows Hydro to access funds from the capital markets at
7 more attractive rates than it could achieve on its own, in virtually all market
8 conditions (see response to NP-74 and pre-filed evidence K. McShane, p. 20,
9 lines 27-28 and p. 21, lines 1-4).

10
11 The issue of the appropriateness of the fee and its inclusion as an operating
12 expense was dealt with by Ms. McShane in her pre-filed evidence at p. 26, where
13 it is stated:

14
15 *“The test for whether the guarantee fee is a legitimate component*
16 *of the cost of debt is whether the cost inclusive of the guarantee fee*
17 *is less than or equal to the cost at which the utility could raise debt*
18 *on the strength of its own financial parameters. At the forecast*
19 *utility capital structure, the cost of debt to Hydro, absent the*
20 *Provincial guarantee, would be more than 100 basis points higher*
21 *than the debt cost calculated with the guarantee fee.”*

22 (lines 26-32)

23
24 This topic was also pursued in cross-examination. For example, on October 30,
25 2001, Ms. McShane testified that the debt guarantee fee is a fee paid to the
26 Province in exchange for the fact that the province incurs a financial risk
27 associated with Hydro’s borrowings (Transcript, October 30, p. 5, lines 14-15).

28
29 None of the parties questioned the level of the guarantee fee or its treatment as
30 an expense. For example, counsel for NP stated that it took no issue with the
31 size of the fee in the current Application (Transcript, October 29, p. 17,
32 lines 26 -30). Also, Mr. John Browne, on behalf of NP stated upon cross-
33 examination that the issue with the fee wasn’t the issue of the fee for a service
34 but whether it should be considered as a factor in determining an appropriate

1 capital structure (Transcript, November 2, p. 15, lines 10-25). The issue raised
2 relating to a possible impact on the capital structure will be considered in the
3 section of this Argument on the appropriate capital structure for Hydro. As well,
4 counsel for Island Industrial Customers acknowledged it took no issue with the
5 size of the fee (Transcript, September 25, p. 32, lines 47-51). Dr. Kalymon, the
6 cost of capital expert called by the Consumer Advocate took no exception to the
7 size of the fee.

8
9 Hydro, therefore, submits, as was approved by the Board in the past, the debt
10 guarantee fee should be treated as a regulated expense. The fee was
11 introduced by the Province in 1989 and first considered by the Board in its 1992
12 Report, where on p. 53, the Board concluded that the debt guarantee fee should
13 be included as a recoverable expense of Hydro. Nothing has changed since this
14 1992 Report. Hydro submits that the evidence shows that the debt guarantee
15 fee is a reasonable fee paid for a service provided by the Province for which
16 Hydro receives a benefit. No party has taken issue with the fee or that it is a
17 regulated expense. Hydro, submits, that the debt guarantee fee should be
18 included as a recoverable expense in the 2002 test year.

19
20 Hydro includes certain foreign exchange losses in its calculation of interest
21 expense. Hydro had a Japanese Yen and a Swiss Franc Loan which, by June of
22 1997, had both been fully repaid with a total foreign exchange loss of \$96.3
23 million being realized (pre-filed evidence J.C. Roberts, p. 8, lines 19-23).

24
25 In its 1992 Report, the Board had recommended that Hydro commence recording
26 amortization of \$1 million per annum related to the exchange loss on the Swiss
27 Franc Loan. As of January 1, 2002, this amortization provision amounted to
28 \$10 million which, when netted against the total foreign exchange loss of
29 \$96.3 million, leaves a net amount of \$86.3 million. Hydro proposes that this loss
30 be amortized over a 40-year period as provided in Section 17(3)(e) of the *Hydro*

1 *Corporation Act*. The annual amortization proposed is \$2.16 million and is
2 included in the calculation of interest expenses for the test year.

3
4 Hydro submits that the amortization of the foreign exchange loss as proposed by
5 Hydro and as provided in Section 17(3)(e) of the *Hydro Corporation Act* be
6 approved by the Board. It should be noted that no party has raised any issue
7 with respect to this proposed treatment, nor has the Board's financial consultant,
8 Grant Thornton.

9

10 **Other Costs**

11

12 The three largest categories of expense in the 2002 revenue requirement are
13 fuel, interest and other costs. Fuel and interest have already been addressed
14 leaving "Other Costs" to be addressed now.

15

16 The category "Other Costs" includes all of those expense items that are generally
17 referred to as Hydro's controllable expenses and includes such items as salaries
18 and fringe benefits, system equipment maintenance, professional services,
19 travel, office supplies, transportation, etc. The components of this category and
20 the amount forecast for the 2002 test year of \$99.3 million is set out on Schedule
21 1A. Mr. Wells in his pre-filed evidence stated that this category of cost is
22 approximately 30% of Hydro's total annual costs, and 80% of this category
23 includes employee compensation and system equipment maintenance (pre-filed
24 evidence, p. 18, lines 4-6).

25

26 Hydro supplied detailed information on these categories of expenses throughout
27 its pre-filed evidence, in responses to information requests and during cross-
28 examination of a number of witnesses including, W. E. Wells, D.W. Reeves,
29 R. J. Henderson, J.C. Roberts, and D.W. Osmond. Mr. Wells in his pre-filed
30 evidence (pp. 18-20) outlined initiatives taken by Hydro to reduce costs and
31 improve efficiencies since 1992, including a 16% reduction in the permanent

1 complement (elimination of 159 positions, p. 18, lines 7-10); cost effective
2 interconnection of isolated diesel systems; implementation of an integrated suite
3 of software applications; changes in processes, etc. Mr. Reeves in his pre-filed
4 evidence (pp. 11-13) outlined specific initiatives in Rural Operations undertaken
5 to reduce costs, without impacting the reliability of service, including introduction
6 of diesel system representatives to do routine maintenance (p. 12) and cost
7 effective interconnection of isolated diesel plants. Additional detail was provided
8 by Mr. Reeves during cross-examination on such issues as changes in
9 purchasing practices (Transcript, October 4, pp. 5-6), and reductions in staffing of
10 42.5 full time equivalent positions (Transcript, October 1, p. 36, lines 88-91).

11

12 All of Hydro's expenses are subject to review each year by the Board's financial
13 consultants, Grant Thornton. In its 2000 report, at p. 11, Grant Thornton made
14 the following conclusion:

15

16 *"Based on the results of our procedures, nothing has come to our*
17 *attention to indicate that the operations and administration*
18 *expenses, fuels, power purchased and interest costs are imprudent*
19 *or unreasonable in relation to sales of power and energy."*

20

21

22 Later in this report, each major category of expense was reviewed with increases
23 or decreases identified and explained. For example, the salaries and fringe
24 benefits were reviewed from 1998 to 2000 and Grant Thornton, on p. 12,
25 concluded that while salaries and fringe benefits had increased by 7.4% or
26 \$4.2 million over 1999, the majority of this overall increase related to the
27 inclusion of future employee benefits (\$2.2 million) (which accounted for
28 approximately half the increase), an increase in hourly wages (\$755,000) and
29 fringe benefits (\$691,000), which together accounted for 87% of the overall
30 increase.

31

1 Similarly, with respect to system equipment maintenance, Grant Thornton
2 reviewed each of the components of this expense and the only comment with
3 respect to a concern in the 2000 Report was noted on p. 17 where Grant
4 Thornton concluded that the increasing trend in system equipment maintenance
5 at the Holyrood Thermal Plant required further analysis.

6
7 With respect to professional services, Grant Thornton noted, on p. 20 of its 2000
8 report, that this category had exhibited an upward trend over the past four years.
9 However, the explanation for the increase for 2000 was identified and no
10 exception was taken to any of the expenditures. In fact, the only operating
11 expense found by Grant Thornton to be unreasonable was the payment of
12 spousal travel costs (Grant Thornton 2000 report, p. 22) and perhaps certain
13 communication costs (response by Grant Thornton to NP-286). Hydro does not
14 agree with Grant Thornton's position as stated in NP-286 on the communication
15 costs. The purpose of the costs referred to are to improve communications,
16 primarily with employees and with stakeholders. The costs are not for a
17 promotional type of advertising to enhance Hydro's corporate image in the
18 community. Hydro believes the communication cost referred to in NP-286 is an
19 appropriate regulated expense.

20
21 All categories of expenses were again reviewed in Grant Thornton's 2001
22 General Rate Hearing Report, dated August 15, 2001. The three main
23 categories identified in 2000 which had shown increases namely, salaries and
24 fringe benefits, system equipment maintenance and professional services, were
25 reviewed in detail. With respect to salaries and fringe benefits Grant Thornton
26 concluded that "the 2002 forecast permanent salaries are reasonable" (p. 25)
27 and that the budget for temporary salaries was reasonable, as was the overtime
28 costs (p. 26). No exception was taken by Grant Thornton to any expense
29 included in the category of salaries and fringe benefits proposed by Hydro for
30 2002.

1 With respect to system equipment maintenance expenses, Grant Thornton at
2 p. 28 of its 2001 Report noted that these costs are forecast to decrease for 2002.
3 At p. 29, Grant Thornton made the following conclusion: “Except for our
4 comments above on annual routine maintenance for the Holyrood thermal plant,
5 based on the results of our review, nothing has come to our attention to indicate
6 that the system equipment maintenance costs for 2002 are unreasonable”.

7

8 It should be noted that the only concern raised by Grant Thornton on the system
9 equipment maintenance category, is with respect to maintenance costs at the
10 Holyrood Thermal Plant. Detailed evidence was provided on the 2001 and 2002
11 maintenance costs for Holyrood (Transcript, October 9, pp. 3-4 for 2001 and
12 Transcript, October 9, p. 5 for 2002) by R.J. Henderson. Mr. Henderson noted
13 that the Holyrood Plant is an aging thermal plant (Transcript, October 9, p. 5,
14 lines 70-76) and requires more maintenance than earlier in its service life.

15

16 Mr. Henderson, through cross-examination gave further detail on the required
17 system equipment maintenance for the Holyrood Plant (see, for example,
18 Transcript, October 10, p. 4, lines 77-98 and p. 5, lines 1-9). No party produced
19 evidence at the hearing to demonstrate that any expense incurred by Hydro at
20 the Holyrood Thermal Plant or, indeed, at any other location, in the category of
21 system equipment maintenance was imprudent, unreasonable or not related to
22 supplying electricity to its customers. The only evidence on record at the Board
23 is the evidence of Hydro that such expenses were required and are reasonable
24 and prudent with respect to the operation of this plant.

25

26 The Newfoundland Court of Appeal in a stated case from the Board with respect
27 to a number of questions, including the Board’s ability to review operating
28 expenses, made a number of comments that are relevant on this issue. A copy
29 of this decision is attached in Schedule “C”. At p. 32 of the decision, (paragraph
30 118) the Court states:

1 *“In defining the parameters of such supervisory power, however,*
2 *the Board must account for a competing principle, namely, that the*
3 *Board is not the manager of the utility and should not as a general*
4 *rule substitute its judgment on managerial and business issues for*
5 *that of the officers of the enterprise.”*
6

7
8 Further on page 33 in paragraph 120, the Court states:
9

10
11 *“there will normally be a presumption of managerial good faith and*
12 *a certain latitude given to management in their decisions with*
13 *respect to expenditures.”*
14

15
16 In the absence of any evidence that any expense was unreasonable or
17 imprudent, Hydro submits that it would be totally inappropriate for the Board to
18 disallow any category of expenditure related to system equipment maintenance.
19 Nor would it be proper and according to regulatory principles for the Board to
20 arbitrarily substitute its opinion for the informed opinion of management who has
21 experience in operating the thermal plant where these expenditures are required.
22

23 The 2001 Grant Thornton report noted that the category of professional services
24 has increased from 1997 to 2001 and was forecast to decrease in 2002.
25 However, all expenditures were fully reviewed by Grant Thornton in this category
26 and they did not find that any expenditure was unreasonable or imprudent. No
27 evidence was submitted to question any specific professional service category
28 expenditure and in the absence of such evidence, it is not appropriate for the
29 Board to substitute its opinion for management that such expenditures are
30 required in order for the company to provide its services to its customers in a
31 reasonable and appropriate manner. The references in the preceding paragraph
32 to the comments of the Newfoundland Court of Appeal on the role of the Board in
33 reviewing operating expenses are equally applicable here.
34

1 Certain of the parties have made general comments with respect to the level of
2 Hydro's expenditures in this category of Other Costs. However, no evidence was
3 produced by any party to the hearing related to any specific category of
4 expenditure to demonstrate that such an expenditure had not been necessary or
5 that it was not related to the provision of service to Hydro's customers. It should
6 be noted that the Board's own financial consultants, Grant Thornton, did not
7 recommend that any expenditure be disallowed, except for that of spousal travel
8 costs and possibly some expenditures in the communications account. The
9 exhibits to the 2001 Grant Thornton report demonstrate the following:

- 10
- 11 1. The total cost of energy per kilowatthour generated, excluding fuel, will
12 decrease in 2002 and has shown a declining trend since 1998;
 - 13
 - 14 2. The category of Other Costs has declined to 28% of the proposed revenue
15 requirement for 2002 versus 30% in 2001, 32% in 2000, 36% in 1999 and
16 29% in 1998.
- 17

18 In the supplementary evidence of Grant Thornton, dated December 13, 2001, a
19 suggestion is made of a productivity allowance provision. However, as noted
20 above, Grant Thornton has not determined, following each of its annual reviews,
21 that any expenditure was unreasonable or imprudent with the two exceptions
22 noted above (spousal travel and possibly certain communication costs). This
23 was confirmed during examination of Mr. Brushett. Grant Thornton noted that a
24 productivity allowance was provided in the order arising from NP's 1996 General
25 Rate Hearing. However, the Board did not apply it in the 1998 General Rate
26 Hearing of NP (see Order No. P.U. 36 (1998-99) p. 33).

27

28 Hydro submits that the use of a productivity allowance factor as suggested by
29 Grant Thornton is totally inappropriate in the absence of any evidence that any of
30 the expenditures are unreasonable, unnecessary or imprudent. Hydro submits
31 that it has demonstrated that it has been fiscally responsible and prudent with

1 respect to the control of its costs from 1992 to 2002, as set out above, and that
2 such a productivity allowance factor should not be ordered by the Board.

3
4
5 **Employee Future Benefits**

6
7 Another issue to be dealt with under the category of Other Costs is the
8 appropriate treatment of employee future benefits. In 2000 Hydro adopted the
9 Canadian Institute of Chartered Accountants recommendation to account for
10 employee future benefits on an accrual rather than a cash basis. With respect to
11 the liability for obligations earned by employees up to the end of 1999, Hydro
12 charged its retained earnings for the entire amount of the transitional obligation,
13 \$22.8 million. Hydro's rationale for doing this was explained in NP-53 (a) on the
14 basis that the adjustment to retained earnings achieved the best matching of
15 costs and revenue since the transitional balance had arisen from employees'
16 service in prior periods. If Hydro had elected to amortize the transitional
17 obligations over the remaining employees service life, the revenue requirement in
18 2002 would have had to be increased by approximately \$1.8 million (see
19 response to NP-53 (b)) and reflected in higher rates to consumers. With respect
20 to future liabilities, Hydro is proposing that it accrue an amount each year to
21 recognize the liability based on an actuarial evaluation. Approximately \$2.2
22 million is included in the 2002 revenue requirement as a cost associated with the
23 accrual of liability for benefits earned in that year.

24
25 Mr. John Browne on behalf of NP, stated on page 32, lines 17-18 of his pre-filed
26 evidence, that if a utility did not have a transitional obligation, the accrual method
27 would normally be preferable to the cash method as the cost of the employee
28 future benefits are expensed in the period that the services giving rise to the
29 obligation are performed. This practice is consistent with the principle of inter-
30 generational equity. On page 34 of his pre-filed evidence, Mr. Browne also
31 points out that the switch to the accrual based approach by Hydro will not have a

1 material impact on the rate increase (less than .31% of Hydro's revenue
2 requirement).

3

4 Mr. Roberts in cross-examination by Ms. Butler, Q.C., on this issue (see
5 Transcript November 15, pp. 7-9) explained Hydro's rationale with respect to
6 employee future benefits:

7

8 *"What management looked at, what was being fair and looking at*
9 *the customers and looking at the inter-generational equity and*
10 *saying that these costs which are \$20 million had occurred in prior*
11 *years, and based on that the decision of management was that*
12 *Hydro would write that amount off rather than try to recover it in*
13 *future years from rate payers. It was a benefit that has been earned*
14 *in the past and that's the decision that was made."*

15 (November 15, p. 8, lines 56-63)

16

17

18 Further with respect to the transitional obligation Mr. Roberts stated:

19

20 *"You can't write off without full accrual and you amortize all of it or*
21 *you're strictly on a cash basis. From an accounting perspective,*
22 *our decision was we would go with an accrual rather than continue*
23 *with a cash basis of accounting."*

24 (Transcript, November 15, p. 8, lines 68-72)

25

26

27 Hydro's proposed treatment of employee future benefits was reviewed by Mr.
28 Brushett who concluded that Hydro's proposed treatment was acceptable. He
29 essentially agreed with the position that had been set out by Mr. Roberts referred
30 to above. He stated:

31

32 *"Well, I think you would have to look at in terms of the impact of*
33 *Hydro's decision overall and the fact that... and I shouldn't quote*
34 *numbers, I guess from memory, but the fact that they did do*
35 *retroactive adjustment and effectively accrued without any intent of*
36 *recovering it from rate payers, the accrual to the end of '99, I think*
37 *you would want to take that into consideration in addition to*
38 *considering whether on a go forward basis it is a higher expense*
39 *under the accrual method versus the cash basis. I guess the*

1 *assumption is that these benefits are being provided and at some*
2 *point they have to be funded by ratepayers so I don't think I would*
3 *be necessarily be recommending deferral of those into future*
4 *periods if there was a reasonable basis for proceeding with the*
5 *adoption right now, particularly considering the fact that the*
6 *retroactive adjustment is charged off to retained earnings with no*
7 *intent of recovering it from rate payers, as I understand."*

8 (Transcript January 8, 2002, p. 29, lines 83-95 and p. 30, lines 1-5)

9
10
11 Hydro submits that its proposed treatment of employee future benefits, that is, to
12 write off to retained earnings the transitional obligation of \$22.8 million and to
13 account on an accrual basis for employee future benefits commencing in 2000, is
14 the appropriate treatment and should be approved by the Board.

15
16 **Duplication of Costs - NP**

17
18 The final issue to be considered under the heading of Other Costs is a
19 suggestion by the Consumer Advocate at various times throughout the hearing
20 that there is significant duplication of costs between Hydro and NP with respect
21 to the provision of certain services. However, no evidence was submitted by the
22 Consumer Advocate to substantiate this statement. In fact evidence as
23 submitted by Hydro witnesses is clear that the potential areas of duplication are
24 very limited given the different nature of Hydro's and NP's operations. NP is
25 primarily a distribution utility and operates generally within the urban areas of the
26 province. Hydro is primarily a generation and transmission utility and has some
27 distribution assets and service areas. It operates primarily in the more remote
28 areas where there are no services or facilities of NP. Potential savings as
29 identified in the co-ordination discussions between the two utilities have been, to
30 the extent possible, followed up with savings being realized, eg. the sharing of
31 equipment.

32

1 In the absence of any direct evidence of a duplication of cost between the two
2 utilities, it is not appropriate for the Board to make any type of allowance to
3 reduce expenses. Until such time as Hydro's and NP's operations or operating
4 areas change, there is no significant potential for duplication. Every effort has
5 been made by both utilities to cooperate on common areas of interest.
6 Numerous efforts of co-ordination and cooperation have been demonstrated
7 throughout this hearing, for example, the joint committee on reliability, the
8 sharing of equipment, etc. These co-ordination activities by both utilities will
9 certainly continue.

10

11

12 **Margin of Profit**

13

14 The fifth and final category of expense in Hydro's proposed revenue requirement
15 listed in Schedule 1A is the margin or return on equity which is forecast to be
16 approximately \$8 million in 2002. The regulated interest for 2002 is \$5.6 million
17 (JAB, Schedule 1 (Rev 2) p. 1). There are several issues associated with the
18 determination of the appropriate return on equity (ROE) which will be addressed
19 in this section, including Hydro's financial targets (short and long term), and the
20 appropriate capital structure for Hydro.

21

22 Under section 80 of the *Public Utilities Act*, Hydro is entitled to earn "a just and
23 reasonable return as determined by the Board on the rate base". In addition,
24 under section 3 (a) (ii) of the EPCA, it is declared to be the policy of the Province
25 that the rates to be charged for the supply of power should "provide sufficient
26 revenue to the producer or retailer of the power to enable it to earn a just and
27 reasonable return as construed under the *Public Utilities Act* so that it is able to
28 achieve and maintain a sound credit rating in the financial markets of the world".

29

1 As pointed out in the Introduction section of this Argument, this is the first rate
2 application by Hydro since it became fully subject to the jurisdiction of the Board
3 and, thus, to section 80 of the *Public Utilities Act*. As well, section 3 (a) (ii) of the
4 EPCA referred to above is new since Hydro's last rate referral. Prior to these
5 amendments, which became effective in 1996, Hydro was not regulated on a
6 return on rate base, but, rather, the Board determined the appropriate interest
7 coverage under the provisions of section 3 (l) (c) (ii) of The *Electrical Power*
8 *Control Act*, since repealed.

9
10 It has been Hydro's position throughout this hearing that the legislative
11 amendments introduced in 1996, referred to above and, set out in detail in
12 Schedule A attached, indicate that, as a matter of public policy, Hydro is
13 "intended to operate as a fully regulated utility, more similar to that of an investor-
14 owned utility than had previously been the case" (W. E. Wells pre-filed, p. 6,
15 lines 20-22). Further, it is Hydro's position that it should not be "viewed
16 differently than any other utility, operated as a commercial entity" (pre-filed
17 W. E. Wells, p. 13, lines 29-31). Hydro is requesting that the Board, in principle,
18 agree that Hydro is entitled to the same opportunities as an investor-owned utility
19 to earn a fair and reasonable return on rate base.

20
21 Ms. K. McShane, the cost of capital witness called by Hydro, made the following
22 statements:

- 23
24 1. *"I start with the proposition that a utility, Crown corporation or*
25 *investor owned, should be financed in a manner which is*
26 *compatible with commercial viability on a stand-alone basis,*
27 *without subsidies as among stakeholders (ratepayers vs.*
28 *investors or among classes of ratepayers). The capital*
29 *structure should be consistent with the business risks of the*
30 *utility and should permit the utility, on a stand-alone basis to*
31 *achieve an investment grade debt rating. An investment grade*
32 *debt rating is one which is BBB or better. For Hydro, a capital*
33 *structure consistent with a BBB rating, equal to that of the*
34 *Province, which guarantees its debt, is a reasonable objective"*
35 (pre-filed p. 16, line 16-26)

1 2. *“Right. My objective was to ensure that when I looked at what*
2 *the overall cost of capital should be, that that overall cost of*
3 *capital would be consistent with, compatible with that, which*
4 *would be achieved by a stand-alone utility with similar business*
5 *risks, and those costs are perhaps divided differently as among*
6 *the cost of debt, the guarantee fee and the return on equity so*
7 *in total the overall cost of capital should be the same”.*

8 (Transcript, October 29, p. 12 lines 57-64)

9
10
11 This position was indeed adopted by the cost of capital experts called on behalf
12 of other parties. Mr. John Browne, for NP, stated in his pre-filed evidence that
13 *“there is an opportunity cost associated with the investment of a government in a*
14 *utility and the allowed return on rate base for a public sector utility should be*
15 *determined on a stand-alone basis, the same as an investor-owned utility”.* (pre-
16 filed evidence, p. 15, lines 17-22). A similar position was taken by Dr. Kalymon,
17 the Consumer Advocate’s expert.

18
19 Hydro proposed that its long term debt/equity ratio target be 60/40, and further
20 stated in its Application that, if it had been requesting a “normal” rate of return in
21 the Application, it would have been in the range of 11% to 11.5% ROE.
22 However, Hydro did not propose that these financial targets be attained in the
23 test year. Messrs. Wells and Osmond on behalf of Hydro explained that the
24 magnitude of the rate increase and its impact on Hydro’s customers moderated
25 Hydro’s position with respect to the time period over which these financial targets
26 should be achieved (pre-filed evidence W. E. Wells, p. 14, pre-filed evidence
27 D. W. Osmond, p. 5). If a return on equity of 11.25% had been used in the
28 original filing, the proposed rates to NP would be approximately 6% higher than
29 the base rate increase requested (D. W. Osmond, pre-filed, p. 6, lines 7-9).

30
31 Because the provincial guarantee of Hydro’s debt permits Hydro to operate with
32 a lower capital structure than otherwise, Hydro proposes that the following
33 targets be adopted in the short term:

- 1 1. a debt/equity ratio of 80/20 with the 2002 debt/equity ratio being
2 83/17;
3
- 4 2. a ROE of 3% for 2002 as a means of assisting in reducing the rate
5 increases required for customers; and
6
- 7 3. a return on rate base of \$98,319,000 (Schedule VII A,
8 J. C. Roberts, pre-filed evidence October 31, 2001) or 7.2%.
9

10 However, in view of Hydro's request for these low financial targets in the test
11 year, it was emphasized by Hydro witnesses that it was essential that the
12 financial markets be advised, through the decision of the Board, that the targets
13 established were short term in nature, with the principle being adopted that Hydro
14 is entitled to earn a return normally approved by the Board for a commercial
15 entity, whether it be investor-owned or crown-owned (pre-filed evidence,
16 W. E. Wells, p. 13, lines 27-31).

17

18 All the cost of capital expert witnesses called at the hearing agreed that the
19 targets being requested were below what would be normally reasonable for a
20 commercial entity:

21

- 22 1. Ms. McShane (pre-filed evidence, p. 53, lines 4-11)
23
- 24 2. Pre-filed evidence of Dr. Basil Kalymon where he recommended a
25 return between 8.75% and 9.25% with a return on rate base of
26 8.168%. These were slightly adjusted in direct examination.
27
- 28 3. Dr. Vilbert (pre-filed evidence, p. 2, lines 16-19)
29

1 In light of Hydro's position in the current Application requesting a 3% ROE for
2 2002, not a lot of emphasis was placed during the hearing on examination of the
3 evidence with respect to current market conditions or economic outlook.
4 However, discussion occurred with respect to a number of factors that normally
5 would be considered and taken into account by the Board in determining
6 appropriate financial targets, including business risk and the application of
7 generally accepted tests to determine the appropriate return. Hydro submits that
8 the fair return should be based on the inherent business and financial risks of
9 Hydro, not the happenstance of ownership.

10
11 With respect to Hydro's business and financial risk, Ms. McShane concluded that
12 Hydro was a - "relatively low risk utility" (pre-filed evidence, p. 19, lines 9-10).
13 Dr. Kalymon, the Consumer Advocate's cost of capital expert, came to a similar
14 conclusion and found that Hydro's risks were similar to other electric utilities such
15 as New Brunswick Power, Nova Scotia Power and NP (pre-filed, p. 9, lines 14-
16 17). Mr. Hall, Hydro's capital markets expert, compared the degree of risk of
17 Hydro and NP and concluded the risks facing both are similar (pre-filed p. 8,
18 lines 14-18 and p.9, lines 18-19).

19
20 The other two cost of capital experts in this matter, Dr. Vilbert for Industrial
21 Customers and Mr. Browne for NP, offered no opinion with respect to the
22 business risk of Hydro in comparison to other utilities. Neither Mr. Browne nor
23 Dr. Vilbert made a specific recommendation with respect to the appropriate ROE
24 or return on rate base and, therefore, did not get into an analysis of business risk,
25 capital structure, etc.

26
27 It is clear from the evidence on the record that the risk Hydro faces is similar to
28 that of NP and other similar electrical utilities in Canada. Ms. McShane and
29 Dr. Kalymon both applied the traditional types of approaches used in Canada to
30 determine what a fair and reasonable return on equity would be for Hydro, with
31 its business and financial risks, on a stand-alone basis. However, the precise

1 level of a fair and reasonable return for Hydro need not be determined in this
2 proceeding, given Hydro's request for only a 3% ROE. As noted above, no party
3 at the hearing suggested that this level of 3% ROE was close to what would be
4 viewed as a normal return on equity. The Board need not, in this proceeding,
5 determine the precise level of return for Hydro. That decision can be made at the
6 time of Hydro's request for a full return on rate base in light of economic and
7 capital market conditions prevailing at the time. Nor does the Board have to
8 determine the specific approach (i.e the specific tests) for determining a fair
9 return on rate base for Hydro. That also can be left to the time when Hydro asks
10 for approval of a commercial return.

11

12 Nevertheless, Hydro wishes to make the following points regarding the After Tax
13 Weighted Average Cost of Capital ("ATWACC") method proposed by Dr. Vilbert
14 on behalf of Island Industrial Customers. Dr. Vilbert stated that a key benefit of
15 the method lies in the fact that it recognizes the interdependence between
16 business and financial risk. Hydro does not take issue with the importance of
17 recognizing that a fair return on equity is related to the level of business and
18 financial risk to which the shareholder is exposed, and that the cost of equity is
19 higher when financial risk is higher. Hydro is of the view that this relationship can
20 be recognized through use of the traditional approach. In this regard, Hydro
21 refers to and accepts the testimony of Dr. Kalymon, who stated in cross-
22 examination that the introduction of income tax into the discussion was an
23 unnecessary complication. (Transcript, November 14, p. 6, lines 41-51). Indeed,
24 Hydro is not taxable. It is of note that the Alberta Energy and Utilities Board, in
25 rejecting the form of the ATWACC model proposed by Dr. Vilbert on behalf of
26 TransAlta Utilities, determined that for a utility that is not taxable, the ATWACC
27 method collapsed to the traditional method. (Consent #10, p. 331) It must also
28 be recognized that no regulatory Board in North America has accepted the
29 ATWACC approach recommended by Dr. Vilbert.

1 **Capital Structure**

2

3 Certain of the cost of capital experts made recommendations on an appropriate
4 capital structure for Hydro. Ms. McShanes' position was that the capital structure
5 should be consistent with the business risk Hydro faced and should permit Hydro
6 on a stand-alone basis to achieve an investment grade debt rating of BBB or
7 better. Ms. McShane's conclusion was that Hydro would require a 60/40
8 debt/equity ratio to achieve a debt rating of BBB or better as its long term
9 financial target. This conclusion was also accepted by Dr. Kalymon (pre-filed
10 evidence, p. 11, lines 14-17). A similar opinion was reached by D. Hall, Hydro's
11 capital markets expert (pre-filed evidence, p. 4, lines 22-25) where he concluded
12 that Hydro's debt level should be similar to the level maintained by commercially
13 operated crown-owned utilities and investor-owned utilities. No specific
14 recommendation was made on the issue of the long-term financial capital
15 structure for Hydro by the other experts: Mr. Browne and Dr. Vilbert. Hydro
16 submits, therefore, that the evidence is clear that an appropriate long-term
17 financial target debt/equity structure would be 60/40.

18

19 Hydro's proposed capital structure for the test year is 83/17. The expert
20 evidence concluded that this proposed capital structure would not negatively
21 impact on Hydro's credit rating given that its debt is guaranteed by the Province
22 (K. McShane pre-filed evidence, p. 21, lines 23-27; D. J. Hall, pre-filed evidence,
23 p. 12, lines 28-31 and Dr. Kalymon, Transcript November 13, p. 30, lines 65-89).

24

25 In light of the fact that the parties have agreed that the debt/equity structure for
26 the test year of 83/17 can be supported in the short term, the Board may ask
27 whether it needs to comment on a longer term financial capital structure for
28 Hydro. As noted above, Hydro believes it is essential that the credit rating
29 agencies and the financial markets of the world be aware that the acceptance of
30 both a capital structure of 83/17 and a 3% ROE are temporary measures only
31 and that they are intended to mitigate current circumstances and are not

1 reflective of the Board's position on the appropriate returns that Hydro should
2 earn in normal circumstances. This was explained by Mr. Hall as follows:

3
4
5 *"As described earlier, the credit rating agencies are generally*
6 *concerned more with the trends evidenced by operations than the*
7 *absolute level of any single measure.*

8
9 *If there is evidence of continually declining performance measures*
10 *with no positive regulatory or corporate moves to address the*
11 *problems, there will be mounting concern about the "self-*
12 *supporting" characterization of Hydro's debt. If, on the other hand,*
13 *the results are caused by unusual circumstances, and if the Board*
14 *has evidenced concern with the situation on a provided guidelines*
15 *to the utility for improvements, and if the Utility has programs in*
16 *place to return to more prudent levels in the medium term, it is likely*
17 *that Hydro can retain the characterization of its debt as self*
18 *supported, even in the face of poor results in the short term.*

19 (pre-filed evidence, p.12, line 3 and p. 13, lines 1-13)
20
21

22 Hydro submits that it is incumbent upon the Board to deal, not with the specifics
23 of the appropriate financial ROE in the future, but to deal with the principle that
24 Hydro is entitled to earn normal rates of return available to a utility operated on
25 commercial terms and similar to those earned by NP. Hydro believes the Board
26 should endorse the long term target of a 60/40 debt/equity ratio.

27 28 29 **Rural Deficit**

30
31 A suggestion was made by Mr. Browne, the witness for NP, that the Board
32 should consider whether an adjustment should be made to Hydro's allowed rate
33 of return to take into account actions that might have been taken in response to
34 social policy objectives and he referred to the rural deficit as a specific example
35 of the pursuit of a social policy (Transcript, November 1, p.35, lines 20-30).
36

1 Mr. Browne is the only expert witness to have taken this position. Both
2 Ms. McShane and Mr. Hall, witnesses called on behalf of Hydro, as well as
3 Dr. Kalymon, the cost of capital expert witness called by the Consumer
4 Advocate, all rejected this position. These three witnesses pointed out that the
5 rural subsidy does reflect costs required to provide regulated service and that
6 cross-subsidization among rate classes is common among utilities. Ms.
7 McShane in response to a question from Ms. Butler, Q.C., stated that she had
8 not made any adjustment to her recommended rate of return because of the rural
9 deficit:

10
11 *"I have looked at what typically happens in other utilities and clearly*
12 *the existence of subsidies as among classes of customers exist as*
13 *a matter of policy irrespective of who the shareholder is. For*
14 *example, it has always been policy in this country to maintain*
15 *residential single line telephone rates at below what it costs to*
16 *serve those customers, particularly in the rural areas, and the*
17 *approach has been taken by the regulatory is to have those*
18 *subsidies borne by other customers, not by the shareholder, and so*
19 *in, given what we seek, you know, those types of subsidies*
20 *throughout the investor-owned utility world, I did not make any*
21 *adjustments to where shareholder return for that."*

22 (Transcript, October 29, p. 13, lines 63-75)
23
24

25 Mr. Hall stated with respect to this issue of subsidy in response to a question
26 from Ms. Butler, Q.C.:

27
28 *"If there is cross-subsidization of rates between different classes of*
29 *customers, which is very typical within a jurisdiction, in my view*
30 *there are some consumers in the province paying more than they*
31 *should, if you take should be the cost of service, and there are*
32 *some consumers who are paying less than they should because of*
33 *whatever circumstances are germane, and that is a cross-*
34 *subsidization between ratepayers, not anything to do with the*
35 *taxpayer. For example, if NP was told, and I believe there must be*
36 *some cross-subsidization within NP's jurisdictions, between rate*
37 *classes that that is between the ratepayers within the region, not*
38 *anything to do with the shareholders of NP."*

39 (Transcript October 31, pp. 29-30, lines 90-96 and 1-8.)
40

1 Further at line 34 of p. 30 of the October 31 transcript, Mr. Hall stated:

2

3 *“Because if the policy of sharing costs between one region and*
4 *another region is something that this Province and the Board thinks*
5 *is appropriate, it doesn’t have to affect the shareholder of the utility*
6 *that implements the policy in the same way that it doesn’t affect NP*
7 *in their jurisdiction to that cross-subsidization if it affects the*
8 *consumers of NP but not the company...”*

9 (lines 34-41)

10

11

12 Dr. Kalymon expressed similar views on this issue of the subsidy and provided
13 an illustrative example of a similar social policy implemented by the National
14 Energy Board where rates for Trans Canada Pipeline in Quebec City were set at
15 the same rate as was charged in Toronto (Transcript November 13, p. 33,
16 lines 5-13). He also referred to other examples of cross-subsidization by
17 telephone companies. Dr. Kalymon went on to say that in any event, the issue is
18 not whether the rate of return should be adjusted because a utility pursues what
19 some might call a social policy objective, but whether the particular cost was a
20 reasonable and prudent one. He stated as follows:

21

22 *“The issue is whether a particular expenditure is a just and*
23 *reasonable expenditure in the context of the full cost of service, so*
24 *regulatory board normally scrutinize every aspect of the cost of*
25 *service beyond cost of capital to see whether a particular cost is*
26 *justified or not. If it isn’t part of the cost providing service then it*
27 *can be disallowed. Whatever impact that has on return is just a*
28 *tangential issue. The same comment could be made about the*
29 *cross-subsidization in the same context. One could say the Board*
30 *has the power to review the rate design and rate structure and the*
31 *degree of cross subsidization that is implied. I am after testifying*
32 *on some rate design issues as well in the past and you cannot*
33 *avoid all cross-subsidization. It is impossible. Somebody is sitting*
34 *next door to the power station and somebody sitting ten miles*
35 *away. There’s going to be cross-subsidization of some sort but it*
36 *may be minor as opposed to more major. So at some point one*
37 *has, the Board has the responsibility to decide whether a particular*
38 *cross-subsidization is socially justified, whether it is sufficient, etc.*
39 *Those may have tangential impacts on the cost of capital but, sorry,*

1 *tangential impacts on the effective returns but I think they're in a*
2 *different domain than what I'm testifying to.*

3 (Transcript November 14, p. 7, lines 43-65)
4
5

6 Hydro submits that it is not appropriate to adjust Hydro's return on equity with
7 respect to the rural deficit as suggested by Mr. Browne. It should also be noted
8 he made no recommendation on what an adjustment should be. Hydro further
9 submits that the issue must be addressed in the context of the revenue
10 requirement and of rate design. The issue is whether the costs incurred are
11 related to providing a regulated service and whether they are reasonable. A
12 further issue arises in the context of rate design to determine whether this type of
13 policy should be reflected in the design of rates. With respect to the issue of
14 whether any of the costs associated with serving Rural Customers should be
15 disallowed, it should be noted that evidence was given by witnesses of Hydro,
16 particularly Mr. Reeves, with respect to how rural operations are managed and
17 with respect to the initiatives that have been taken in recent years to reduce
18 costs to the extent possible.
19

20 With respect to the issue of rate design, it should be noted that all of the experts,
21 including Mr. Browne, recognize that cross-subsidization among ratepayers is
22 common. NP has suggested that the difference here is the relative size of the
23 deficit (\$30.6 million, JAB-1 (Rev. 2) attached to 3rd supplementary evidence of
24 J. Brickhill, October 31) which is approximately 9.6% of the total revenue
25 requirement. Hydro did provide information (response to NP-185) relating to
26 subsidies in diesel communities in a number of provinces which indicated on a
27 per-capita basis that the amount of the subsidy paid for each such customer in
28 Newfoundland is in the middle of the experience of the provinces shown in that
29 response. NP did not submit any evidence with respect to the size of the subsidy
30 in Newfoundland in comparison to any other jurisdiction. The size of the rural
31 deficit in comparison to the revenue requirement was not of concern to
32 Ms. McShane, Mr. Hall or Dr. Kalymon in relation to the appropriate financial
33 targets for Hydro.

1 Hydro is proposing the continuation of the existing policy that will set rates for all
2 customers served on Hydro's Island Interconnected System to be the same as
3 rates charged by NP to its customers, Hydro is also proposing to continue the
4 policy that the rates for the first 700 kWh of consumption a month in the isolated
5 rural areas be the same as that charged by NP to its customers. Hydro submits
6 that the continuation of these long standing policies for rate design be continued
7 and, as advocated by Ms. McShane, Mr. Hall and by Dr. Kalymon, that it is not
8 appropriate to adjust the return on equity because of the rural subsidy arising
9 from the implementation of these rate policies. Like any other element in the cost
10 of service, the Board must deal with the costs associated with serving Rural
11 Customers through the issues of revenue requirement and through rate design.
12 Should the Board wish to change these policies, then it must direct a change in
13 rate design on the basis that the rate policies for Rural Customers are no longer
14 acceptable.

15

16 While the above has been focused on the issue of the rural deficit, similar
17 comments can be made with respect to the issue of broader social objectives,
18 other than the rural deficit. The only items that were identified by Hydro as
19 activities in pursuit of social objectives were listed in the response to NP-214
20 which included the rural rates, (including the rural deficit) and power purchased.
21 Hydro submits there is no other evidence on the record to indicate pursuit of
22 social policy objectives that would be different for Hydro than any investor-owned
23 utility. Again, as with the rural deficit, if any action is to be taken by the Board,
24 then it should not be through the adjustment of the rate of return, but in finding
25 that expenses are unreasonable or imprudent in relation to the provision of
26 service. Hydro submits that there is no basis on the evidence in this proceeding
27 for the Board to make such a finding. It should also be noted that no precedent
28 was referred to by Mr. Browne or NP that any regulatory board has ever required
29 the shareholder to bear the cost of a social policy designed to ensure customers
30 pay similar rates for similar service.

1 **Dividends**

2

3 The issue of the amount of dividends projected for the test year was raised in the
4 hearing. Mr. John Browne suggested that the Board could deem a capital
5 structure for Hydro as if a portion of the dividend was not paid. This would mean
6 that the Board in effect would deem a higher equity in Hydro than actually
7 expected (Transcript November 1, p. 35, lines 41-56). This recommendation was
8 not supported by any other witness. Mr. Browne did agree that the deeming
9 issue would not be relevant, if the Board finds that the rural deficit is reasonable.
10 (Transcript, November 2, p. 16, lines 1-3).

11

12 Ms. McShane specifically recommended that the Board should use the actual
13 capital structure in place to ensure that the overall cost of capital that is paid by
14 the ratepayers is not in excess of what it would be if the utility were appropriately
15 capitalized (Transcript October 29, p. 9, lines 9-17). Further, Ms. McShane
16 stated that the rate of return on rate base should be not higher than it otherwise
17 would have been had the dividend not been paid. (October 29, p. 11, lines 10-
18 13). With respect to Mr. Browne's recommendation, Ms. McShane pointed out
19 only once in Canada had a regulator deemed a capital structure for a company
20 with more equity than, in fact, it actually had. She explained the reason for this is
21 that normally, equity is more expensive than debt and there is no benefit to the
22 ratepayer for a regulator approving more equity than the company actually has
23 (Transcript October 29, p. 8, lines 36-59).

24

25 Dr. Kalymon similarly discounted the idea of the Board deeming a capital
26 structure in relation to any dividend payments. In fact, Dr. Kalymon said the
27 issue really was only one of an "accounting issue and one of cosmetics".
28 (Transcript November 13, p. 32, line 35) Dr. Kalymon summarized his position
29 as saying that because the Province guaranteed Hydro's debt, the issue of
30 whether it paid itself a dividend, but continued to guarantee the debt, was a
31 matter of image, but not of substance.

1 With respect to the actual amount of the dividends projected for 2002, again it
2 should be noted that none of the cost of capital experts had difficulty with the
3 amount of the proposed dividend payment in the test year although it will
4 contribute to a deterioration in Hydro's debt/equity ratio. Ms. McShane's
5 evidence on this point is that while a predictable dividend policy is desirable, and
6 the payment of the proposed dividend in the test year exceeds Hydro's existing
7 dividend policy to pay out 75% of net income, and it contributes to the
8 deterioration of the debt/equity ratio in the test year, it does not affect her
9 recommendation on ROE. Her position is that there should be no deemed
10 capital structure as suggested by Mr. Browne. Ms. McShane pointed out that
11 the amount payable from 1975 to 2002 with the proposed dividend would have
12 been 40% of Hydro's net income for that entire period. (Transcript October 31,
13 p. 1, lines 43-45). Dr. Kalymon's position was that because the Government
14 guaranteed the debt, all that really was happening was that the dividend was a
15 removal of cash and there was the replacement of cash with debt guaranteed by
16 the shareholder (Transcript November 14, p. 6, lines 99-102). Thus, both
17 Ms. McShane and Dr. Kalymon have stated there should be no adjustment
18 required as the result of the payment of the dividend in the year 2002. In fact,
19 they both recognize that Hydro's shareholder is entitled to a return of dividends
20 and that there was nothing so unusual about the proposed payment that it would
21 require any adjustment to Hydro's ROE.
22

OTHER FINANCIAL ISSUES

Inter-Corporate Transactions

Mr. Browne on behalf of NP recommended that the Board should address the issue of inter-corporate charges and further recommended that Hydro develop policies and procedures with respect to this to cover all inter-corporate transactions and that these policies and procedures should be subject to regulatory review and approval (Transcript November 1, p. 36, lines 27-53). Hydro submits that it has already complied with this recommendation as its practices with respect to charging one subsidiary, CF(L)Co, were stated in response to an information request, NP-11 (b) and was subject to review in this hearing. This policy has already been reviewed by the Board's financial consultant, Grant Thornton, who in its 2001 report, at p. 37, concluded that the new methodology for determining inter-company charges is reasonable and appropriate. Hydro submits that the recommendation of Mr. Browne has been addressed and that the policy set out for inter-company charges in the response to NP-11 (b) has been reviewed by the Board's financial consultants and it was before all of the parties at this hearing. All of the parties had the opportunity to question this policy. Hydro submits that it is unnecessary, and it would be a duplication of costs, to have a separate hearing further on the issue of inter-corporate charges. Hydro requests that the Board approve the policy for inter-company charges as described in the response to NP-11 (b) and as outlined and reviewed at the hearing in the evidence of Mr. Roberts and Mr. Osmond.

The only issue, in Hydro's view, on this topic is whether the other subsidiaries of Hydro should be charged in the same manner. As indicated by Mr. Roberts, the activity currently associated with the other companies is insignificant and charges have not been recorded in the same way as for CF(L)Co. Hydro proposes, however, that, starting in 2002, it will apply the same policy as set out in NP-11 (b) to services rendered to its other subsidiary companies.

1 **Rate Base**

2

3 As noted in the introductory section of this Argument, Hydro is now regulated on
4 a rate of return on rate base since legislative amendments became effective in
5 1996. This is the first hearing in which the determination of Hydro's rate base
6 has been an issue. Extensive evidence was provided on this topic by
7 Ms. McShane in her pre-filed evidence on pp. 4-14. As well, Mr. Roberts in his
8 pre-filed evidence at pp. 3-5 dealt with the determination of Hydro's rate base in
9 accordance with the principles outlined in Ms. McShane's evidence. Schedule II
10 to Mr. Roberts pre-filed evidence sets out the proposed calculation for Hydro's
11 rate base. This calculation was reviewed by the Board's external financial
12 consultants, Grant Thornton. On pp. 7 – 8 of their 2001 Report, Grant Thornton
13 concluded that they "had not noted any discrepancies in the calculation of the
14 average rate base" and further concluded that the items in rate base were
15 "reasonable and appropriate in reference to the legislative guidance and normal
16 regulatory practice" (p. 7). Grant Thornton did point out that the inclusion of the
17 deferred foreign exchange loss in rate base was unusual. However, under
18 Section 17 (4) of the *Hydro Corporation Act*, the foreign exchange losses are
19 considered to be reasonable and prudent and are to be charged to the operating
20 account and recoverable from ratepayers over a 40 year period. Therefore, the
21 legislation has provided the appropriate treatment for the foreign exchange loss
22 inclusion in Hydro's rate base.

23

24 The only issue raised by any of the parties to the hearing with respect to the
25 determination of rate base was the recommendation of Mr. Mark Drazen, the
26 expert witness for the Town of Labrador City, that the collection of interest
27 expense by Hydro prior to its being paid should be included as an offset to
28 Hydro's cash working capital allowance. (pre-filed evidence, p. 6) In NLH-90
29 Mr. Drazen was asked to provide precedents of those jurisdictions in which this
30 recommendation had been applied. This information request was not answered
31 until Mr. Drazen appeared as a witness on December 12. At that time

1 Mr. Drazen stated that it is standard practice in Alberta to include the interest
2 expense collected prior to it being paid in the lead/lag study calculation
3 (Transcript December 12, p. 3, lines 68-71). He further advised that he had
4 made the same recommendation in Quebec, but it had not been accepted there,
5 and that, while he had recommended it before the National Energy Board, he
6 was unsure of the outcome. Further on p. 9 of the transcript of the same day,
7 Mr. Drazen was unable to provide any evidence with respect to other
8 jurisdictions. On p. 10 of the transcript of December 12, lines 10-22 Ms. Butler,
9 Q.C., asked Mr. Drazen to provide a written response with respect to whether his
10 recommendation had been adopted and used in other jurisdictions in Canada.
11 The response to this undertaking was received on January 18, 2002 and is not
12 helpful as it does not clarify the practice in other jurisdictions.

13

14 With respect to the one case where Mr. Drazen was aware that it had been used
15 that is, Alberta, it is clear that other adjustments are made in the calculation other
16 than the one he recommended. There, depreciation and return on equity are also
17 included in the lead/lag study (Transcript December 12, p. 10, lines 28-29).

18

19 It is Hydro's submission that there is insufficient evidence before the Board to
20 support Mr. Drazen's recommendation on this. It is unclear as to what the
21 practice is in other jurisdictions. It is clear that, even in the one instance where it
22 appears to have been accepted, other items are included in the lead/lag study.
23 Hydro submits that the calculation as recommended by Ms. McShane, applied by
24 Hydro and reviewed by Grant Thornton is the most appropriate one. Hydro
25 would point out that NP follows the same practices that are recommended by
26 Hydro.

27

1 **Rate Stabilization Plan (“RSP”)**

2

3 One of the most controversial issues throughout this hearing has been the RSP.
4 Hydro’s position is that the RSP, first introduced in 1986, has functioned, as
5 originally intended, to smooth out the rate increases or decreases as a result of
6 changes primarily in fuel (including both price and consumption) but also
7 hydraulic and load conditions, while at the same time allowing Hydro to recover
8 the cost of serving customers. Mr. Osmond testified that prior to the RSP, Hydro
9 was allowed to recover increases in the price of fuel through a Fuel Adjustment
10 Charge and changes in production as a result of changes in hydrology through a
11 Water Equalization Provision. It is Hydro’s position that the RSP was
12 implemented primarily to smooth out the fluctuations in customers’ bills arising
13 from wide variations in fuel price and hydraulic conditions, as Hydro already had
14 a recovery mechanism which recovered the variations in fuel price and load in
15 the following month from which they occurred. (Transcript, November 20, pp. 1-2)
16 While it is Hydro’s position that the plan has worked relatively well, it is
17 suggesting certain changes to the RSP as detailed in the response to IC-120.
18 The primary changes being proposed are (1) that the allocation of the balance in
19 the RSP to customers be based on 12 months-to-date energy and (2) that the
20 cap of \$50 million be increased to \$100 million.

21

22 A number of issues have been raised by the parties with respect to the RSP. It is
23 Hydro’s understanding of the position of the parties to date that only the
24 Consumer Advocate is recommending the elimination of the RSP. It is unclear at
25 this time what the specific changes, if any, that Industrial Customers and NP will
26 be suggesting.

27

28 The Consumer Advocate’s evidence on the proposal to eliminate the RSP was
29 provided by its expert Mr. Douglas Bowman. Three reasons were provided on
30 p. 6 of Mr. Bowman’s pre-filed evidence to support his recommendation to
31 eliminate the RSP:

- 1 1. It causes cross-subsidization in that past consumers are subsidized by
2 current consumers and it appears that current consumers will be
3 subsidized by future consumers.
4
- 5 2. It removes any incentive that Hydro might have to better manage its
6 fuel supply costs and improve its forecasting techniques.
7
- 8 3. It is difficult for consumers to understand.
9

10 These reasons were expanded upon in evidence by Mr. Bowman on
11 December 4, pp. 46-47.

12

13 The first issue is often referred to as an inter-generational equity issue. It is
14 normally recognized that costs should be recovered over the period in which they
15 are incurred to provide the service. However, where appropriate, costs can be
16 deferred and recovered over longer time frames. In adopting this approach,
17 regulators balance the immediate recovery of regulated costs that utilities are
18 entitled to with smoothing the impact for ratepayers. The same type of situation
19 occurs with any fuel adjustment charge which the various experts have agreed
20 are common. The longer the period for the recovery of the deferred charge, the
21 more acute the issue becomes with respect to inter-generational equity. At the
22 present time, Hydro recovers the RSP balance based on a recovery of one third
23 of the balance each year, on a declining balance. However, as has been
24 suggested by some of the parties, including the Board's financial consultant,
25 Grant Thornton, the option is available for the Board to reduce the period of
26 recovery and to change the method of recovery from a declining balance to a
27 straight line approach. Hydro does not disagree with a straight line approach or a
28 shorter period than three years for recovery of the RSP balance. However, in
29 reviewing this recommendation for a shorter timeframe for recovery, the Board
30 must be aware of the consequences this will have for ratepayers.

1 With respect to the second objection, Hydro does not agree that the RSP, in and
2 of itself, removes Hydro's incentive to manage its fuel supply cost. Hydro's
3 forecast of fuel supply costs have been submitted in all past rate referrals and is
4 an issue in this hearing. The Board has the jurisdiction to determine if any of
5 Hydro's fuel supply costs are unreasonable. The Board reviews Hydro's
6 management practices with respect to fuel as it does with any other expense.
7 The Board retains jurisdiction to ensure appropriate practices regarding fuel are
8 followed by Hydro, regardless of the RSP.

9

10 A third point raised to support the recommendation to eliminate the RSP is that it
11 is difficult for consumers to understand. As explained by Mr. Osmond, it is
12 Hydro's position that consumers understand the basic principles of the RSP, but
13 not necessarily the detailed mechanisms. Hydro submits that this is true for a
14 number of rate design issues, that is, while the customer may understand the
15 end result, they may not necessarily understand the principles of rate design and
16 how a particular rate is arrived at. (See also examination of P. Hamilton,
17 Transcript November 29, pp. 12-13). It is also Hydro's submission that, there is
18 no doubt, based on the degree of examination of the mechanics of the RSP
19 through requests for information and examination at the hearing, that the parties
20 have a very detailed understanding of the calculations of the RSP. The issue
21 then becomes whether the end use consumer must have the similar detailed
22 knowledge. Hydro submits that it is only necessary for consumers to understand
23 the basic philosophy of the RSP.

24

25 Mr. Bowman in his evidence added a fourth reason to support his
26 recommendation to eliminate the RSP, namely, that it distorts price signals. As
27 with the issue of inter-generational equity, it is true that customers will not
28 immediately pay the impact of a rising increase in No. 6 fuel burnt at Holyrood or
29 changes in load. However, balanced against this, is the impact of the smoothing
30 of such increases to avoid sharp fluctuations in price, which, in Hydro's view, is
31 what customers want.

1 **The RSP Balance - Cap**

2

3 There has been much discussion with respect to the RSP balance.

4 Schedule XIV to the pre-filed evidence of J.C. Roberts listed the actual balances
5 in the RSP from 1992 to 2000 and contained a forecast for 2001 and 2002.

6 Following a decrease in 1994, the overall balance for both Retail and Industrial
7 Customers increased in 1995 to \$12.9 million, to \$48.8 million in 1998 and then
8 decreased to \$34.5 million in 1999 and rose slightly to \$35.6 million in the year
9 2000 (\$22.7 million retail, \$12.9 million industrial). The 2001 and 2002 forecast
10 RSP balances were revised from that shown in Schedule XIV by PUB-81. The
11 revised 2001 forecast for the RSP balance is \$83.6 million (\$60.4 million for retail
12 and \$23.2 million for Industrial Customers). The 2002 forecast has been revised
13 to \$86.3 million (\$65 million for retail and \$21.3 million for Industrial Customers).

14

15 The increases in the balances in the RSP from 1992 to 2001 were caused by the
16 dramatic increase in the price of Bunker "C" from the time that base rates were
17 set using \$12.50 Cdn./barrel for No. 6 fuel in 1992. The increase forecast for
18 2002 relates to the fact that Hydro is not proposing that the price to be used for
19 No. 6 fuel in base rates be set at the forecast price and, thus, there is some
20 activity in the RSP for 2002.

21

22 Hydro has submitted that the current cap of \$50 million on the retail portion of the
23 RSP be increased to \$100 million to reflect reality (2001 RSP retail balance is
24 forecast to be \$60.4 million) and the fact that Hydro is proposing that the price to
25 be used in base rates for the 2002 rate adjustment be less than the forecast
26 price. Mr. Brushett in his supplementary evidence, dated December 13, 2001,
27 set out three options with respect to the cap on the RSP: approve the \$100
28 million cap proposed by Hydro; approve an increase in the cap between \$50
29 million and \$100 million related to the revised projected balance in the retail RSP
30 over 2002; and leave the cap at \$50 million and decide how the excess is to be

1 recovered, if at all. The third option of Mr. Brushett is essentially that
2 recommended by Mr. Brockman on behalf of NP.

3

4 When Hydro suggested the cap of \$100 million at the time of its original filing, the
5 2002 overall RSP balance was forecast to be \$97.8 million overall. Hydro does
6 not object to the recommendation of Mr. Brushett that the cap be set in relation to
7 the forecast RSP balance for retail customers. The current forecast of the RSP
8 balance on the retail portion for 2002 is set out in response to PUB-81 as \$64.9
9 million. Hydro, based on its review, does not forecast (using the same
10 assumptions as in PUB-81) that the RSP balance will increase over this limit in
11 2003. As recognized by Mr. Brushett in cross-examination, the response to
12 PUB-81 is based on a forecast and, like any forecast, it is not precise. Mr.
13 Brushett suggested, in light of the forecast of a \$65 million balance on the retail
14 portion of the plan in 2002, that a \$70 or \$75 million cap might be appropriate as
15 a temporary measure until it can be reviewed at the earlier of Hydro's next rate
16 referral or three years (Transcript, January 8, p. 9, lines 68-82 and p. 10, lines
17 19-24).

18

19 Based on the most current information, Hydro is prepared to accept the
20 recommendation set out by Mr. Brushett in cross-examination that the cap on the
21 RSP balance should be set in relation to the forecast. However, as any forecast
22 is not precise, Hydro proposes that the cap in the retail portion be set at \$85
23 million. Hydro would point out the forecasts of RSP balances in PUB-81 are
24 based on average hydraulic conditions and its forecast of the price for No. 6 fuel.
25 If 2002 is another low water year, like 2001, or if the price of No. 6 fuel is higher
26 than used in the forecast, the RSP balances in PUB-81 could be significantly
27 higher. Also, the fact that new rates will be implemented later in 2002 than
28 January will increase the forecast RSP balances in PUB-81, depending on the
29 date of implementation. Hydro is further prepared to accept a cap on the retail
30 balance in the RSP as a temporary measure until the earlier of Hydro's next rate
31 referral or three years.

1 Hydro does not accept the recommendation of Mr. Brockman that the cap should
2 be left at \$50 million with a further hearing to determine how, if at all, the balance
3 would be recovered. Hydro believes that this creates uncertainty with respect to
4 the recovery of the balance and that, in fact, it could affect the recommendations
5 on the appropriate return made by Ms. McShane and Mr. Hall, as it introduces an
6 additional element of risk that was not taken into account when they made their
7 recommendations. As all the parties have acknowledged, the balance in the
8 RSP relates to costs that were actually incurred by Hydro in serving customers
9 and, thus, they are appropriate regulated expenses. There is no basis, as
10 suggested by NP, to introduce the element of uncertainty with respect to the
11 recovery of what, in effect, are appropriate regulated expenses, prudently and
12 reasonably incurred to serve customers.

13

14

15 **Recovery of RSP Balance**

16

17 Another issue raised during the hearing was how the balance in the RSP should
18 be recovered. Hydro had proposed no change in the present recovery method,
19 which is to adjust mill rates each year based on recovery of a 1/3 of the balance
20 in the RSP at that time. Mr. Brushett in his supplementary evidence dated
21 December 13 set out two alternatives for the Board to consider with respect to
22 recovery of the balance in the RSP (pp. 8-9). The two alternatives suggested
23 were as follows:

24

- 25 1. freeze the balance as of December 31, 2001 and continue to
26 recover this balance using the current three year declining balance
27 method and recover any accumulation in the plan in subsequent
28 years using a straight line basis over a two year period; and
29
- 30 2. freeze the balance as of December 31, 2001 and recover this
31 balance over a three year period using a straight line basis with any

1 accumulation in the plan in subsequent years, being recovered over
2 a two year period (straight line).

3

4 The implications for customers of these alternative recovery methods were set
5 out in Exhibit 4 to the December 13 evidence. Hydro filed Exhibit – Hydro #2 to
6 show a slight adjustment in Option A in Exhibit 4 to reflect the assumptions as set
7 out in that document.

8

9 Obviously, if the recovery of the balance of the RSP is accelerated as suggested
10 in both alternatives by Mr. Brushett, there will be an impact on customers that the
11 Board should be cognizant of in considering this issue. The Consumer Advocate
12 requested that Hydro prepare a calculation similar to Exhibit 4 in Mr. Brushett's
13 December 13 evidence outlining the rate impacts of a longer period of recovery,
14 that is, 5, 10 and 15 years rather than periods used by Mr. Brushett in Exhibit 4.
15 This obviously would lessen the impact on consumers of the recovery of the RSP
16 balance. However, it would exacerbate the inter-generational equity issue that
17 the Consumer Advocate already raised with respect to the RSP. Hydro believes
18 that the recovery periods of 5, 10 and 15 years are too long. There also then
19 would remain the issue of how any new activity in the RSP would be dealt with.

20

21 Hydro is not adverse to a shorter period for the recovery of the RSP balance than
22 the current method and leaves the decision to the judgment of the Board. Either
23 alternative suggested by Mr. Brushett in his December 13 evidence is acceptable
24 to Hydro.

25

26

27 Allocation of RSP Balance

28

29 An additional issue was raised by the Island Industrial Customers with respect to
30 the RSP and that is how the balance in the plan was allocated between NP and
31 Island Industrial Customers from 1992 to the present. A letter to the Board from

1 Hydro in 1986 was filed in response to IC-284 (e) which clearly sets out, in
2 Hydro's submission, the rules to be applied to the RSP, including how the
3 balance in the RSP would be allocated between Retail and Island Industrial
4 Customers. This letter was also filed at the 1989 hearing in response to an
5 information request from Mr. Hutchings, Q.C., the current counsel for the Island
6 Industrial Customers, for the rules applicable to the RSP. It is Hydro's
7 submission that it is clear from this letter that it was understood at that time that
8 the allocation of the balance would be as Hydro has done it each year since
9 1992.

10
11 Moreover, it is clear from the evidence that the rules relating to the allocation as
12 set out in the 1986 letter to the Board were made known to Island Industrial
13 Customers, by the latest 1993. A copy of a letter from Hydro to Abitibi
14 Consolidated Inc., Stephenville in 1993 was filed in response to IC-286. It is
15 Hydro's submission that it is clear from this letter how the load variation
16 component was to work, which is the way Hydro has applied it since 1986 when
17 the plan was introduced.

18
19 It is Hydro's submission that the way in which Hydro split the RSP balance
20 between Island Industrial Customers and NP was understood and communicated
21 to the Board in 1986. It was subsequently the subject of review at Hydro's 1989
22 Rate Hearing. It has been consistently used by Hydro from 1986 to the present
23 date. Moreover, Hydro has demonstrated that it was communicated to Abitibi
24 Consolidated Inc. no later than 1993. The RSP and its calculation was reviewed
25 again at the 1990 Hydro rate hearing and each year by the Board's financial
26 consultant.

27
28 It is difficult in these circumstances to accept the Island Industrial Customers'
29 position that Hydro has not implemented the RSP properly or that these
30 customers were unaware of the implications or the manner in which the balance
31 was split between Retail and Island Industrial Customers. It is also interesting to

1 note that NP has not raised a similar issue or concern. There is, therefore,
2 absolutely no basis on which the Board should consider the suggestion by the
3 Island Industrial Customers that the allocations of the balances in the RSP since
4 1992 between NP and Island Industrial Customers should be reviewed.

5
6 As the Board is aware, Hydro is suggesting that in future the allocation of the
7 RSP balance be based on the customers' twelve months to date energy for the
8 year in question, so that this will not be an issue on a go forward basis, if this
9 change in the RSP is approved by the Board.

10
11
12 **RSP Balance – Industrial Class**

13
14 The last issue raised by Island Industrial Customers with respect to the
15 mechanics of the RSP is that the remaining customers in the industrial class
16 absorb all of the balance for that class in the event that an Island Industrial
17 Customer ceases operations. However, under the rules for the operation of the
18 RSP as set out in the 1986 letter, and as recommended by Hydro in this hearing,
19 the RSP balance is apportioned on a rate class basis. Mr. Osmond explained
20 why it would not be possible to separate out the actual balance that may be
21 owing by any individual industrial customer. In the transcript of November 26, p.
22 4, lines 21-39, Mr. Osmond explained that the rates are normally designed by
23 rate class and thus Hydro has designed a rate for its retail customer, NP, and an
24 Island industrial rate for its Island Industrial Customers. Rates are not designed
25 for each Industrial Customer. In order to determine the balance owing by a
26 customer should it cease operation, it would be necessary to have a separate
27 plan specific for each customer which would add immense complexity to the
28 current RSP as it would involve tracking of all the various components for each
29 individual customer. This was recognized by the expert for the Island Industrial
30 Customers, Mr. Osler, who acknowledged that trying to split up the balance

1 between individual customers would introduce another level of confusion or
2 complexity. (Transcript, December 3, p. 8, lines 6-7).

3

4 Hydro submits that, as rates are designed based on a class of customers, the
5 method employed since 1986 for the RSP of treating the Plan for the Island
6 Industrial Customers as a class is the most appropriate.

7

COST OF SERVICE METHODOLOGY

1
2
3 Once the revenue requirement of a utility has been determined, it is then
4 necessary to determine how that revenue requirement is to be recovered from
5 customers. Generally a cost of service study is completed to determine the
6 appropriate manner in which this is to be done. The appropriate methodology to
7 be used by Hydro was the subject of a special Generic Hearing before the Board
8 in the Fall of 1992, with the Board issuing the 1993 Report which contained a
9 number of recommendations relating to the cost of service methodology to be
10 used by Hydro in the development of rates for its customers.

11
12 The 1993 Report (p. 6), as well as the experts at this hearing, have recognized
13 that there are two types of cost of service studies: embedded cost studies and
14 marginal cost studies. An embedded cost of service study allocates the existing
15 costs of the utility for existing plant and operating expenses. A marginal cost of
16 service study allocates the cost of marginal consumption (p. 6 of the 1993
17 Report). In the 1993 Report the Board recommended that Hydro's cost of
18 service study be "*of the embedded type and that the methodological objective be*
19 *to allocate costs to rate classes in a fair and equitable manner based on cost and*
20 *responsibility for cost occurrence*" (p. 74). Thus, the cost of service study
21 submitted by Hydro with respect to the current Application is an embedded cost
22 of service study and all recommendations as outlined in the 1993 Report were
23 adopted by Hydro (see Exhibit LBB-3 attached to Pre-filed evidence of
24 Larry Brockman comparing the recommendations in the 1993 Report with
25 Hydro's Application and Pre-filed testimony of J. Brickhill p. 7-8).

26
27 In reviewing the issues with respect to Hydro's proposed cost of service
28 methodology, it should be borne in mind that Hydro, of all the parties to the
29 hearing, is probably the most neutral with respect to both the cost of service
30 methodology issues and the rate design issues. As noted above, once the
31 revenue requirement is approved by the Board, it gets allocated among

1 customers in accordance with the methodology and rate design issues
2 employed. Judgment must be exercised with respect to certain cost of service
3 methodology issues and rate design issues. In its approach to both these
4 subjects, Hydro has put forward what it believes is the fairest and most equitable
5 manner to allocate costs, as well as to design rates among all of its customer
6 classes. In this regard, as Hydro's revenue requirement must be recovered from
7 its customers, Hydro has no undue vested interest with respect to a particular
8 outcome of any of these issues. Hydro has, in all cases, made
9 recommendations based upon what it believes to be the most fair and equitable
10 way to treat the issues among its customer classes.

11

12

13 **Allocation of Generation Demand Costs**

14

15 Only a limited number of issues were raised by the parties with respect to the
16 cost of service study. The first relates to the allocation of generation demand
17 costs. Recommendation 8 from the 1993 Report (p. 75) recommended that a 1
18 CP allocator be approved for interim use for the Island Interconnected System
19 and that Hydro complete an analysis of the relationship between load factor and
20 system reserve requirement and make a recommendation regarding the number
21 of peaks on which the CP allocator for generation demand costs should be based
22 at the time of its next rate hearing.

23

24 Mr. Brickhill in his pre-filed evidence (pp. 8-9) reviewed the loss of load hours
25 study which Hydro completed in response to this recommendation. At lines 19-
26 22 of p.8 Mr. Brickhill stated that the study indicated a "*greater risk of loss of load*
27 *hours largely in two winter months*" with the probability increasing as the load
28 factor increases. He concluded that the study supported the use of a 2 CP
29 allocator. Therefore, the generation demand cost in the cost of service study in
30 the Application was allocated among rate classes by means of a 2 CP allocator.
31 While Mr. Brickhill stated that the Hydro study supported the use of a 2 CP

1 allocator, he also stated that the use of a 1 CP allocator would not be wrong
2 (Transcript November 27, p. 16, lines 38-42 and lines 53-56).

3
4 The cost of service experts called by the other parties all recommended the use
5 of a 1 CP allocator with the exception of Mr. Brockman for NP. (pre-filed
6 supplementary evidence, C. Osler, September 12, 2001, p. 16, lines 3-4; pre-
7 filed evidence of D. Bowman, p. 3, lines 9-13; and pre-filed evidence J. Wilson,
8 p. 5, lines 11-13). Only Mr. Brockman recommended the use of a 4 CP allocator
9 (pre-filed evidence L. Brockman, p. 24, line 14). Mr. Brockman's rationale is
10 explained on pp. 23-24 of his pre-filed evidence and is primarily based on the fact
11 that the winter peak can occur in any of the four winter months. This rationale
12 has not been accepted by Messrs. Brickhill or Osler nor by Dr. Wilson.
13 Mr. Bowman did state that if a multiple CP were to be used he favoured 4 CP
14 over 2 CP (pre-filed evidence p. 3, lines 14-15).

15
16 Hydro's submission on this issue is that the loss of load hours study the Board
17 asked Hydro to complete indicated the use of a 2 CP allocator. However, Hydro
18 agrees that the use of 1 CP allocator is also appropriate. Hydro does not
19 support the use of a 4 CP allocator.

20 21 22 **Classification of Transmission Plant**

23
24 A second issue raised by the parties with respect to the cost of service
25 methodology is the classification of transmission plant as energy.
26 Recommendation 15 of the 1993 Report was that transmission lines on the
27 Island Interconnected System used solely for the purpose of connecting remote
28 generation to the main transmission system should be classified in the same
29 manner as the generation it connects and that other transmission be classified
30 100% to demand. This treatment, as recommended by the Board and as applied

1 by Hydro in its Application, was supported by all experts at the hearing except
2 Dr. Wilson.

3

4 On p. 8 of his pre-filed evidence, lines 6-9, Dr. Wilson recommended that Hydro's
5 transmission network should be classified between demand and energy in
6 proportion to the system load factor or in accordance with marginal cost
7 principles. Dr. Wilson did not suggest any specific percentage that should be
8 classified as energy and was unable to provide examples of jurisdictions that use
9 this method to classify transmission plant (Transcript December 6, p. 33 and
10 response to NLH-38). Hydro submits that its classification of grid transmission
11 plant (other than that used to connect remote generation) to demand is
12 consistent with the recommendations contained in the 1993 Report. It is also
13 supported by all the other parties to the proceeding, except for the Board's
14 consultant. Hydro submits that its proposed classification of transmission plant
15 should be approved.

16

17

18 **Treatment of Non-Firm Load/Demand Credit**

19

20 The last issue raised by any of the parties with respect to the cost of service
21 methodology was raised by Mr. Osler on behalf of Industrial Customers where on
22 p. 20 of his September 12 supplementary evidence, lines 19-25 Mr. Osler states
23 that Hydro has "*not presented a consistent approach in addressing non-firm*
24 *loads, that is, the industrial non-firm energy and NP's demand credit in the cost*
25 *of service*".

26

27 The evidence with respect to both types of arrangements is set out in both the
28 pre-filed evidence and the transcript. With respect to NP, the evidence is clear
29 that Hydro has the option of requesting that NP use its generation plant at
30 Hydro's request. The calculation of the generation credit which is provided to NP
31 in the cost of service study is provided in the response to NP-126 and was

1 explained by Mr. Brickhill in his evidence (Transcript November 26, p. 38, lines 7-
2 23). Mr. Brickhill explained the difference in treatment in that the generation
3 credit provided to NP in the cost of service study does lower NP's cost and the
4 cost to its customers. Abitibi Consolidated Inc. is compensated for Hydro's right
5 to interrupt its load on an annual basis in the amount of approximately \$1.3
6 million plus an additional payment when the interruption occurs. No further
7 compensation in the cost of service is appropriate. In reference to the treatment
8 of the industrial Interruptible B-arrangement, Mr. Brickhill stated "*I can't imagine*
9 *paying money and giving them a credit. That would simply be unfair to Hydro*
10 *and Hydro's other customers*". (Transcript, November 26, p. 38, lines 21-23)

11

12 It is Hydro's position that both NP and Abitibi Consolidated Inc. are appropriately
13 compensated for the right that Hydro has with these customers. The right with
14 respect to NP is to request NP to run its own generation when Hydro requires it
15 and compensation is provided through the generation credit. The right with
16 respect to Abitibi Consolidated Inc. is to interrupt Abitibi's load at its Stephenville
17 Mill under certain well-defined conditions which were reviewed in detail with Mr.
18 Dean (Transcript January 10, p. 5, lines 30-92 and p.6 line 1) and Abitibi
19 Consolidated Inc. receives compensation for this. During the hearing no other
20 party took a position with respect to this issue. Hydro submits that its proposed
21 treatment for both arrangements is appropriate and should be approved by the
22 Board.

23

24

25 **Assignment of Plant**

26

27 The 1993 Report made a number of recommendations with respect to the
28 assignment of plant. These are explained on pp. 15-16 of the pre-filed evidence
29 of Hubert Budgell, as well as the recommendation on this issue in the 1995
30 Report. The revised guidelines for assignment of plant, taking into account the
31 Board's 1993 Report, as modified by its 1996 Report, are set out on pp.16-17 of

1 the pre-filed evidence of Mr. Budgell. The most substantive issue raised by any
2 of the parties to the hearing with respect to the proposed assignment of plant has
3 been raised by the Island Industrial Customers with respect to the classification
4 of certain transmission plant and the assignment of the frequency converters as
5 specifically assigned to certain Island Industrial Customers.

6
7 On page 16, line 20 of Mr. Budgell's pre-filed evidence, Mr. Budgell explained
8 that plant is assigned as either common with all customers paying the cost or
9 specifically assigned to a certain customer. The definition of common plant set
10 out on p. 16, lines 22-23 is "*plant that is of substantial benefit to two or more firm*
11 *customers*". In accordance with that definition Hydro has assigned as common
12 all of its production facilities, all transmission and terminal stations 66 kV and
13 above that is of substantial benefit to two or more customers, all transmission
14 and terminal station plants whose sole function is to interconnect a generating
15 facility with the system (then such plant have their costs classified on the same
16 basis as the generation it interconnects) and all Hydro's transmission and
17 terminal station plants that connects a single customer and remote generation or
18 voltage support equipment that is of substantial benefit to all customers on the
19 grid. The Island Industrial Customers have raised specific issues with respect to
20 the assignment of certain transmission plant as common, that is the transmission
21 line interconnecting the Great Northern Peninsula.

22 23 24 **GNP Transmission Line-Assignment**

25
26 Mr. Budgell, on behalf of Hydro, has explained the guideline developed by Hydro
27 to determine whether a transmission line connecting a single customer and
28 remote generation is of common benefit. On page 17, lines 7-12 of his pre-filed
29 evidence, Mr. Budgell stated "*For the purpose of this guideline if, under any*
30 *normal operating scenario, the output of remote generation can be delivered to*
31 *the 230 kV grid (i.e. in excess of radial load), then the remote generation is*

1 *considered to be of substantial benefit to all customers and as such the*
2 *transmission and terminals plant connecting it to the grid would be assigned*
3 *common”* (lines 7-12). It must be emphasized that this is a test that determines
4 the assignment of transmission and terminals. Hydro’s position is that all
5 production facilities (hydraulic, thermal, gas turbine and diesel) are assigned as
6 common, irrespective of their location (Pre-filed evidence, H. Budgell, p. 16, lines
7 26-28).

8
9 Specifically with respect to the GNP, it should be noted that in its 1996 Report,
10 the Board recommended that both generation assets and the 138 KV
11 transmission line on the Great Northern Peninsula should be assigned, on a
12 provisional basis as being of common benefit to all interconnected customers
13 and that sub-transmission costs for lines whose voltage is below 138 KV be
14 specifically assigned (p. 33 of 1996 Report). The Board did suggest that these
15 cost assignment decisions be reviewed at a future hearing.

16
17 The response to IC-215 demonstrated how the GNP transmission met the test as
18 outlined on page 17 of Mr. Budgell’s pre-filed evidence. Lines 13-16 of page 3
19 of this response indicated that a review of the Great Northern Peninsula had
20 demonstrated that under light load conditions the combined generation of
21 Hawkes Bay, St. Anthony and Roddickton exceeded the radial load. Thus it met
22 the test that under normal operating conditions the output could be delivered to
23 the 230 kV grid. Mr. Budgell in cross-examination on November 7 further
24 explained how the generation on the Great Northern Peninsula can be
25 transported to the grid and, therefore, the transmission connecting it to the grid is
26 of common benefit.

27
28 *“... if I put on five megawatts of generation on system because*
29 *there is a short or outage, if I put it on the Burin Peninsula, or I put it*
30 *on in Port aux Basques, or on the GNP, it benefits the overall*
31 *system in meeting load requirements. Or if the generation needed*
32 *in one part of the system for voltage support and we’re full out in*
33 *that area we could put on generation in another area to free up*

1 generation in another part of the system so it can be used
2 elsewhere. That's a benefit to all customers, and what this is
3 indicating here is that, well, we were caught with the dilemma that
4 there were many ways to go in setting up this criteria. We could
5 say that it is on a percentage basis, so to say, well, what is
6 substantial, is it substantial in which regard, its more than ten
7 megawatts, is it substantial on a percentage basis, is it substantial
8 in relation to the load that's in the system, so all of these different
9 thoughts entered into the decision, and we thought, from a fairness
10 perspective, this criteria in other words, the generation that only
11 does it ... because all generation supports the system, but this
12 generation also at times can even, under light load conditions, can
13 make it to the 230 KV system and we thought that that was an
14 appropriate means of defining the word "substantial" for the benefit
15 of this criteria."

16 (Transcript, November 7, p. 20, lines 65-88)

17
18
19 Mr. Budgell went on to explain that some radial lines didn't meet the criteria but
20 that under this guideline, the transmission lines connecting the Great Northern
21 Peninsula, the Burin Peninsula and the Port aux Basques area to the Island
22 interconnected grid meet the definition and therefore should be assigned as
23 common. (Transcript, November 7, p. 20, lines 90-94).

24
25 As pointed out in the introduction to this section on the cost of service
26 methodology, once the revenue requirement has been determined, the cost of
27 service study (including the assignment of plant) deals with how Hydro's costs
28 should be recovered from its customers. Hydro will recover its cost and the
29 question is which customer should pay the approved regulated costs. In
30 assessing this, Hydro has reviewed all of the relevant criteria and concluded that
31 the most reasonable and fairest treatment for all customers is as proposed by
32 Hydro in the Application, which is to treat the transmission line connecting the
33 Great Northern Peninsula as of common benefit to all of the system. As this line
34 is of common benefit, all customers should share in the cost of paying for it. If
35 Hydro's proposed guideline is accepted, then the same principle would apply with
36 respect to the transmission lines to the Burin Peninsula and Port aux Basques
37 area and they would be assigned as common as well.

1 Hydro recognizes that the decision on the assignment of these three
2 transmission lines affects the amount that customers will pay and that the result
3 of the decision to treat them as common will shift costs to Island Industrial
4 Customers. The financial impact of this for Island Industrial Customers has been
5 pointed out. The response to IC-87 indicates that the assignment of the GNP to
6 common vs. specifically assigning it to rural, which it was previously, is \$1.5
7 million annually. However, Hydro believes that the fairest way for all customers
8 is to treat the assignment of these transmission lines as common.

9
10
11 **Prudence of GNP Interconnection**

12
13 The second issue raised with respect to the interconnection of the St. Anthony/
14 Roddickton area to the main grid was the prudence of such interconnection. This
15 issue was raised only by the Island Industrial Customers. Hydro has provided
16 detailed information in this hearing in the supplementary evidence of Hubert
17 Budgell filed September 26, 2001, and in numerous responses to information
18 requests which, in its view, clearly demonstrates that the project was, at the time
19 of the decision to interconnect, financially prudent. The evidence also
20 demonstrates that the studies done at the time of the decision provided a
21 forecast reduced revenue requirement vs. the isolated alternative during the
22 study period with a payback of twelve years (response to IC-203 (6) revised and
23 supplementary evidence of H. Budgell, p. 5). These studies, the manner in which
24 they were conducted and the results are outlined in detail in this supplementary
25 evidence of September 26.

26
27 As well, it should be noted that the basis of the studies completed by Hydro to
28 determine the cost effectiveness of an interconnection have been reviewed by
29 external consultants of the Board on two occasions, in 1991 and 1999. In 1991
30 the Board's consultant, G. C. Baker of Hiltz and Seamone Company Limited
31 concluded that the planning techniques employed by Hydro with respect to

1 decisions on major plant additions were “*accurate, adequate, and much the*
2 *same employed by other large utilities*” (p. 10 and referred to on p. 3, lines 21-22
3 of supplementary evidence of H. Budgell). In 1999 Quetta Inc and Associates
4 conducted an operating review of Hydro and reviewed the planning process used
5 by Hydro with respect to making decisions with respect to investments. It
6 reviewed the studies done for the Great Northern Peninsula transmission line
7 and concluded on p. 30 (referred to on p. 4 of the supplementary evidence of
8 H. Budgell, lines 20-22 and the Study filed in NP-30, p. 30) that the study done
9 for the GNP was “well done”.

10

11 Mr. Osler suggested that the benefits provided by the GNP interconnection
12 should be greater than the costs imposed on the system by the decision to
13 proceed (supplementary pre-filed evidence C. Osler, September 12, p. 43,
14 lines 12-13). The study that was filed by Hydro with Mr. Budgell’s supplementary
15 evidence of September 26 (p. 10, lines 14-16) indicates that the proposal for
16 federal funding completed by Hydro showed an estimated cumulative reduction
17 of \$65.8 million (\$10.1 million in 1994 \$) in the rural subsidy vs. the isolated
18 diesel alternative. This conclusion remains valid. The final cost of the project
19 was \$26.4 million (net of the \$5 million received in federal funding). This cost is
20 very close to the estimated net cost of the project (\$25.6 million) used in the
21 study which concluded there would be a reduction of \$65.8 million in the rural
22 subsidy vs. the isolated diesel alternative.

23

24 Hydro submits that the decision in 1994 to complete the St. Anthony/Roddickton
25 interconnection in 1996 was a prudent decision supported by cost effectiveness
26 analyses as filed with the Board and the fact that the analyses showed a
27 reduction in the rural subsidy arising from the interconnection.

1 Frequency Converters

2

3 The second major issue raised during the hearing under the topic of the
4 assignment of plant was the appropriate treatment for the two frequency
5 converters. This issue was raised only by the Island Industrial Customers.

6

7 The evidence is that the frequency converters are required for the Abitibi Mill at
8 Grand Falls and for the Corner Brook Pulp and Paper Mill at Corner Brook to
9 allow them to convert some of their existing generation from 50 Hz to 60 Hz for
10 their own mill requirements. The response to IC-32 explained Hydro's rationale
11 for the proposed change in treatment of the frequency converters from common
12 to specifically assigned to each of the Industrial Customers using them. Lines 16-
13 28 of this reply states:

14

15 *"The frequency converters were re-assigned following a review of*
16 *plant assignments undertaken in preparation for this rate*
17 *application. In the initial years of the Island Interconnected System*
18 *the frequency converters at Corner Brook and Grand Falls were a*
19 *benefit to each of the industrial customers, NP and the grid as a*
20 *whole. With the continued expansion of the transmission system*
21 *and the construction of generating stations at Cat Arm and Hinds*
22 *Lake, operation of the frequency converters has little impact on the*
23 *230 KV system voltage levels. The role of the frequency converters*
24 *has been reduced to providing local voltage control for the mill*
25 *power systems and transferring power from 50 Hz to 60 Hz for use*
26 *in the individual paper mills. With the frequency converters being*
27 *only of benefit to the respective customers, the assets were*
28 *specifically assigned to each of the industrial customers they*
29 *serve."*

30

31

32 The Island Industrial Customers attempt to rely on historical experience to
33 support the continuation of the frequency converters as a common cost. The
34 factual circumstances raises the issue of whether an asset, once treated as a
35 common asset, should continue to be so treated, even though the benefit it
36 provided to the rest of the customers has been terminated. Hydro acknowledges
37 that at the time of the development of the Bay D'Espoir Plant and the

1 construction of the Island transmission grid, the frequency converters provided
2 the mechanism to allow the 50 Hz and 60 Hz systems to be interconnected and
3 function as a single system as set out in the response to IC-55. However, as
4 also stated at lines 10-17 of page 2 of that response:

5
6 *“The Island interconnected system today is quite different. There*
7 *is very little 50 Hz load remaining and the 60 Hz generation and*
8 *transmission network has developed to the stage where the support*
9 *provided by the converters is virtually insignificant. The primary*
10 *function of the frequency converters today is to convert the*
11 *customers’ excess 50 Hz generation to 60 Hz to supply 60 Hz loads*
12 *at the customers’ mills in Corner Brook and Grand Falls-Windsor. It*
13 *is because of this change in the significance of the converters that*
14 *the assignment has been changed from common to specifically*
15 *assigned.”*
16
17

18 It should also be noted that since the commencement of this hearing, Abitibi
19 Consolidated Inc. at Grand Falls has confirmed that the conversion of their 50 Hz
20 generation will be complete by no later than the end of April, 2002, leaving the
21 issue of the frequency converter for only the Corner Brook Pulp and Paper Mill at
22 Corner Brook.

23
24 The issue before the Board is whether the frequency converters should continue
25 to be treated as common, because of the benefit to the grid they provided at the
26 time of construction and for a period of time thereafter, when, at this particular
27 point in time, they are of benefit only to the two customers being served. This
28 will change by April 30, 2002 to one customer. Hydro submits that based on all
29 the normal tests that are applied for assignment of plant, the frequency
30 converters should be specifically assigned as they are only of benefit to the
31 customers who are now using them. Historical usage is no longer relevant.
32

RATES ISSUES

1
2
3 The issues to be dealt with under this heading include the appropriateness of the
4 energy only rate structure for NP, the recommendation of Mr. Bowman that there
5 should be a specific study done on rate design, rural rates, the issue of
6 seasonal/time of use rates, the issue of the development of Labrador
7 interconnected rates, the wheeling rate, and the effective date and method of
8 rate changes.

NP – Energy Only Rate

9
10
11
12
13 Hydro currently charges NP an energy only rate and proposes in its current
14 Application that this continue. This proposal is supported by NP. Dr. Wilson in
15 his pre-filed evidence (page 21 of the Report attached to his evidence) suggests
16 that Hydro's wholesale rate structure should be "calibrated" so that NP in its next
17 rate case can design retail rates to include cost-based charges that NP would
18 realize as its retail sales volumes change. Mr. Bowman in his pre-filed evidence
19 (page 3, lines 23; p.4 line 1) recommended that the Board hire an independent
20 consultant to recommend rate design and, further on page 4, stated that there
21 are benefits to be gained from a rate design including time varying demand and
22 energy charges, as well as an interruptible rate option (lines 17-19). Finally, at
23 lines 22-23 he states that a more "complex rate structure" for NP is justified.
24 Mr. Osler on page 29, lines 11-15 of his supplementary evidence of September
25 12 suggests that there should be a multi-part rate in place which includes
26 demand charges (including appropriate ratchets), energy charges and fixed
27 charges, as necessary.

28

1 The position of both utilities has been clearly set out throughout the hearing.
2 NP's position was set out in a letter dated May 11, 2001, forwarded to Hydro
3 which was attached to the response to PUB-68. Hydro's customer, NP, stated in
4 this letter:

5

6 *"It is NP's view that, while a demand-energy rate may be*
7 *theoretically desirable in many circumstances, introducing such a*
8 *rate structure into the power purchase arrangement between*
9 *Newfoundland Hydro and NP is neither necessary nor desirable in*
10 *the current environment."*

11

12

13 Further in this letter it is stated that *"a demand energy rate would have a*
14 *tendency to create volatility in the earnings of both Hydro and NP from year to*
15 *year. Because this increased business risk ultimately would be reflected in the*
16 *utilities' cost of capital, and tend to put upward pressure on consumer rates,*
17 *measures would be required to moderate this effect on the utilities"*. NP goes on
18 to say that it does not believe a demand/energy rate structure is necessary to
19 provide appropriate pricing signals to its customers as it, in the design of its
20 rates, provides appropriate signals. In the response to IC-239, Hydro confirmed
21 that it concurred with the conclusion set out in NP's letter filed in response to
22 PUB-68.

23

24 Detailed evidence was given on this issue on behalf of NP by Mr. Brockman. On
25 pages 28-29 of Mr. Brockman's August, 2001 evidence he explains why he is not
26 recommending a demand/energy rate structure at this time. The reasons set out
27 there are similar to the reasons set out in the letter attached to PUB-68. This
28 position was confirmed by Mr. Brockman during cross-examination.

29

30 Mr. Brickhill on behalf of Hydro in his first supplementary evidence filed on
31 September 12, deals with the issue of the energy only rate for NP. On pages 6-
32 10 of this evidence Mr. Brickhill sets out why it is reasonable for Hydro to charge
33 NP entirely through an energy charge. At page 8 of this evidence on lines 12-16,

1 he concludes that the matching of revenues and costs is achieved by means of
2 the RSP in conjunction with the energy only rate. Thus, there is no basis for the
3 assertion that the energy only rate fails to match costs. He then deals with the
4 claim that an energy only rate does not discourage wasteful use of capacity and
5 concludes on page 9 that so long as the rate design used by NP to bill its
6 customers reflects the proper recovery of demand, energy and customer
7 components, there is no adverse impact on the load pattern, and thus there is no
8 wasteful use of demand caused by Hydro's energy only rate for service to NP.
9 Mr. Brickhill also points out, on page 9 of his supplementary evidence, the
10 potential impact that a demand charge could have on NP's use of hydraulic units
11 which could result in a higher potential for spillage. Mr. Brickhill's conclusion on
12 page 9 is that he has no difficulty with the use of an energy only rate, in
13 conjunction with the RSP, for billing NP.

14
15 In view of the fact that both the supplier of the power and the purchaser of the
16 power do not see any merit in pursuing an alternative rate structure, and in view
17 of the evidence provided by both Mr. Brickhill and Mr. Brockman, it is Hydro's
18 submission that there is little merit in pursuing this issue further at this time. It is
19 Hydro's submission that each of the arguments put forward by the other parties
20 relating to the introduction of the charge have been adequately addressed in the
21 evidence of Mr. Brickhill and Mr. Brockman and that there is no substantive basis
22 on which the Board should order the utilities to further consider a demand/energy
23 rate structure for NP.

24 25 26 **Seasonal Cost Variations And Marginal Considerations**

27
28 Dr. Wilson, the Board's consultant, recommended that Hydro should prepare and
29 file rates reflecting seasonal cost variations and that marginal cost considerations
30 should receive greater attention in designing Hydro's rates (pre-filed evidence,
31 p. 7, lines 4-18).

1 Hydro's position in respect to this recommendation was set out by Mr. Brickhill in
2 his first supplementary evidence filed September 12 on pp. 1-5. Mr. Brickhill
3 points out that marginal cost based rates have no meaning or relevance to Hydro
4 unless there are significant changes in Government and Board policy (p.1, lines
5 27-28; p. 2, lines 1-2). He points out that the Board, in its 1993 Report,
6 recommended an embedded cost of service study which Hydro filed in the
7 Application. He goes on to point out that marginal cost based rates are usually
8 required to send price signals and that this is not as acute in the Newfoundland
9 environment, as it is in other places, because of the operation of the RSP and
10 rate design policies. Both Government policy and previous Board
11 recommendations result in Hydro's Rural Customers being subsidized and thus,
12 to begin with, price signals are distorted as one class of customer is subsidized
13 by another. He also points out the role of the RSP with respect to sending price
14 signals and, on p. 3, lines 1-17, concludes that the existence of the rural subsidy
15 and the RSP confuse the picture on marginal cost-based rates in Newfoundland.

16

17 It is Hydro's position that it would not be appropriate at this time to spend
18 additional time and incur additional costs to study marginal cost considerations in
19 Newfoundland for the reasons set out in Mr. Brickhill's supplementary evidence.

20

21

22 **Recommendation Of Further Study By An Independent Consultant**

23

24 Mr. Bowman has recommended that the Board hire an independent consultant to
25 review and recommend rate design for customers which would then be reviewed
26 at a public hearing. It is Hydro's position that all of the issues with respect to rate
27 design are before the Board at this hearing and that no added value for Hydro or
28 its customers would be derived by having a further study at this time. The issues
29 are clearly before the Board and can be dealt with at this time. The Board has
30 had the resources of five cost of service, rate design experts available to it during
31 this hearing (Messrs. Brickhill, Brockman, Osler, Bowman and Dr. Wilson) and all

1 available information. Nothing will be gained by a further study, except additional
2 costs.

3

4

5 **Rural Rates**

6

7 Hydro's proposals with respect to the rates to be charged its Rural Customers
8 were described in the pre-filed evidence of Mr. Osmond pp. 11-12. With respect
9 to the Island Interconnected System, Hydro is proposing that the policy that the
10 customers pay the same rates as charged to customers of NP be continued.
11 With respect to Isolated Rural Systems, Hydro is proposing that the current
12 policies be continued, that is, that domestic and general service customers on
13 the Isolated Systems pay the same rates for the first 700 kWh per month of
14 consumption as do Hydro's customers on the Island Interconnected System (i.e.
15 the same rates as NP's customers). Hydro is further proposing that the energy
16 rates for consumption above the 700 kWh lifeline block continue to change by the
17 average percent of change in NP's rates. Hydro is proposing in the current
18 Application to implement the first step in full cost recovery for federal and
19 provincial departments and agencies served by Hydro in the Isolated Systems.

20

21 No real issue was taken by any of the parties at the hearing with respect to the
22 existing policy of setting rates for customers served on the Island Interconnected
23 System or the policy with respect to the lifeline block for domestic customers in
24 the Isolated Systems. The main issue with respect to rural rates focused on the
25 fact that Hydro is not proposing to start the phase out of preferential rates given
26 to certain Rural Customers and that it was not moving more quickly with respect
27 to the implementation of full cost recovery for government departments and
28 agencies. Hydro's proposal with respect to both these issues is that, if the Board
29 approves Hydro's general approach to the rural rates, then Hydro, at its next rate
30 application, will submit a plan proposing the appropriate alteration in the rates
31 over a five-year period.

1 With respect to cost recovery for government departments and agencies it should
2 be pointed out that the amount of additional revenue, should these rates recover
3 full cost is \$2 million (pre-filed evidence Mr. Osmond, p. 12, lines 24-25). If the
4 preferential rates charged certain Rural Customers are totally eliminated, the
5 additional revenue would be \$0.6 million. (Transcript November 19, p. 39, lines
6 28-29).

7

8 Hydro's position with respect to rural rates has been taken in light of the overall
9 increases that have been proposed for customers. In light of the amount of
10 increase being proposed, Hydro did not go further and recommend an additional
11 increase (except for government departments and agencies) to reflect the phase
12 out of preferential rates or the full implementation of cost recovery for
13 government departments and agencies. Hydro submits that this issue is now
14 before the Board and that, while Hydro has submitted what it believes is a
15 reasonable approach in the current context, there is more than one reasonable
16 approach. Hydro leaves this matter for the Board's consideration and decision.

17

18 The other way of reducing the rural deficit, apart from increasing revenue through
19 rate design, is to ensure that costs are kept as low as possible. In this respect
20 Hydro has outlined a number of initiatives it has undertaken to ensure that the
21 costs of supplying Rural Customers are as low as possible, (see e.g. pre-filed
22 evidence Mr. Reeves, pp. 11-13). Until there is significant change with respect to
23 the policies outlined above for the rates to be charged Rural Customers, it is
24 unlikely that there will be a significant reduction in the rural deficit as a result of
25 additional revenues from rates. Hydro continues to strive to ensure that all costs
26 associated with serving its Rural Customers are as low as possible. Hydro would
27 point out that no issue was taken by the Intervenor with respect to any of these
28 costs with the possible exception of certain capital expenditures which are dealt
29 with in Schedule B of this Argument.

30

1 **Labrador Interconnected Rates**

2

3 In the 1993 Report the Board recommended that there be, for cost of service
4 purposes, one study for the Island Interconnected System, one for the Labrador
5 Interconnected System and one for all Isolated Rural Systems. Consistent with
6 this recommendation, Hydro is proposing in the current Application, to implement
7 one uniform set of rates for customers served from the Labrador Interconnected
8 System in Labrador City, Wabush and the Happy Valley/Goose Bay area.

9

10 As described on p. 13, lines 8-21 of the pre-filed evidence of Mr. Osmond, there
11 are currently three sets of rates, rules and regulations for the Labrador
12 Interconnected System arising from the fact that Hydro acquired these systems
13 at different times. In the current hearing Hydro presented one cost of service
14 study for the Labrador Interconnected System. Hydro is proposing that the
15 current 24 different rate classes in effect in the three areas be combined into six
16 classes as stated in the pre-filed evidence of Mr. Hamilton. Hydro proposes that
17 these new rate classes be the same as those used on the Island Interconnected
18 System but the rates would reflect the costs of the Labrador Interconnected
19 System. The implementation of the new rate classes for this system will place all
20 Labrador interconnected customers in an appropriate class based on each
21 customer's load characteristics. As a first step in implementing uniform rates for
22 this system, Hydro is proposing that initially Labrador City and Wabush
23 customers pay the same rates. While customers in the Happy Valley/Goose Bay
24 area are proposed to be categorized in the same six classes as the other
25 customers in the Labrador Interconnected System, their level of rates will differ at
26 this time. Details of the proposed rate design changes are contained in the pre-
27 filed evidence of Mr. Hamilton.

28

29 The Town of Labrador City is proposing that instead of one Interconnected
30 Labrador System, there in effect be two, with Labrador City/Wabush being
31 treated as one and Happy Valley/Goose Bay being treated as the second area.

1 Hydro does not agree with this position. It is Hydro's position that all of the
2 customers on the Labrador Interconnected System are served by the same
3 source of power. As Mr. Osmond stated at the hearing, the normal policy is that
4 if customers are served from the same system or grid they should pay the same
5 rates (Transcript November 21, p. 32, lines 63-73 and lines 81-86).

6
7 Hydro submits that its proposal to have one Labrador Interconnected System is
8 consistent with the recommendation of the Board in its 1993 Report and that it is
9 consistent with normal utility practice that customers served from the same
10 system (where there are common costs) pay the same rates. As it is not
11 possible to achieve this in the current application, as there are significant impacts
12 for certain customer classes, Hydro proposes that the approach be phased in as
13 outlined in its evidence.

14
15 Mr. Drazen in his evidence has suggested it is possible to determine the cost of
16 serving Labrador City and Wabush and submitted evidence to that effect.
17 However, it must be pointed out that this was done on the same basis as was
18 done by Hydro in response to a specific direction from the Board with respect to
19 the Wabush surplus which is not consistent with the current determination of
20 costs for a customer class using the approved cost of service methodology. It is,
21 therefore, not appropriate to use the same basis for the calculation of costs for
22 serving Labrador City customers.

23
24 Hydro requests approval of its proposal that the Labrador Interconnected System
25 be treated as one system and that one set of rates be developed for all
26 customers served from that system with all customers being placed in the
27 appropriate rate category. As a first step, Hydro is proposing that the number of
28 rate classes be reduced and that similar rate structures be applied for similar
29 customers. The first step includes a single set of rates for customers in Labrador
30 City and Wabush. Should the Board approve this in principle, Hydro will submit,

1 at its next rate hearing, a five-year plan to implement the appropriate set of
2 uniform rates for the customers served from this system.

3

4

5 **Wabush Surplus**

6

7 A second issue with respect to Labrador Interconnected System rates which
8 must be addressed is that of the Wabush surplus. Hydro's proposal is outlined in
9 the pre-filed evidence of Mr. Osmond pp. 16-17. The Public Utilities Board in an
10 interim report dated November 10, 1988 approved rates for Wabush effective
11 January 1, 1989 and stated that, if in future years, PDD (the then operator of the
12 Wabush system) achieved a surplus, the surplus would be refunded to
13 customers. Mr. Osmond went on to explain that in 1993 the Board deferred the
14 issue of the Wabush surplus until Hydro's next rate referral reviewing electricity
15 rates for customers served from the Labrador interconnected grid. Hydro has
16 determined that the total amount of this "surplus" is \$2.9 million including interest,
17 for the years 1989 to 2001 based on the costing methodology originally used to
18 establish Wabush rates and not the current cost of service methodology.

19

20 Hydro, in its Application, proposed that the surplus be refunded to Wabush
21 customers in 2002 based on each customer's proportionate share of the 2001
22 revenues (pre-filed evidence Mr. Osmond, p. 17, lines 6-9). The Consumer
23 Advocate has raised the issue of whether this is fair to customers who left the
24 system since 1989. In its response to CA-62 on this point, Hydro stated that it
25 would be virtually impossible to track all customers and their consumption since
26 1989 and that it would be a significant administrative exercise to attempt to
27 calculate the refund as several years of records are not available in electronic
28 form. Hydro requests that the Board approve the refund of the Wabush surplus
29 as proposed by Hydro.

1 **CFB Goose Bay (5 Wing)**

2

3 Another issue with respect to rates for Labrador interconnected customers is the
4 rate to be charged CFB Goose Bay (5 Wing). The rate proposed to be charged
5 CFB Goose Bay for secondary power was described by Mr. Hamilton (see
6 transcript November 29, pp. 24-26). At that time Mr. Hamilton explained that the
7 method for the pricing is based on the value to CFB Goose Bay and Hydro's lost
8 opportunity cost if it sells to CFB Goose Bay. The basis on which the rate is set is
9 explained in the pre-filed evidence of Mr. Hamilton, p. 14, lines 3-14 and in the
10 response to CA-78. It is clear from this evidence that the rate for the secondary
11 service is based on 90% of the customer's avoided fuel cost with Hydro's
12 opportunity cost being a floor. Hydro's opportunity cost is based on revenues it
13 would receive by selling the power elsewhere, i.e. to Hydro Quebec.

14

15 In his pre-filed evidence, Dr. Wilson has suggested that the Board is not limited
16 to Hydro's proposal which is to apply the net revenue received from CFB Goose
17 Bay to the Labrador Interconnected System and that this may be available to
18 apply to the rural deficit. In the transcript of December 7 at p. 1, Dr. Wilson
19 outlines the options the Board has available with respect to the treatment of
20 revenue from this sale of secondary energy. At lines 63-75 and lines 87-92 on
21 p. 1 and lines 1-8 on p. 2 he points out there that one option is to apply it to the
22 Labrador Interconnected System, while another alternative is to apply it against
23 the rural subsidy generally. He advised that the Board has discretion on how to
24 apply these funds. Mr. Osler took a similar position to that of Dr. Wilson on this
25 issue (supplementary evidence September 12, p. 21, lines 14-19). Hydro agrees
26 that the issue of the allocation of revenue from this customer is within the
27 discretion of the Board and takes no further position on the issue.

28

1 **Wheeling Rate**

2

3 Another issue with respect to rate design is the appropriate wheeling rate to be
4 charged. In the supplementary evidence of C. Osler dated September 12, 2001
5 pp. 30-31, Mr. Osler takes exception to the fact that the wheeling rate was
6 determined including all transmission costs and suggests that the wheeling rate
7 should be determined based only on the portion of the grid actually used.

8 Hydro's expert, Mr. Brickhill, was cross-examined on this point by counsel for the
9 Island Industrial Customers (Transcript November 27, pp. 14-16). Mr. Brickhill
10 pointed out that with wheeling it is very difficult to know where the energy is going
11 so that it often makes more sense to use average system costs as a way of
12 approximating what could only be determined by doing a load flow study, the cost
13 of which would exceed the historical revenue Hydro has received from wheeling
14 rates.

15
16 Hydro submits that its current and historical approach to use average
17 transmission system costs on common transmission lines, to determine the
18 wheeling rate, is appropriate and should be approved by the Board.

19
20
21 **Effective Date and Method of Rates Changes**

22
23 As stated in the EPCA, Hydro is required to set rates based on forecast costs.
24 Hydro, in its evidence, has proposed that the "Test Year" for this purpose be
25 based on its 2002 forecast costs. Because of the length of the hearing, it is no
26 longer possible to implement rates resulting from this test year on January 1,
27 2002 as was contemplated in the original filing. Hydro, however, is requesting
28 that the same rates that would have been effective on January 1, 2002, based on
29 the Board's final ruling, be ordered to become effective at the earliest possible
30 implementation date.

1 Further, because of the significant rate structure changes which have been
2 proposed for its firm customers on the Labrador Interconnected System, Hydro
3 would have great difficulty in prorating the rate changes based on customer's
4 electricity consumption. Hydro requests the Board consider this in its order
5 regarding the method of rate implementation.

6
7 Specifically, regarding the preceding issues Hydro recommends the following:

- 8
- 9 1. That the rates, excluding Labrador Interconnected rates for firm
10 customers, be effective for consumption on and after the
11 implementation date, as ordered by the Board, and be the same
12 rates as would have been effective on January 1, 2002.
 - 13
 - 14 2. That the rates for Labrador Interconnected firm customers be
15 effective for bills issued on and after the implementation date, as
16 ordered by the Board, and be the same rates as would have been
17 effective on January 1, 2002.

18
19 Concurrent with the implementation of new rates, Hydro proposes the Board
20 order Hydro to implement all proposed changes to the RSP, including the method
21 of allocation to customers based on 12 months-to-date energy as outlined
22 previously. Further, Hydro proposes that the allocation of customers' RSP
23 balances prior to the implementation date would be based on the current
24 approved methodology and that customer balances in the respective Plans and
25 year-to-date RSP activity be fixed at the month-end prior to rate implementation.

26

1 **Final Cost of Service**

2

3 In order to determine the final base rates to be charged customers, it will be
4 necessary for Hydro to complete a final cost of service study for 2002, once
5 specific direction is received by Hydro from the Board.

6

7 Other than changes to capital budgets and fixed assets as proposed by Hydro in
8 this Argument, the update of hydrology to reflect 2000 actuals and other issues
9 identified by the Board, such as final fuel price, Hydro proposes that no further
10 adjustments be made in the final cost of service run in order to determine final
11 base rates.

12

RULES AND REGULATIONS FOR SERVICE

1

2

3 Hydro currently has one set of Rules and Regulations that apply to the Island
4 Interconnected System, the Isolated Systems and the L'Anse au Loup System.
5 A similar set had been applied in the Happy Valley/Goose Bay area since 1981,
6 while Wabush and Labrador City have different sets of Rules and Regulations,
7 which are the ones that were in effect at the time of the acquisition of these
8 systems by Hydro. Hydro now proposes to use one set of Rules and Regulations
9 for all areas which are set out in Schedule B to the Application. A number of
10 minor changes are being proposed by Hydro to ensure consistency generally
11 with those approved for NP. These minor wording changes are described in the
12 pre-filed evidence of Mr. Hamilton at pp. 14-16. Mr. Bowman in his pre-filed
13 evidence at pp. 17-18 has suggested changes to clauses 4, 10 (c) and 10 (g) of
14 Hydro's proposed Rules and Regulations.

15

16 As noted above, Hydro's proposed Rules and Regulations are generally the
17 same as those approved for NP. With respect to Clause 4, Hydro's practice is
18 the same as NP's. Clauses 10(c) and 10(g) are the same wording as in NP's
19 Rules. In principle, however, Hydro does not disagree with the suggestions of
20 Mr. Bowman with respect to clauses 4 and 10 (c). However, Hydro does not
21 agree with the proposed change to clause 10 (g) relating to the recovery of an
22 underbilling. At the current time, Hydro does collect underbillings, due to its
23 error, for up to a period of one year. Hydro believes that this is an appropriate
24 practice, where there has been an underbilling caused by its error, and proposes
25 that this clause should be accepted as proposed by Hydro.

26

1 **Industrial Contracts**

2

3 As Hydro is now fully regulated, it has submitted the terms and conditions
4 applicable to serving its Island Industrial Customers as set out in the revised
5 Industrial Power Contracts filed with the Board on January 10, 2002. It has been
6 acknowledged by counsel for the Island Industrial Customers that these terms
7 and conditions are acceptable to all Island Industrial Customers with the
8 exception of one customer. North Atlantic Refining Limited does not agree with
9 the \$1 million limitation on Hydro's liability expressed in subclause 9.04 (2) of the
10 proposed contract with this customer that was initially filed on December 30,
11 2000 and filed again on January 10, 2002. Mr. Glenn Mifflin gave evidence as to
12 this customer's concerns with respect to the amount of the cap on January 10,
13 2002.

14

15 Hydro accepts liability for its negligence in the proposed contractual language
16 which is not the situation in the existing contracts. However, in light of the
17 particular sensitivity of the refinery to damages from an outage, as short as 3
18 minutes or less, Hydro submits that it is not appropriate that Hydro and its
19 customers bear the full cost of these damages. As we all know, the issue of what
20 constitutes negligence is not necessarily black and white, and the issue for the
21 Board is who should best bear this cost. Hydro, through the negotiations with its
22 customers, has agreed to accept liability but under certain conditions. This
23 position has been accepted by the remaining three industrial customers (Abitibi
24 Consolidated Inc., Grand Falls, Abitibi Consolidated Inc., Stephenville, and
25 Corner Brook Pulp and Paper Ltd.). If the refinery has peculiar circumstances
26 unique to it, it is Hydro's position that it should not be Hydro and its customers
27 that bears these costs. Hydro submits that its accommodation through the
28 negotiation process to accept liability with a cap of \$1 million, is a reasonable
29 compromise in the context of all of the issues under negotiation and that it should
30 be approved by the Board.

1 Hydro further submits that the industrial contracts as submitted on January 10,
2 2002 should be approved by the Board.

3

4

5 **Transformer Losses**

6

7 Hydro is proposing a change with respect to the treatment of transformer losses
8 in the rates for NP and Island Industrial Customers. This proposed change is to
9 ensure consistent treatment of transformer losses based on the location of
10 metering equipment. Hydro proposes the rates for NP and Island Industrial
11 Customers be based on transmission supplied to the line side terminals of
12 customer-owned or specifically assigned transformers. This adjustment is being
13 proposed to ensure fairness and proper cost recovery.

14

15 The response to IC-227 (a) describes Hydro's current method of assignment for
16 transformer losses. The proposed change in treatment affects all customers
17 except Corner Brook Pulp and Paper and Hydro Rural Customers. Hydro
18 delivers to all customers (except Corner Brook Pulp & Paper and Hydro's Rural
19 Customers) at transmission level voltages and losses occur from this delivery
20 point to where the metering occurs, which is at a lower voltage. Currently the
21 losses going from the high voltage to the lower voltage have been paid for by all
22 other customers as no adjustment was made to metered quantities to account for
23 it. Hydro submits that the losses incurred are associated with only the relevant
24 customer and that it is fairer and more equitable for that customer to pay these
25 losses through adjustment to their metered energy.

26

27 Both Messrs. Budgell and Hamilton were cross-examined on this point. In the
28 Transcript of November 8 at pp. 11-14, Ms. Henley-Andrews, Q.C., reviewed with
29 Mr. Budgell the issue of specifically assigning the transformer losses associated
30 with supplying Abitibi Consolidated Inc., Stephenville at the 230 kV terminal that

1 are incurred from the point of delivery to the metering point. At page 14, line 8-
2 13, Mr. Budgell stated:

3

4 *“The issue here is on specifically assign... who bears the cost of*
5 *losses on specifically assigned or owned equipment where*
6 *metering is on the low side and losses have occurred before the*
7 *metering, and that’s what the issue comes down to and what we’re*
8 *trying to do is correct that.”*

9

10

11 Mr. Hamilton was also cross-examined on this point and provided Hydro’s
12 rationale for the proposed treatment. He explained that with specifically assigned
13 transformers, the customers pay the losses that are unique to them. Abitibi is
14 buying its power at the 230 kV terminal but the metering is not at 230 kV. The
15 metering is on the low side of the transformer. It is, therefore, appropriate that
16 the customer bears the cost of the losses from the delivery point to it to the
17 metering point. (Transcript, November 28, p. 38-40).

18

19 Abitibi Consolidated Inc. made references to the practices in New Brunswick,
20 Nova Scotia, Hydro-Quebec and Manitoba in the pre-filed evidence of M. Dean.
21 In cross-examination by Ms. Butler, Q.C., on January 10 at pages 8-9 of the
22 transcript, Mr. Dean acknowledged that the point of metering can be different in
23 these jurisdictions and as well the issue of ownership of the transformer would
24 affect this point. It should be noted that the information provided by Abitibi
25 Consolidated Inc. didn’t deal with the point of metering or the ownership of
26 transformers in the other jurisdictions. Hydro submits that the information
27 provided by Abitibi Consolidated Inc. on this issue with respect to the practices in
28 other jurisdictions is not helpful.

29

30 Hydro submits that its proposed change in treatment with respect to the
31 transformer losses is fair and equitable to all customers. Hydro acknowledges
32 that it will result in a greater impact to some customers, such as Abitibi
33 Consolidated Inc., Stephenville. However, Hydro points out that its proposed

- 1 treatment of transformer losses is the most appropriate and fairest treatment for
- 2 all customers.
- 3

2002 CAPITAL BUDGET

1
2
3 As noted above, Hydro became fully regulated and fully subject to the jurisdiction
4 of the Public Utilities Board in 1996. This included the jurisdiction of the Board
5 with respect to the approval of capital budgets. Section 41 (1) of the Act requires
6 a utility to submit to the Board for approval its annual capital budget. Under
7 Section 41 (3), the utility may not proceed with a project in excess of \$50,000
8 without the prior approval of the Board.

9
10 Hydro submitted its proposed 2002 Capital Budget as part of its General Rate
11 Application on May 31, 2001. The 2002 Capital Budget is the sixth capital
12 budget Hydro has submitted for approval to the Board since it became fully
13 regulated (Section 17 (6) of the *Hydro Corporation Act* provided that Hydro's
14 1996 Capital Budget was deemed to have been approved by the Board.) In
15 submitting its 2002 Capital Budget for approval, Hydro followed the normal past
16 practice. For example, the budget was divided into the same sections including
17 the total capital budget in Section A, projects over \$50,000 in Section B, projects
18 subject to the minimum filing guidelines in Section C and finally in Section D,
19 leases that require the Board's approval, if the amount of the lease is in excess
20 of \$5,000 per year. Further justification was provided in Section B with respect to
21 projects over \$50,000. As in the past, Hydro provided a brief outline of each of
22 these projects in Section B. Through the hearing process any party and the
23 Board could ask questions with respect to each project. In fact, Hydro responded
24 to numerous information requests on its 2002 proposed Capital Budget.

25
26 Certain of the parties raised issues during the course of the hearing with respect
27 to the amount of justification provided by Hydro to support a capital budget. They
28 reserved their right as noted in Order No. P.U. 30 (2001-2002) to submit
29 argument on the sufficiency of the documentation used to support a capital
30 budget and the capital budget process generally.

1 In November, Hydro sought approval for the 2002 Capital Budget of \$40.9 million
2 (revision dated November 30, 2001) and Order No. P.U. 30 (2001-2002)
3 approved those projects in excess of \$50,000 set out in Appendix A to the Order
4 and also approved those projects totaling \$13,650,000 set out in Section C of the
5 2002 Budget. Order No. P.U. 31 (2001-2002) approved projects that were less
6 than \$50,000 totaling \$731,000. As these projects have been specifically
7 approved, this Argument will address those issues set out in the preceding
8 paragraph relating to documentation, justification, etc. and those projects which
9 have not been approved to date for 2002.

10 11 12 **Process**

13
14 The current process employed by Hydro with respect to the preparation of an
15 annual capital budget is described in the response to NP –179. Direct evidence
16 was provided on the process by John Roberts, (Transcript November 14, pp. 17-
17 19, transcript November 15, p. 27). It is clear from review of this documentation
18 that the process currently in place is an extensive process occupying
19 approximately nine (9) months where there are levels of review at various levels
20 of Management up to the Management Committee and the Board of Directors.

21
22 The criteria used to assess capital projects is set out on p. B-6 of the 2002
23 Capital Budget. As well, as explained by Mr. Roberts in the transcript of
24 November 15, p. 27, lines 57-68, Hydro uses, as a guideline to determine the
25 cash available for its capital program, its net regulated income plus depreciation
26 recognizing that there will be years in which this guideline may be exceeded as a
27 result of various capital requirements. This process has been used by Hydro in
28 all previous capital budget applications approved by the Board.

29

1 Part of the process of seeking the approval of the Board is to provide justification
2 for the projects over \$50,000. The Board has not required Hydro in the past to
3 submit any detail or justification for projects under \$50,000. As noted by
4 Mr. Roberts on p. 27 of the November 15 transcript, Hydro's Management
5 Committee is provided with additional justification with a brief summary of
6 projects over \$50,000 being included in the application to the PUB. The practice
7 to date has been to provide additional explanations to the Board and to any party
8 in response to information requests, rather than providing additional detailed
9 justification in the initial documentation that is submitted. Should the Board
10 determine, following the conclusion of this hearing, that it would be advisable for
11 a utility to submit additional information with the original application, then Hydro
12 would be pleased to work with the Board and NP to determine any additional
13 requirements the Board may have in addition to those that have been required to
14 date by the Board before it would approve a capital project.

15

16 It must be remembered that Hydro has an obligation to supply its customers with
17 a reliable service in a safe environment for its employees and its customers.
18 Capital expenditures will be required each year in order for Hydro to fulfill this
19 mandate. Hydro has an obligation to ensure that its supply of power is least cost.
20 Thus, it must ensure that only those capital projects that are required to provide
21 reliable, safe service are carried out and that they are done in a least cost
22 manner. While Hydro is, as indicated in the previous paragraph, willing to work
23 with the Board in determining any additional requirements the Board may require
24 in the future with respect to additional information for capital budgets, Hydro
25 submits it is not reasonable for the Board to change the rules for the process of
26 approval of a utility's annual capital budget without notice. That is, if any
27 additional justification or documentation is required, it should be determined by
28 the Board and communicated to Hydro in advance of Hydro's submission of its
29 next capital budget (2003) so that Hydro will have adequate time to respond.

30

1 In the Application currently before the Board, the Board is faced with the fact that
2 a number of Interveners have raised objections to a number of the capital
3 projects put forward by Hydro. In reviewing this matter, the Board must be
4 cognizant of the fact that Hydro, as the operating utility, has expertise in its area
5 of operations and its operational requirements. It has submitted evidence
6 consistent with the Board's past practice to justify each of these projects. On the
7 other hand, the parties who have made objections have not filed any direct
8 evidence themselves to contradict the evidence put forward by Hydro. The only
9 remotely relevant evidence by the other parties arose in the cross-examination
10 by the Consumer Advocate of Mr. Dean on behalf of Island Industrial Customers.
11 Mr. Dean pointed out that he had reviewed Hydro's proposed 2002 capital
12 expenditures from the background of his own experience in the pulp and paper
13 business and made certain observations. The Island Industrial Customers did
14 not offer any evidence as to what is reasonable for utility operations vs. the pulp
15 and paper industry. It should be noted that the Island Industrial Customers did
16 not ask any information requests with respect to any of the capital projects to
17 seek answers to any questions they might have. With respect to those that they
18 have filed objections to, it should be noted that counsel for Island Industrial
19 Customers asked questions in cross-examination with respect to only 5 of the
20 total of 35 projects that they have objected to. In fact, only a total of 6 projects
21 were the subject of cross-examination by any counsel.

22

23 The Newfoundland Court of Appeal in the stated case from the Public Utilities
24 Board (attached in Schedule C) made a number of observations and comments
25 with respect to the Board's jurisdiction to review operating expenses, referred to
26 previously. Hydro submits that these comments are equally applicable with
27 respect to capital expenditures. At p. 32, paragraph 118 of the decision, the
28 Court states:

29

30 *"In defining the parameters of such supervisory power, however,*
31 *the Board must account for a competing principle, namely, that the*
32 *Board is not the manager of the utility and should not as a general*

1 *rule substitute its judgment on managerial and business issues for*
2 *that of the officers of the enterprise.”*
3

4 Further on p. 33, paragraph 120, the Court states:

5
6 *“there will normally be a presumption of managerial good faith and*
7 *a certain latitude given to management in their decisions with*
8 *respect to expenditures.”*
9

10 While these comments are made in the context of operating expenditures, they
11 are equally applicable to capital expenditures.

12

13 The evidence on the record before the Board is clear. Information has been
14 provided to support the capital projects Hydro proposes for 2002 in order to
15 provide reliable service to its customers. The Board cannot give credence to the
16 mere speculation or musings of other parties to the hearing as to whether these
17 are prudent. Unless there is evidence on the record to allow the Board to
18 conclude that Hydro’s position that these expenditures are reasonable is not
19 correct, and Hydro submits there is no such evidence, these projects should be
20 approved.

21

22 Hydro’s position on the specific 2002 capital projects to which objections have
23 been made is set out in Schedule B to this Argument. Having reviewed these
24 projects again during the preparation of Final Argument, Hydro has decided to
25 defer three projects to which objections were taken. The first two relate to
26 Harbour Deep: B-46, Replace 136 kW Diesel Unit No. 285 and B-57, Upgrade
27 Diesel Plant, Harbour Deep. Given the continuing uncertainty on the status of
28 the community, Hydro believes it would be reasonable to defer both these
29 projects. The third project Hydro agrees be deferred from 2002 is B-23 –
30 Replace Two Air Compressors – Buchans. Additional commentary on the
31 deferral of these three projects is contained in Schedule B.

32

1 Hydro proposes that a fourth 2002 capital budget project be deferred. B-47 –
2 Replace 75 KW Diesel Unit No. 252 – Petites was approved by Order No. P.U.
3 30 (2001-2002). However, in the review of the budget that took place in
4 finalization of Hydro's position for Argument, it was decided that it would be
5 prudent to defer this project as well, given the declining load in the community.
6 Petites has fourteen domestic customers at present and this number is expected
7 to reduce. The existing units, (two 40 KW units in good condition and the 75 KW
8 unit which had been proposed be replaced) should be able to meet this load.
9 Hydro, therefore, requests that Order No. P.U. 30 (2001-2002) be amended to
10 cancel approval of this project.

11

12

13 **Historical Practice**

14

15 In the 2001 Grant Thornton Report at p. 14, the observation is made that Hydro's
16 total capital expenditures have been lower than budget by an average of 15% for
17 the period 1996-2000. This issue was explored with a number of Hydro
18 witnesses including D. W. Reeves and H. G. Budgell. It is clear from their
19 evidence (Transcript October 2, p. 20, lines 50-59; Transcript November 5, p. 17,
20 lines 21-27) that prior to Hydro becoming fully regulated, its practice with respect
21 to its capital budget was to focus on the total amount for a capital project as
22 opposed to the annual cash flow for a project where the project was a multi-year
23 project. Once Hydro became subject to the Board, which only approves annual
24 capital budgets, the focus then had to change from, not only the total capital cost
25 of the project, but to the cash flow requirements within each year of a multi-year
26 project. Both witnesses also testified that attention has been focused on this at
27 Hydro with the actual experience being a tighter control of the annual cash flows
28 (Transcript October 1, p. 27, lines 40-48; November 5, p. 17, lines 21-29) as
29 indicated by the decreasing percentage of under spending as shown on p. 14 of
30 the 2001 Grant Thornton Report. Mr. Reeves also explained some of the action
31 taken by Hydro to address the issue: enhanced coordination between

1 engineering and operations staff, more critical attention to completing projects in
2 the year in which they are budgeted, as well as the past focus on the total
3 project cost, and some new software tools to monitor and control project costs
4 (Transcript October 1, p. 29, lines 2-30).

5
6 In his evidence Mr. Brushett correctly explained that the real issue on this topic is
7 not the approval of the capital expenditures, but whether it would be appropriate
8 to adjust the rate base projected for 2002 to reflect an allowance for under-
9 spending. (Transcript, January 8, 2002, p. 44, lines 57-75). On p. 15 of the 2001
10 Grant Thornton Report, the financial implications of a 15% downward adjustment
11 to the forecast capital expenditures is provided: a reduction in depreciation of
12 expenses of \$122,000 and a reduction in interest expense of \$302,000 based on
13 an embedded cost of debt of 8.4%.

14
15 This issue has been considered by the Board before with respect to NP. In NP's
16 1996 Hearing the evidence demonstrated that NP's historic under-spending from
17 1991 to 1995 for the five year period in question was 11.64% (Order No. P.U. 7
18 (1996-97) and the reduction ordered was 4%. Similarly in 1998 where the under-
19 spending at that time was 10%, the Board again ordered a 4% reduction (Order
20 No. P.U. 36, (1998-1999).

21
22 Hydro points out that the 1996 year illustrated in the 2001 Grant Thornton Report
23 was for a capital budget not regulated by the Board. Based on the evidence that
24 regulation by the Board of capital projects has imposed new requirements on
25 Hydro and that Hydro is improving with respect to this issue of under-spending
26 and that Hydro's under-spending of 15% (13% if 1996 is excluded) for the period
27 1996-2000 is similar to that of NP in 1996, Hydro suggests that an adjustment, if
28 any, should be no more than 4%.

1 Q. (a) Provide the excerpts from the legislation to support, in Hydro's
2 view, the statement "the legislative amendments indicate that, as a
3 matter of public policy, Hydro is intended to operate as a fully
4 regulated utility, more similar to that of an investor-owned utility"
5 (WEW, page 6 lines 20-22).
6
7
8

9 A. (a) Pursuant to Chapter 37 of the Statutes of Newfoundland 1995,
10 there were a series of legislative amendments affecting Hydro. The
11 effect of these amendments was to repeal certain provisions that
12 had existed under the *Hydro Corporation Act*, Revised Statutes of
13 Newfoundland, 1990, as amended to that time, and under various
14 other statutes. Prior to the repealing of these provisions, a number
15 of special legislative treatments usually associated with crown
16 corporations and government agencies had applied to Hydro.
17

18 Section 5 of Chapter 37 reads as follows:
19

20 "5. Section 14 of the Act is repealed."
21

22 Section 14 of the *Hydro Corporation Act* provided Hydro with the
23 exclusive franchise to develop all previously un-granted hydro-
24 electric sites on the island portion of the province.
25

26
27 Section 6 of Chapter 37 reads as follows:

1 “6. Paragraph 16(1)(h) of the Act is repealed and the following
2 substituted:

3 “(h) deposit money or securities with a bank, trustee, trust
4 company, or other depository in Canada or outside Canada;”

5 Prior to this amendment, the prior approval of the Lieutenant-
6 Governor in Council was required to deposit money or securities
7 outside Canada.

8
9
10 Section 7 of Chapter 37 starts as follows:

11
12 “7. Sections 17, 18, 19, 20 and 21 of the Act are repealed”

13
14 Under section 17, Hydro had access to special powers of
15 expropriation under the *Expropriation Act*. Section 19 provided
16 Hydro with the ability to obtain rights to water powers and lands
17 through an assurance of the Lieutenant-Governor in Council.
18 Under sections 20 and 21, respectively, Hydro was exempt from
19 the *Crown Lands Act* and the *Public Utilities Act*.

20
21
22 Section 8 of Chapter 37 reads as follows:

23
24 “8. Sections 22 and 23 of the Act are repealed.”

25
26 Under section 22, Hydro was subject to the *Public Service*
27 *Collective Bargaining Act*. Subsection 19(1) of the *Hydro*
28 *Corporation Act* as amended by Chapter 37 reads as follows:

29
30 “19.(1) The *Labour Relations Act* applies to the corporation.”

31

1 Section 10 of Chapter 37 reads as follows:

2 “10. Section 26 of the Act is repealed.”

3 Section 26 of the *Hydro Corporation Act* provided Hydro with
4 certain rights to obtain franchise rights to those hydro-electric sites
5 in Labrador not subject to prior grants by the Crown.

6

7

8 Section 11 of Chapter 37 reads as follows:

9

10 “11. Subsection 40(2) of the Act is repealed.”

11

12 Subsection 40(2) of the *Hydro Corporation Act* required Hydro to
13 obtain the approval of the Lieutenant-Governor in Council for
14 borrowing programs reflected in its budget.

15

16

17 Section 12 of Chapter 37 reads as follows:

18

19 “12. Subsection 41(3) of the Act is repealed and the following
20 substituted:

21

22 “(3) The annual financial statement of the corporation shall
23 be audited by a firm of auditors.”

24

25 Prior to this amendment, the Act provided that the auditors be
26 appointed by the Lieutenant-Governor in Council.

27

28

29 Section 13 of Chapter 37 reads as follows:

1 (2) the Schedule to the Act is amended by deleting the
2 words "Newfoundland and Labrador Hydro".

3
4 The *Electrical Power Control Act*, 1994 revised the power policies
5 that had earlier been set out in the *Electrical Power Control Act*.
6 The legislature removed from the 1994 statute the special
7 treatment that had existed for Hydro as to the margin of profit. The
8 provision that applies at present is the same for Hydro as it is for
9 Newfoundland Power:

10
11 "3. It is declared to be the policy of the province that

12
13 (a) the rates to be charged, either generally or
14 under specific contacts, for the supply of power within
15 the province

16
17 (iii) should provide sufficient revenue to the
18 producer or retailer of the power to enable it to
19 earn a just and reasonable return as construed
20 under the *Public Utilities Act* so that it is able to
21 achieve and maintain a sound credit rating in
22 the financial markets of the world . . ."

23

1 **CAPITAL PROJECTS TO WHICH OBJECTION HAS BEEN MADE**

2
3 **Projects Over \$50,000**

4
5 1. **B-10 - Install 25 kV Distribution Line – Ebbegunbaeg (\$1,555,000)**

6 This project is described on p. B-10 of the proposed 2002 Capital Budget
7 as the construction of a new 25 kV distribution line from North Salmon Dam to
8 the Ebbegunbaeg Control Structure. While no questions were asked in cross-
9 examination of any of Hydro witnesses with respect to this project, three
10 information requests were asked: PUB-3, NP-99 and NP-223. The response to
11 NP-99 (a) shows that a cost benefit analysis was done for this project. The
12 analysis compared the cost of continuing to supply service by on-site diesel
13 generation against the cost of constructing the distribution line from the existing
14 Upper Salmon facility. The analysis as stated in the response to NP-99 (a)
15 concluded that the net cumulative present worth of savings for the line extension
16 was approximately \$440,000 (\$ in 2001) with a payback period of nine years and
17 a benefit-to-cost ratio of 1.25.

18
19 Hydro submits that the cost benefit analysis completed for this project
20 clearly shows it is cost effective. Hydro submits that the project should be
21 approved by the Board.

22
23
24 2. **B-14 – Install Fault Recorder – Upper Salmon Generating Station**
25 **(\$127,000)**

26 This project is described on p. B-14 of the proposed 2002 Capital Budget
27 as the installation of a fault recorder at the Upper Salmon Generating Station.
28 No questions were asked of any Hydro witness by any of the parties during
29 cross-examination with respect to this project. Two information requests were
30 asked: PUB-6 and NP-233. In the response to PUB-6, it is stated the fault
31 recorder to be purchased and installed under this project will provide more

1 detailed information on a fault which will allow faster restoration time in the event
2 of an outage. The number of outages for TL234 from Upper Salmon to Bay
3 D'Espoir are stated in PUB-6. As pointed out in that answer, the installation of
4 the fault recorder does not directly increase the reliability of the generating unit,
5 but it certainly can assist with respect to identifying the cause of the fault and
6 restoration in the event of an outage. Additional information was provided in NP-
7 233 with respect to the outages that have occurred on the line in question.

8
9 Hydro submits that this project should be approved as it will assist in
10 improving reliability of service to its customers.

11
12
13 3. **B-15- Install Intake Stoplogs – Paradise River (\$158,000)**

14 This project is described on p. B-15 of the proposed 2002 Capital Budget
15 as the installation of stoplogs at the Paradise River Generating Station to
16 maintain a safe working environment for the proper maintenance of the intake
17 guide, gate guides and sill. No questions were asked during cross-examination
18 of any Hydro witness with respect to this project. Two information requests were
19 asked: PUB-7 and NP-100. The response to NP-100 states that the stoplogs
20 were not included at the time of the construction of the Paradise River Power
21 plant but provision was made in the design of the plant for their utilization. As
22 explained in the answer to NP-100, the stoplogs are important to ensure that it is
23 possible to safely perform inspections of the wicket gate, with which Hydro has
24 been experiencing problems.

25
26 Hydro submits that this project should be approved, as failure to do so
27 could result in an extended interruption of power supply.

28

1 4. **B-16- Replace Control Cables-Bay D'Espoir (\$131,000)**

2 This project is described on page B-16 of the proposed 2002 Capital
3 Budget as the replacement of the two thirty-six (36) pair control cables between
4 powerhouse No. 1 and Intake No. 2 and 4 with a fibre optic cable. No questions
5 were asked of any Hydro witness during cross-examination and one information
6 request, PUB-8, was asked. The justification provided in B-16 explains that the
7 existing cables are 23 years old and that lightning has damaged a significant
8 number of the cable pairs requiring their replacement.

9

10 Hydro submits that the project should be approved for the reasons given.

11

12

13 5. **B-17- Replace Ventilation System at Powerhouse No. 1 Bay D'Espoir**
14 **(\$164,000)**

15 The description of this project is set out on p. B-17 of the proposed 2002
16 Capital Budget as the replacement of exhaust fans in the Bay D'Espoir
17 powerhouse to reduce the ambient air temperature in the plant. No questions
18 were asked of any Hydro witness during cross-examination with respect to this
19 project. One information request was received: PUB-9. The response to PUB-9
20 indicates that the current fans which Hydro proposes be replaced were installed
21 at the time the powerhouse was constructed in the 1960's. The justification
22 provided in the original submission indicates that the existing fans are difficult to
23 maintain and require unit outages for maintenance purposes. As well, the high
24 ambient air temperatures increase the rate of degradation of equipment such as
25 windings and other insulation systems.

26

27 Hydro submits that this project should be approved for the reasons given.

28

1 6. **B-18- Purchase Track Machine – Cat Arm (\$177,000)**

2 The description of this project is contained in the proposed 2002 Capital
3 Budget at page B-18. The project involves the purchase of an enclosed track
4 machine to transport personnel and equipment to Cat Arm during adverse
5 weather conditions. The response to PUB-10 stated that the access road to Cat
6 Arm is not ploughed during the winter and that the machine (a go-track) currently
7 being used has been found to be ineffective in deep snow and has limited
8 carrying capacity. The track machine which is proposed to be purchased is able
9 to operate more effectively in deeper snow and can transport heavier materials
10 and more personnel.

11
12 Additional information was provided in response to two information
13 requests from NP: NP-103 and NP-224. The responses to these information
14 requests state that Hydro has only one other enclosed track machine of the same
15 type which is located at Stephenville, which would not be available during
16 adverse weather conditions to operate in the Cat Arm area. While Hydro has
17 been fortunate to date in that there have not been extended outages caused as a
18 result of a lack of an appropriate machine and timely access to the site, there is
19 no doubt that the lack of a suitable track machine has potential for extending
20 power outages during the winter months as stated in the response to NP-103.
21 The response to NP-224 provides information as to why it is not possible to use
22 the similar machine located in Stephenville in the Cat Arm area during adverse
23 weather conditions, as it would affect the response to emergencies in the
24 Western Area of Hydro's operations.

25
26 There was also extensive cross-examination of Mr. Reeves with respect to
27 this proposed capital budget which can be found in the transcripts of October 1,
28 pages 47-49 and October 2, pages 1-3. Mr. Reeves confirmed the information
29 provided in the responses to PUB-10 and NP-103 and NP-224.

1 Hydro submits this project should be approved, as the failure to get
2 personnel and equipment to the Cat Arm Site in a timely manner could result in
3 extended power outages at that facility.

4
5
6 7. **B-19- Purchase and Install Continuous Emission Monitoring**
7 **(\$801,000)**

8 Page B-19 of the proposed 2002 Capital Budget provides the description
9 of this project which involves the installation of a continuous emission monitoring
10 system on each of the three stacks at the Holyrood Generating Station. Three
11 information requests were asked with respect to this project: PUB-11, NP-104
12 and NP-225. It can be seen from the responses to these questions that the
13 proposed emission monitoring system would measure emissions (No_x, So_x and
14 CO₂) that are not visible to the human eye, while the monitors that are currently
15 in the stack measure emissions that are visible. As pointed out in the answer to
16 these questions, a Health Risk Assessment Report was completed on the plant
17 which recommended ambient air monitoring stations to assess the validity of the
18 SO₂/NO₂ ratio used in the Report. The response to NP-225 points out that the
19 equipment recommended by the consultant is expensive to install and operate
20 and could be used for the purpose of monitoring only. The in-stack monitoring
21 equipment proposed by Hydro in B-19 will not only measure the emissions within
22 the stack, but will allow staff to operate the plant more efficiently. The rationale
23 for this decision is set out in the response to NP-225. While Hydro is normally
24 within statutory limits on these emissions, it is reasonable and prudent for Hydro
25 to undertake the additional studies that were recommended in the Health Risk
26 Assessment Report. As well, given the difference between the two types of
27 monitoring system proposed, Hydro submits that the continuous emission
28 monitoring system will permit management of the emissions, as well as the
29 monitoring which is not currently available.

30

1 There was cross-examination of Mr. H. G. Budgell by NP on this project
2 which can be found in the transcript of November 5 at pages 27-30. Further
3 cross-examination occurred on November 6 by Ms. Henley-Andrews, Q.C., at
4 pages 37-38. The fact that Hydro's proposed emission monitoring program will
5 enhance control of the combustion process was explained by Mr. Budgell on
6 November 5 at page 28 of the transcript at lines 5-35. The ambient air
7 monitoring system recommended in the Health Risk Assessment Report does
8 not.

9

10 Mr. Budgell went on at page 29 of the transcript of November 5 at lines 1-
11 21 to explain why the in-stack emission monitoring system is a cost effective,
12 functional way to monitor the emissions in comparison to the air ambient system
13 which had originally been recommended by the consultant.

14

15 Hydro also provided information in an undertaking (U-Hydro No. 18) which
16 clearly demonstrates that the continuous emission monitoring in-stack system
17 proposed by Hydro is more cost effective than the ambient air monitoring
18 program. This undertaking demonstrates that, assuming in-situ testing is no
19 longer required by the Provincial Department of Environment, the cumulative
20 present worth of Hydro's proposed monitoring system starts to decrease
21 immediately and is less than the ambient air monitoring system after only the first
22 year due to efficiency improvements and there is a positive cumulative present
23 worth after ten years. Even if in-stack testing continues to be required by the
24 Department of Environment, the cumulative present worth will still start to
25 immediately decrease and is less than the ambient air monitoring system in
26 2004.

27

28 Certain of the parties have raised the fact that the in-stack monitoring
29 system is not currently a legislative requirement. However, in order to ensure
30 that it is running the Holyrood Plant as efficiently as possible, with minimal risk to
31 the residents in the area, Hydro has undertaken a number of measures, including

1 the Health Risk Assessment Study, which made a recommendation for further
2 monitoring. Hydro believes that it is reasonable and prudent to undertake this
3 monitoring and that the in-stack monitoring chosen is cost effective compared to
4 the ambient air testing monitoring system which had originally been
5 recommended in the Health Risk Assessment Report.

6

7 Hydro submits that this project should be approved.

8

9

10 8. **B-21- Purchase and Install Closed Circuit Surveillance System –**
11 **Holyrood (\$152,000)**

12 Page B-21 of the 2002 Capital Budget sets out the description of this
13 project which is to purchase and install a closed circuit surveillance system at the
14 Holyrood Plant site to provide enhanced security for the site and to improve
15 public safety.

16

17 Three information requests were asked with respect to this project: PUB-
18 13, NP-105 and NP-226. The response to NP-105 indicates that significant
19 vandalism has been experienced at the north side of the plant and that the
20 proposed system will assist in preventing further acts of vandalism in this
21 location. NP-226 further explains that the capital expenditure is not justified
22 solely on the cost of vandalism, but also to enhance public safety and to reduce
23 the risk of serious damage to equipment. While Hydro does have continuous
24 security at the site, it is not possible to provide coverage at all site locations. The
25 use of the proposed closed circuit surveillance system would provide continuous
26 monitoring of high exposure areas. It is noted in the response to NP-226 that the
27 RCMP had recommended the installation of this system. Details of the
28 vandalism experienced at all Hydro's production facility from 1995 to 2000 is set
29 out in the response to PUB-13. Of the 39 incidents reported, 37 occurred at the
30 Holyrood plant.

1 In cross-examination by Board counsel, Mr. Budgell explained this project
2 (Transcript, November 9, pp. 22-23). At page 23 of the transcript at lines 8-11,
3 Mr. Kennedy suggested there may be other alternatives to the security system
4 proposed by Hydro. However, it must be pointed out that no evidence was led by
5 Board counsel with respect to these alternatives or to their costs. It is Hydro's
6 submission that absolutely no weight should be placed on the musings of any
7 counsel unless they are supported by facts at the hearing.

8
9 Hydro submits that it is reasonable and prudent for Hydro to proceed with
10 the installation of this proposed system to reduce the risk of vandalism, to further
11 enhance public safety and security and to reduce the risk of damage to
12 equipment. Hydro further submits that this project should be approved.

13
14
15 9. **B-22- Replace Turbine Electro-Hydraulic Control System – Unit No. 1**
16 **– Holyrood (\$34,000; future \$1,084,000)**

17 This project is described on page B-22 of the proposed 2002 Capital
18 Budget as the replacement of the obsolete governor control system for Unit No. 1
19 Turbine at the Holyrood plant which is in excess of thirty years old. It was noted
20 there that the same system had already been replaced on Unit No. 2. There
21 was one information request with respect to this project: PUB-14 . The response
22 to PUB-14 explained that this system will provide black start capability for the
23 Holyrood Thermal Plant which is considered necessary for reliability
24 improvement purposes. The need to replace this system arises from the
25 unavailability of spare parts and lack of technical support from the equipment
26 manufacturer. There was no cross-examination of any Hydro witness on this
27 project.

28
29 Hydro submits that sufficient justification is on the record before the Board
30 to demonstrate that this project is prudent, is similar to one already undertaken
31 on Unit No. 2 at Holyrood and is required to ensure reliable supply to its

1 customers, in addition to black start capabilities. Hydro further submits that this
2 project should be approved.

3

4

5 10. **B-23- Replace two air Compressors-Buchans (\$65,000)**

6 This project is described on page B-23 of the proposed 2002 Capital
7 Budget as the replacement of two air compressors that will be 29 years old in
8 2002. Only one information request was asked with respect to this project:
9 PUB-15. No questions were asked of any Hydro witness with respect to this
10 project.

11

12 Hydro proposes that this project be deferred, given the condition of the
13 compressors.

14

15

16 11. **B-25- Paved Parking Area – Bishop’s Falls Complex (\$69,000)**

17 This project is explained on page B-25 of the proposed 2002 Capital
18 Budget as the paving of the gravel parking lot at the Bishop’s Falls Complex
19 which is used by heavy equipment (muskegs, line trucks, etc.). One information
20 request was posed with respect to this project: PUB-17 where it is pointed out
21 that there is significant work each year in the spring and summer to help control
22 the dust and improve working conditions. Mr. Reeves was cross-examined with
23 respect to this project by Board Counsel on October 3, pages 27-28.

24

25 Hydro submits that it is reasonable and prudent to proceed with this
26 project and it should be approved.

27

1 12. **B-31- Replacement of Poles TL215 (69 KV, Doyles-Port aux Basques)**
2 **(\$138,000)**

3 This project is described on page B-31 of the proposed 2002 Capital
4 Budget. There it is explained that an inspection program in 2000 identified poles
5 requiring replacement on this transmission line by 2002. The four structures of
6 the highest priority were completed in 2001 and the remaining ones identified as
7 requiring replacement in the inspection program were scheduled for 2002. No
8 information requests were asked with respect to this project and there was no
9 cross-examination of any Hydro witness on the project.

10
11 Hydro submits that this project should proceed in order to ensure reliable
12 service to its customers. As noted above, Hydro's maintenance program
13 determined following an inspection that the poles required replacement and
14 prioritized certain ones for 2001 and the remaining for 2002. Hydro submits that
15 this project is reasonable and prudent and that the Board should approve the
16 replacement of the remaining poles for 2002.

17
18
19 13. **B-32- Purchase and Install Remote Communications Equipment –**
20 **Buchans and Stony Brook (\$51,000)**

21 This project is described on page B-32 of the proposed 2002 Capital
22 Budget as the purchase and installation of a number of relays and associated
23 communications equipment to store fault information at Stony Brook and
24 Buchans Terminal Station to allow remote access of the relays. At present
25 personnel must travel to each station to retrieve the information. Hydro states on
26 p. B-32 that the installation of the equipment will "assist in the timely analysis of
27 faults and will provide fast access to fault type and locations". Two information
28 requests were asked with respect to this project: PUB-23 and NP-234. The
29 response to NP-234 indicates that similar equipment installed in other locations
30 has been used to reduce outage times. Only Board counsel cross-examined any
31 Hydro witness with respect to this project. On October 3 at pages 28-29 of the

1 transcript, Mr. Kennedy reviewed with Mr. Reeves the justification for this project,
2 where at page 29 lines 28-39 Mr. Reeves points out that this type of equipment
3 will reduce outage time and that this type of information is critical for a utility to
4 have today.

5

6 Hydro submits that this project should be approved.

7

8

9 14. **B-34- Purchase and Install Digital Fault Recorder-Stony Brook**
10 **(\$92,000)**

11 This project is described at page B-34 of the proposed 2002 Capital
12 Budget as the purchase and installation of a fault recorder to record voltages,
13 currents and other important data before, during and after a fault. Information
14 from the recorder will be analyzed to verify correct operation of protection and
15 control relaying, breakers and other equipment and will assist in determining
16 whether additional follow-up action is required. Only one information request
17 was asked with respect to this project: PUB-25 where the number of outages at
18 this area since 1995 are recorded at 37. It also points out that these statistics do
19 not include NP's lines or incidents of single pole reclosing which would be
20 available with the proposed digital fault recorder. Only Board counsel cross-
21 examined any Hydro witness with respect to this project. On October 3 at
22 page 30 of the transcript, lines 7-12, Mr. Reeves explains why this is an
23 important piece of equipment to assist Hydro in determining faults and to help
24 improve reliability of supply to its customers.

25

26 Hydro submits that this project should be approved.

27

1 15. **B-46- Replace 136 KW Diesel Unit No. 285-Harbour Deep (Previous**
2 **\$11,000; \$282,000) and B-57-Upgrade Diesel Plant – Harbour Deep**
3 **(previous \$35,000; \$515,000)**

4 Project B-46 is described on page B-46 of the proposed 2002 Capital
5 Budget as the purchase and installation of a 136 KW diesel generating set to
6 replace an existing unit at Harbour Deep which was purchased in 1975 and
7 which will have approximately 94,000 operating hours on it by 2002. Project B-
8 57 to upgrade the diesel plant at Harbour Deep is described on page B-57 of the
9 proposed 2002 Capital Budget. There it is explained that the project would
10 involve the construction of a new diesel hall and the renovation of the existing
11 diesel hall as a control room, office, etc.

12
13 One information request was asked with respect to both of these projects:
14 NP-111 while a second one, NP-230 was asked with respect to B-57. Additional
15 information is provided in both of these information requests with respect to the
16 reason why the building needs to be upgraded as well as a unit replaced.
17 However, information at the hearing indicated that the residents of Harbour Deep
18 are considering relocation (transcript October 1, p. 30, lines 43-61). Mr. Reeves
19 advised in lines 62-80 of the October 1 transcript at page 30 that, should Harbour
20 Deep continue as a community, the existing diesel hall is not adequate to
21 continue to provide service nor is Unit No. 284 in appropriate condition to
22 continue to operate.

23
24 The dilemma for Hydro arises from the fact that there is uncertainty as to
25 whether Harbour Deep will continue as a community or not. Communications
26 were held with the Government of Newfoundland with respect to the possible
27 relocation of the community. A letter from the Deputy Minister of the Department
28 of Public Works and Services was filed (U-Hydro No. 34) which confirms that the
29 Government has not made any decision on a request from the residents of
30 Harbour Deep for financial support to assist in the relocation.

1 Due to the uncertainty concerning the status of the community of Harbour
2 Deep, Hydro agrees that it would not be prudent to incur any capital dollars that
3 are not absolutely required to be spent in the year 2002 and agrees to defer
4 project B-57 for the upgrade of the diesel plant at a cost of \$515,000 and to defer
5 the replacement of the diesel Unit No. 284 which is project B-46, at a cost of
6 \$282,000. Hydro would point out that, if there is further deterioration in Unit
7 No. 284, action will have to be taken during 2002. Hydro proposes that this
8 would be done through the contingency fund allotment normally provided for in
9 the annual capital budget.

10
11
12 16. **B-60- Acquire Document Management and Imaging System**
13 **(\$104,000)**

14 This project is described on page B-60 of the proposed 2002 Capital
15 Budget as an electronic document management solution for effective control,
16 management and access to documents. Two information requests were asked
17 with respect to this project: PUB-41 and NP-115. As well Mr. Budgell was cross-
18 examined about this project by counsel for NP, Island Industrial Customers and
19 the Board.

20
21 In NP-115 additional information is provided on the rationale for the
22 project. The response states that Hydro's record management system is
23 antiquated with records management being on a departmental basis as opposed
24 to corporate wide. The scope of the project is described in the response to PUB-
25 41 as an initial phase of a project which includes a pilot in the Customer Services
26 Department and an analysis of what the corporate needs are and how new and
27 enhanced technology can best address these needs. As it is a pilot, and work by
28 an external consultant is required to determine how the overall corporate needs
29 can be addressed, it is not possible until the completion of this phase, to
30 determine what the total cost will be and whether it will be prudent to proceed
31 with it on a corporate basis.

1 Mr. Budgell provided additional explanation for this project on November 5
2 at p. 5 of the transcript at lines 23-34 where he described the existing types of
3 documents that would be considered as part of this project by Hydro and the
4 current way they are managed. He states in line 26 "management is different for
5 every document and that's part of the problem". He goes on in the transcript of
6 November 6 at page 38 at lines 68-72 to explain that part of the capital
7 expenditures in 2002 is to retain a consultant and that a review would be done
8 similar to a feasibility study to give information to determine the benefits to the
9 total organization. Again in the transcript of November 9 at page 24 at lines 82-
10 84 Mr. Budgell explains that the purpose of the capital expenditures in 2002 is to
11 determine the suitability of electronic document system for Hydro and to
12 determine what best fits Hydro's requirements.

13
14 Hydro submits that it is reasonable and prudent for Hydro to explore new
15 technology and to determine whether efficiencies can be obtained by moving to a
16 corporate document management system. Hydro submits that this project
17 should be approved.

18
19
20 17. **B-61- Purchase Additional Corporate Applications (\$517,000)**

21 This project is described at page B-61 of the proposed 2002 Capital
22 Budget as the assessment and purchase of technical and business software to
23 support Hydro's business functions. Two information requests were asked with
24 respect to this capital expenditure: PUB-42 and NP-114. In the response to NP-
25 114 it is stated that \$117,500 of the proposed \$517,000 is for the purchase of a
26 short term load forecast software. This software will improve Hydro's ability to
27 take advantage of opportunities to optimize thermal unit dispatch at Holyrood and
28 its decision-making regarding equipment removal for maintenance and its ability
29 to predict and mitigate system spills.

30

1 The balance of the proposed expenditure, i.e. \$399,000, is to provide for
2 additional corporate application software requirements in 2002. PUB-42 sets out
3 the priorities for the type of corporate applications that Hydro's experience
4 demonstrates is required to be purchased each and every year to support its
5 information technology systems. Additional information was provided by
6 Mr. Budgell in cross-examination. Hydro's requires funds for information
7 technology and system requirements in the year 2002 and this is based on
8 Hydro's past experience with the ever changing needs for information technology
9 (Transcript November 5, p. 25, lines 76-81; Transcript November 6, p. 39,
10 lines 73-92). Mr. Budgell explained that requests for software are reviewed by a
11 special group within Hydro who assess whether the software should be
12 purchased (Transcript November 6, p. 38, lines 73-92) and whether it is
13 compatible with existing software and systems.

14

15 Hydro submits that the amount proposed in the 2002 Capital Budget
16 should be approved. Based on Hydro's experience with respect to these types
17 of requirements, there is no doubt that Hydro will need to purchase additional
18 software in 2002 to support its business functions.

19

20

21 18. **B-62- Purchase and Install Uninterruptible Power Supply – Computer**
22 **Room (\$70,000)**

23 This project is described on page B-62 of the proposed 2002 Capital
24 Budget as the purchase and installation of an on-line uninterruptible power
25 supply to the computer room at Hydro Place to provide conditioned and backup
26 power for the mainframes and servers which support all the corporate financial
27 applications and all local area network based applications. Only one information
28 request was asked with respect to this project: PUB-43. In response to that
29 information request, Hydro advised that the current system is unable to supply
30 adequate power conditioning and battery reserve capability and that the units are

1 starting to fail due to battery failures. No questions were asked of any Hydro
2 witness with respect to this proposed capital project.

3

4 Hydro submits that it is clear that Hydro must ensure the integrity of all of
5 its financial applications and its mainframe and servers. It submits that the
6 proposed capital expenditure is reasonable and required to support its ongoing
7 business requirements and should be approved.

8

9

10 19. **B-63- Replacement of Printers (\$130,000)**

11 This project is described on page B-63 of the proposed 2002 Capital
12 Budget as replacement of obsolete printers throughout all Hydro offices in the
13 Province. Only one information request was asked with respect to this capital
14 project: PUB-44. In response to that information request, Hydro advised that the
15 number of printers to be replaced in 2002 is 66 with the average age being from
16 5 to 7 years. No questions were asked of any Hydro witness with respect to this
17 proposed capital project.

18

19 Hydro submits that this capital expenditure, as submitted by Hydro, is
20 required for its normal business operations and should be approved.

21

22

23 20. **B-64- Replacement of AS400 Computers (\$143,000)**

24 This capital project was revised during the hearing. Originally, Hydro
25 proposed the replacement of the two existing AS400 computers in contemplation
26 of moving to the JDE Software product World Vision. However, in light of the
27 decision of JD Edwards to continue support of its current product, Hydro has
28 determined that it is not necessary in 2002 to prepare for the move to World
29 Vision and thus, new computers are not required in 2002. It, therefore, would not
30 be prudent to proceed with the purchase of new computers at this time.

1 On November 30, Hydro submitted a revised capital budget expenditure
2 for 2002 to purchase the existing AS400 computers and additional disk space.
3 The revised project is described on the revised page B-64 as the purchase of the
4 existing 400 computers, which are presently being leased, with the lease expiring
5 during 2002. It is also stated in B-64 (Rev) that the additional disk space is
6 necessary to ensure adequate operation of current applications and that current
7 utilization is approximately 75% of the maximum recommended level. There
8 were two information requests with respect to the original proposed capital
9 project of replacement of the computers at \$2.1 million; PUB-45 and NP-116.
10 However, as just noted, Hydro has changed this project and these information
11 requests are no longer relevant. There was no cross-examination of any Hydro
12 witness with respect to the revised capital expenditures to purchase the existing
13 AS400 computers.

14
15 Hydro submits that it obviously needs these computers to continue with its
16 current operations and that the decision to delay the purchase of new computers
17 given the manufacturer's extended support of the current product is reasonable.
18 Hydro further submits that the revised capital project should be approved.

19
20
21 **21. B-66- Replace VHF Mobile Radio System (\$3,081,000; future**
22 **\$5,640,000)**

23 This project is described on revised page B-66 of the proposed 2002
24 Capital Budget. This project was revised during the hearing to reflect a two year
25 period for the project rather than one year as reflected in the original 2002
26 Capital Budget submission.

27
28 The project is described on revised page B-66 as the replacement of the
29 existing VHF Mobile Radio System which consists of a single non-redundant
30 switch in Gander, site controllers and radio repeaters at 29 sites across the
31 Island and approximately 350 mobile and portable radios. Four information

1 requests were asked with respect to this project: PUB-46 and NP-98,
2 117 and 231. As well, there was extensive cross-examination of Mr. Budgell on
3 November 5, November 8 and November 9 by counsel for NP and for the
4 Consumer Advocate.

5

6 Hydro owns and has responsibility to maintain the main transmission grid
7 for the Province. To do this, Hydro personnel work primarily in isolated and
8 remote locations, sometimes only accessible by helicopter. The nature of the
9 work is such that it must be performed all year long and, of course, in times of
10 power outages. Transmission line work must often be completed at night and in
11 extreme and hazardous weather conditions. As well, for its other operations,
12 both generation and distribution, it should be noted that Hydro operates in
13 several isolated and remote locations. The areas of close proximity with NP
14 service areas are very limited.

15

16 It is the VHF Mobile Radio System which provides communications for
17 Hydro's transmission line crews and other personnel to maintain and operate
18 Hydro's system. It is absolutely critical to Hydro's operating and maintenance of
19 equipment throughout the Province and the safety of Hydro employees
20 performing such work. The mobile radio system is used daily by Hydro
21 personnel all over the Province and is an essential requirement for daily
22 operations. Its primary use is to provide essential communications link between
23 field personnel and the Energy Control Center, as well as communications
24 between members of a work crew and between work crews and it is essential for
25 a safe work environment for employees.

26

27 Failure of the existing system will render Hydro incapable of effectively
28 performing normal daily maintenance or repair work as Hydro's workers cannot
29 depend on third party equipment and systems which are not suited to the work.
30 Other technology such as cellular phones and satellite phones were suggested
31 by parties to the hearing as possible alternatives. Cellular telephone coverage is

1 unavailable in many areas in which Hydro has a requirement for mobile
2 communications. Anyone who has travelled around the Province and tried to use
3 a cell phone has direct knowledge of this. As well, Mr. Budgell explained how
4 cell phones do not provide adequate coverage. Cellular facilities are often
5 restricted in the time of an emergency when it is essential that there be adequate
6 mobile communications between crews and between the Energy Control Center
7 when the crews are out trying to restore power. The other alternative of satellite
8 telephone, which was also raised, again has limited availability, an uncertain
9 future and certain of them have bulky terminal equipment and they all have
10 expensive air time. Neither cellular nor satellite telephones provide the level of
11 services required for utility mobile communications.

12

13 Mr. Budgell explained that cell phone usage is not suitable for Hydro's
14 operations (transcript November 9, p. 13, lines 20-23, 27-42). Mr. Budgell also
15 explained why satellite phones are not ideal (transcript November 9, p. 19,
16 lines 1-3). Similarly, the evidence of Mr. Budgell found in the transcript of
17 November 9, pages 28-30, as well as lines 20-32 of page 19, summarizes
18 Hydro's analysis which supports the conclusion that satellite phones are not a
19 viable alternative to the VHF Radio System as suggested by certain counsel.

20

21 It should be noted that counsel, who have no first hand knowledge or
22 experience of Hydro's operations or the conditions under which its crews must
23 operate, have suggested the use of what Hydro has found to be inappropriate
24 technology to support its employees in the work that they do and provide the
25 appropriate level of safety. It also should be noted that counsel for the other
26 parties did not file any evidence with respect to the suitability and reliability of
27 these alternatives for a utility type of operation. They are simply suggesting or
28 musing from their only personal experience that they might be suitable
29 alternatives. As such, these musings are totally valueless without any evidence
30 to support them. The record demonstrates that neither the use of cell phones or
31 satellite phones are adequate alternatives to VHF Mobile Radios. As well,

1 U-Hydro 21, which was an analysis to demonstrate the use of satellite phones vs.
2 VHF radio, demonstrates that the VHF radio, apart from the issue of functionality,
3 is more cost effective than satellite phones.

4
5 The Consumer Advocate also raised the issue of whether there was
6 duplication between Hydro's and NP's sites. Hydro sites are found in figure 2
7 attached to NP-180 and U-Hydro No. 20 shows NP's VHF repeater sites on the
8 Island. The evidence demonstrated that there are only three sites of Hydro and
9 NP that are even in close proximity out of 48 sites (transcript November 9, page
10 12, lines 2-8). This evidence again demonstrates that Hydro's operational
11 requirements are different than NP's. Hydro operates in different areas of the
12 Province where it has a need for this system. While both utilities can share a
13 new system, (not one of the existing utility systems), it is equally clear that there
14 would have to be additional features to any system owned by one utility to meet
15 the operational requirements of the other utility. For example, the information
16 filed demonstrates that there would be an additional cost of approximately \$3
17 million, if NP sites were to be covered in the new Hydro system.

18
19 Hydro submits that the evidence is clear that the VHF Radio System is a
20 critical system required by Hydro to complete its maintenance and to provide
21 communications link between field personnel and the Energy Control Center, as
22 well as communications within a line crew and between crews. The evidence is
23 equally clear that the existing system is obsolete and no longer is supported by
24 the original manufacturer. It is not possible to get replacement parts nor does
25 Hydro have enough spare parts in inventory to adequately support this system.

26

1 Hydro's justification for this project can be summarized as follows:

2

3 1. The VHF mobile radio system is absolutely critical to allow Hydro to
4 maintain its operations and to provide a safe work environment for its
5 crews who must work in all types of conditions, including extreme adverse
6 weather conditions.

7

8 2. The existing system is obsolete and no longer supported by the
9 manufacturer. It is too high a risk for the system to continue without plans
10 to replace it in the immediate future.

11

12 3. There are no alternative technologies to replace the VHF radio system for
13 Hydro's specific requirements that would provide the required coverage,
14 functionality and reliability.

15

16 4. All other utilities, including NP, maintain their own mobile radio system as
17 it is critical to the efficient operation of the power system and the safety of
18 its employees. (See NP-180 which indicates a recent survey of Canadian
19 transmission and generation utilities shows that all utilities except one
20 owned and maintained their own mobile radio system).

21

22 5. The coverage areas of Hydro and NP are, like their service areas,
23 significantly different. The existing systems owned by both utilities are not
24 compatible and they do not have the capacity to accommodate the
25 requirements of the other utility. The only alternative for a joint system is
26 the implementation of a new infrastructure.

27

28 6. No evidence was led by any party to the hearing to contradict Hydro's
29 position with respect to the criticality of this system or the feasibility of
30 other alternatives.

1 It has also been pointed out that the Department of Works, Services and
2 Transportation ("WST") use the current system and have given a commitment to
3 Hydro to use the new system. While the actual amount to be paid by WST has
4 not been determined it has been estimated to be approximately \$60,000 per
5 month (November 9, page 17, lines 60-68). This additional revenue will be a
6 credit to the revenue requirement once all the arrangements have been finalized
7 and the new system is in place being utilized by WST.

8
9 Hydro submits that this project should be approved.

10
11
12 22. **B-67- Replace Teleprotection – Stony Brook-Grand Falls Converter**
13 **(\$58,000)**

14 This project is described on page B-67 of the proposed 2002 Capital
15 Budget as the replacement of the existing teleprotection units for voice, data and
16 teleprotection at the Stony Brook Terminal Station and the Grand Falls
17 Frequency Converter at the Abitibi Mill in Grand Falls. The manufacturer does
18 not support the current equipment. Only one information request was asked with
19 respect to this, which is NP-98, where certain questions were asked with respect
20 to a number of projects including this one. No questions were asked during
21 cross-examination of any Hydro witness with respect to this project.

22
23 Hydro submits that there has been no evidence to contradict Hydro's
24 position that this project is required to provide a reliable service.

25
26
27 23. **B-68- Replace UHF Radio – Upper Salmon (\$556,000)**

28 This project is described on page B-68 of the proposed 2002 Capital
29 Budget as replacement of obsolete UHF radio links from Upper Salmon
30 Generating Station to West Salmon Spillway, North Salmon Spillway and
31 Ebbegunbaeg Control Structure that supports operational voice, data and

1 controls signals at these sites. The description further states that the current
2 radio equipment is 20 years old, spares are no longer available and the
3 equipment is no longer supported by the manufacturer. Hydro proposes to
4 replace the radio equipment with a combination of digital radio and fiber optic
5 technology. Three information requests were asked with respect to this project:
6 PUB-47 and NP-98 and 222. In the response to PUB-47 it is pointed out that the
7 proposed replacement is similar to the replacement of the UHF radio system that
8 was completed at Hinds Lake in 1998 and at that time the alternatives were
9 pursued as listed in the response to the request for information which showed
10 why the current alternative was chosen. No questions were asked of any Hydro
11 witness with respect to this project during cross-examination by any party.

12

13 Hydro submits that this project should be approved.

14

15

16 24. **B-69- Complete Microwave Radio System Interconnection (\$269,000;**
17 **future \$8,673,000)**

18 This project is described on page B-69 of the proposed 2002 Capital
19 Budget as the purchase, installation and testing of a new digital microwave radio
20 system to connect Hydro's telecommunication facilities on the West and East
21 regions of the Island. This project is Phase III of Hydro's Five Phase
22 Telecommunications Plan first filed with the Board in 1998. Five information
23 requests were filed with respect to this project: PUB-46, NP-118, NP-180, NP-
24 143 and NP-232. As indicated in the response to PUB-46, the West Coast
25 microwave was upgraded in 1998 as part of Phase I of Hydro's
26 Telecommunications Plan with the East Coast microwave being upgraded in
27 Phase II in 2000 and 2001. The proposed 2002 capital expenditure is Phase III
28 which is to interconnect the East and West microwave systems. This Phase will
29 complete the final portion of the microwave radio infrastructure component of
30 Hydro's Telecommunications Plan.

1 Details on the projected annual cost to operate and maintaining this
2 system, as well as Hydro's position with respect to the alternative of using a third
3 party server, is provided in the response to NP-118. As stated in the response to
4 that question, generating and transmission utilities have traditionally continued to
5 own mission critical teleprotection services such as the microwave system.
6 Additional information was contained in the response to NP-232 with respect to
7 the survey undertaken to determine the practices of other utilities with respect to
8 their critical telecommunications systems.

9
10 The response to NP-180 provides the response provided at Hydro's 2001
11 Capital Budget Hearing on this project and sets out the alternatives Hydro
12 considered to the microwave system that is, power line carrier and fiber optic
13 technology. Information is provided in the attachments to NP-180 on the analysis
14 performed which concluded that the power line carrier alternative was not an
15 acceptable technical solution because of its inability to support high-speed data
16 requirements and that the cost of the fiber optic alternative was prohibitive.
17 Attached to NP-180 was a letter dated March 7, 2001 from Newfoundland Hydro
18 to NP. On page 2 of that letter Hydro sets out its goal for the microwave system
19 which is to provide the ability for teleprotection of the 230 KV bulk transmission
20 grid for the Province. There it is stated "once the need for the replacement of our
21 existing telecommunication facilities was determined, steps were taken to ensure
22 that NLH was embarking on the least-cost, technically acceptable
23 telecommunications technology, i.e. digital microwave as opposed to fiber optic
24 technology, for example, and that it is consistent with NLH's philosophy".

25
26 Mr. Henderson described how the different type of communication
27 facilities are used for teleprotection purposes (Transcript October 11, p. 21, lines
28 78-81 and p. 22, lines 1-39). Mr. Henderson explained that a lot of analysis was
29 done to determine the most appropriate use of technology depending on their
30 requirements and that the operational requirements and the costs will determine
31 the mode of communication used by Hydro.

1 It should be noted that no party to the proceeding called direct evidence
2 with respect to this proposed capital budget project and there was little cross-
3 examination with respect to this project. Hydro submits that the project is
4 justified and that Hydro has demonstrated it is the least cost alternative to
5 replace a 1960's system which is no longer adequate. Hydro submits that it
6 should be approved by the Board.

7
8
9 25. **B-71- Provide Global Positioning System and Time Synchronization –**
10 **Phase II (\$211,000)**

11 This project is described on page B-71 of the proposed 2002 Capital
12 Budget as the installation of 22 GPS clocks to provide data used in the
13 evaluation of system performance and control systems. Only one information
14 request was asked with respect to this project: PUB-49 which indicated that this
15 was the last phase of the project and provided the number of sites included for
16 the installation in 2002. There was no examination of any Hydro witness with
17 respect to this project.

18
19 Hydro submits that this project should be approved.

20
21
22 26. **B-72- Install Interactive Voice Response System ("IVR") – Hydro**
23 **Place (\$171,000)**

24 This project is described on page B-72 of the proposed 2002 Capital
25 Budget as the installation of an IVR system at Hydro Place to support the
26 Customer Services' Call Centre to provide advanced customer information
27 retrieval capability. Two information requests were asked with respect to this:
28 PUB-50 and NP-119. The response to these information requests indicates that
29 the system has been identified as a desirable application in order to provide
30 improved customer service as it will allow faster response time for customer
31 enquiries. There was also cross-examination on this topic of Mr. Budgell by

1 Board counsel, found in the transcript of November 9 at pages 23-24, which
2 confirmed the information provided in the responses to the two information
3 requests.

4
5 Hydro submits that this project will enhance customer services and that it
6 should be approved by the Board.

7
8
9 **27. B-74- Vehicles (\$1,897,000)**

10 This project is described on page B-74 of the proposed 2002 Capital
11 Budget as the replacement of 35 units, including 6 cars, 17 pickups and 12 line
12 trucks. As stated in that description of the project, Hydro's policy is to operate
13 vehicles to minimize new investment and operating and maintenance costs.
14 Vehicles are assessed on an annual basis for replacement taking into account
15 the overall condition of each vehicle and its distance driven as well as the history
16 of maintenance costs.

17
18 One information request was asked on this capital project: PUB-51 which
19 lists the vehicles to be purchased and the budget amount for each category.
20 Hydro did provide information in U-Hydro No.6 of the number of vehicles it had
21 for off-road and on-road.

22
23 Hydro submits that each year it has requirements to replace vehicles. The
24 guidelines used to determine replacements clearly demonstrate that Hydro takes
25 into account the overall condition of each vehicle on an individual basis including
26 such things as the mileage and maintenance costs. No party has questioned
27 these practices.

28
29 Hydro submits that the total capital expenditure requested should be
30 approved.

1 **PROJECTS UNDER \$50,000**

2
3 The Industrial Customers have objected to the following projects under \$50,000
4 which are found in Section A of the proposed 2002 Capital Budget.

- 5
- 6 1. Replace Sump Pump No. 2 at Powerhouse No. 1 – Bay D’Espoir -
7 \$46,000; page A-4
 - 8
 - 9 2. Purchase Security Surveillance System – Bay D’Espoir - \$35,000;
10 page A-4
 - 11
 - 12 3. Purchase and Replace Tools and Equipment less than \$50,000 for the
13 Thermal Plant – p. A-4 Objections taken to half of the proposed amount
14 with the objection amounting to \$38,500;
 - 15
 - 16 4. Purchase and Replace Tools and Equipment less than \$50,000 for Central
17 Region - \$103,500; page A-5, which was half the amount proposed by
18 Hydro;
 - 19
 - 20 5. Purchase Metering Spares – Meter Shop – \$28,000; page A-5
 - 21
 - 22 6. Provide three LCD Projectors – Hydro Place - \$39,000; page A-8
 - 23
 - 24 7. Replacement of Desktop Preferrials – \$18,000; page A-8
 - 25
 - 26 8. Purchase and Replacement of Administrative Office Equipment less than
27 \$50,000; - Industrial Customers have objected to half of the proposed
28 2002 expenditure with the total expenditure being \$51,000; page A-9
- 29

1 For projects under \$50,000, it has been the practice of the Board that project
2 justifications are not required in the submission of a utility's capital budget. In
3 filing its 2002 Proposed Capital Budget Hydro, therefore, did not submit any
4 justification for these projects. It should also be noted that: (1) no party asked an
5 information request with respect to any of the projects to which objections have
6 now been raised by the Island Industrial Customers; (2) no party, including
7 Island Industrial Customers, cross-examined any Hydro witness with respect to
8 the projects to which objection is now taken; (3) no party filed direct evidence to
9 contradict the requirements for any of the capital projects under \$50,000
10 proposed by Hydro; and (4) there appears to be no rationale to support the
11 objections taken to certain projects and not others (e.g. objection was taken to
12 half of only certain tools and equipment expenditures i.e. Central region and not
13 other identical expenditures in other areas).

14

15 Hydro submits that all of the projects under \$50,000 that have been objected to
16 should be approved by the Board. Hydro's practice with respect to these has
17 been consistent and there is no evidence to contradict the position of Hydro's
18 Management that these projects are reasonable, prudent and required to provide
19 service to Hydro's customers.

Newfoundland (Board of Commissioners of Public Utilities),
Re (Newfoundland Court of Appeal)



Newfoundland (Board of Commissioners of Public Utilities), Re

In The Matter of Section 101 of the Public Utilities Act, R.S.N. 1990, c. P-47

In The Matter of a case stated by the Board of Commissioners of Public Utilities to the Court of Appeal for its hearing consideration and opinion on questions of law affecting the jurisdiction of the Board of Commissioners of Public Utilities

Citation: 1998 CarswellNfld 150, (*sub nom.* Reference re s. 101 of the Public Utilities Act (Nfld.)) 164 Nfld. & P.E.I.R. 60, (*sub nom.* Reference re s. 101 of the Public Utilities Act (Nfld.)) 507 A.P.R. 60

Court: Newfoundland Court of Appeal

Judge: O'Neill, Cameron, Green JJ.A.

Heard: March 11, 1997

Heard: March 12, 1997

Judgment: June 15, 1998

Year: 1998

Docket: 96/141

Counsel: *V. Randell J. Earle, Q.C.* Counsel for the Board of Commissioners of Public Utilities.

Ian F. Kelly, Q.C., Counsel for Nfld. Light & Power Co. Ltd.

Mark Kennedy, Counsel for the Consumer Advocate.

Subject:

Public

Civil Practice and Procedure

Public utilities --- Regulatory boards -- Regulation of rates --- Utilities board stated case to Court of Appeal for determination of "just and reasonable" return on rate base of utility -- Board had jurisdiction to fix rate of return that public utility could earn annually -- Board did not have jurisdiction to fix rate of return on common equity or shares -- Board had jurisdiction to set rate of return as range -- Board had broad jurisdiction to regulate how excess revenue was dealt with in situation where utility earned rate of return greater than that determined to be just and reasonable -- Board had jurisdiction to define excess revenue for purpose of maintenance of reserve account and set out how excess, if not ordered to be paid into reserve account, was dealt with -- In setting rate, board had jurisdiction to consider type and level of projected expenses of utility and determine whether such expenses were reasonable -- Board did not have jurisdiction to require public utility to maintain debt-equity ratio or ratio within stated range -- Board did not have jurisdiction to require utility to obtain its capital requirements by issue of specific financial instruments -- Board did not have jurisdiction to intrude into day to day financial or managerial decision-making of utility with respect to capital structure.

The Board of Commissioners of Public Utilities stated at case to the Court of Appeal with respect to the

jurisdiction and powers of the board as they affected the board's approach to the determination of a "just and reasonable" return on the rate base of a utility. A number of question were posed.

Held: The board had broad jurisdiction with respect to the determination of a just and reasonable return on the rate base of a utility.

Per Green J.A. (Cameron J.A. concurring): The board had jurisdiction to fix the rate of return that a public utility could earn annually but it did not have jurisdiction to fix the rate of return on common equity or shares. The board had jurisdiction to set the rate of return as a range and it had broad jurisdiction to regulate how any excess revenue was dealt with in a situation where the utility earned a rate of return greater than that determined to be just and reasonable. The board had jurisdiction to define what excess revenue was for the purpose of maintenance of a reserve account and had the jurisdiction to set out how that excess, if not ordered to be paid into the reserve account, was dealt with. In setting the rate, the board had jurisdiction to consider the type and level of projected expenses of a utility and to determine whether such expenses were reasonable. The board did not have the jurisdiction to require a utility to obtain its capital requirements by issue of specific financial instruments, nor did it have jurisdiction to intrude into the day to day financial or managerial decision-making of a utility with respect to its capital structure.

Per O'Neill J.A. (dissenting): The determination of the rate on common shares of a utility is very much a part of the rate making process. Rates to be charged should provide sufficient revenue to enable the producer or retailer of the power to earn a just and reasonable return so that it is able to achieve and maintain a sound credit rating in the world's financial markets. The board had the jurisdiction to fix the rate of return on the rate base as well as the rate on common shares. Revenues generated after the rates, tolls and charges were set belonged to the utility and thus the board did not have the jurisdiction to order rebates to customers. The Board did not have the jurisdiction to set rates in a manner that would compensate for prior excess earnings.

Cases considered by Green, J.A.:

Acker v. United States (1936), 298 U.S. 426, 56 S. Ct. 824, 80 L. Ed. 1257 (U.S. Ill.) -- considered

Bell Canada v. Canada (Canadian Radio-Television & Telecommunications Commission), 38 Admin. L.R. 1, [1989] 1 S.C.R. 1722, 60 D.L.R. (4th) 682, 97 N.R. 15, [1989] 1 R.C.S. 1722 (S.C.C.) -- considered

Bell Telephone Co. of Canada, Re (1966), 56 B.T.C. 535 -- considered

Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia (1923), 262 U.S. 679, 43 S. Ct. 675, 67 L. Ed. 1176, P.U.R. 1923D 11 (U.S. W. Va.) -- considered

British Columbia Electric Railway v. British Columbia (Public Utilities Commission), [1960] S.C.R. 837, 33 W.W.R. 97, 82 C.R.T.C. 32, 25 D.L.R. (2d) 689 (S.C.C.) -- considered

Edmonton (City) v. Northwestern Utilities Ltd., [1929] S.C.R. 186, [1929] 2 D.L.R. 4 (S.C.C.) -- considered

Federal Power Commission v. Hope Natural Gas Co. (1944), 320 U.S. 591, 64 S. Ct. 281, 88 L. Ed. 333, 51 P.U.R. (N.S.) 193 -- considered

Montana-Dakota Utilities Co. v. Northwestern Public Service Co. (1951), 341 U.S. 246, 71 S. Ct. 692, 95 L. Ed. 912, 88 P.U.R. (N.S.) 129 (U.S. S.D.) -- considered

Newfoundland Light & Power Co. v. Newfoundland (Public Utilities Commissioners Board) (1987), 25 Admin. L.R. 180, 37 D.L.R. (4th) 35, 63 Nfld. & P.E.I.R. 335, 194 A.P.R. 335 (Nfld. C.A.) -- considered

Northwestern Utilities, Re (1978), [1979] 1 S.C.R. 684, 7 Alta. L.R. (2d) 370, 12 A.R. 449, 89 D.L.R. (3d) 161, 23 N.R. 565 (S.C.C.) -- considered

Union Gas Ltd. v. Ontario (Energy Board) (1983), 43 O.R. (2d) 489, 1 D.L.R. (4th) 698 (Ont. Div. Ct.) --

considered

Wabush (Town) v. Power Distribution District of Newfoundland & Labrador (1988), 71 Nfld. & P.E.I.R. 29, 220 A.P.R. 29 (Nfld. C.A.) -- considered

Statutes considered by Green, J.A.:

Nfld.*Electrical Power Control Act, 1994*, S.N. 1994, c. E-5.1

s. 3(a) -- considered

s. 3(a)(i) -- considered

s. 3(a)(ii) -- considered

s. 3(a)(iii) -- considered

s. 3(b) -- considered

s. 3(b)(i) -- considered

s. 3(b)(ii) -- considered

s. 3(b)(iii) -- considered

s. 4 -- considered

Nfld.*Public Utilities Act*, R.S.N. 1990, c. P-47

s. 16 -- considered

s. 37(1) -- considered

s. 58 -- considered

s. 59 -- considered

s. 59(2) -- referred to

s. 64(1) -- considered

s. 64(2) -- considered

s. 68(4) -- considered

s. 69 -- considered

s. 69(3) -- considered

s. 70 -- considered

s. 70(1) -- considered

s. 75 -- considered

s. 75(3) -- considered
s. 76 -- considered
s. 78(1) -- considered
s. 78(2) -- considered
s. 78(2)(h) -- considered
s. 80 -- considered
s. 80(1) -- considered
s. 80(2) -- considered
s. 80(4) -- considered
s. 84(1) -- considered
s. 84(2) -- considered
s. 87(1) -- considered
s. 91 -- considered
s. 91(1) -- considered
s. 91(3) -- considered
s. 91(5)(a) -- considered
s. 101 -- pursuant to
s. 102 -- referred to
s. 117 -- considered
s. 118 -- considered
s. 118(2) -- considered

Statutes considered by O'Neill, J.A.:

Nfld.*Electrical Power Control Act, 1994*, S.N. 1994, c. E-5.1

Generally -- considered

s. 3 -- considered

s. 4 -- considered

Nfld.*Public Utilities Act*, R.S.N. 1990, c. P-47

Generally -- considered

- s. 16 -- considered
- s. 37 -- considered
- s. 37(1) -- considered
- s. 58 -- considered
- s. 59 -- considered
- s. 69 -- considered
- s. 69(1) -- considered
- s. 69(2) -- considered
- s. 69(3) -- considered
- s. 69(4) -- considered
- s. 70 -- considered
- s. 70(1) -- considered
- s. 76 -- considered
- s. 80 -- considered
- s. 80(1) -- considered
- s. 80(2) -- considered
- s. 80(4) -- considered
- s. 84(1) -- considered
- s. 85 -- considered
- s. 86 -- considered
- s. 87(1) -- considered
- s. 91 -- referred to
- s. 101 -- pursuant to

RULING on stated case.

Green, J.A.:

1 The Board of Commissioners of Public Utilities has stated a case for the opinion of this Court, pursuant to s. 101 of the *Public Utilities Act*¹. The questions posed concern the jurisdiction and powers of the Board as they affect the approach of the Board to the determination of a "just and reasonable return" on the rate base of a utility, as well as related

matters.

The Stated Case in Context

2 The Board is the statutory body which has the authority and duty for the "general supervision of all public utilities" in Newfoundland and Labrador and in the course of exercising that supervisory role has general authority to "make all necessary examinations and inquiries and keep itself informed as to the compliance by public utilities with the law" and, as well, it has the right "to obtain from a public utility all information necessary to enable the Board to fulfil its duties"².

3 One of the Board's primary functions with respect to electrical utilities is the regulation and approval of rates, tolls and charges³. In so doing, the Board must take account of the statutory requirement that the 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.⁴ The process essentially involves the fixing and determining of the appropriate rate base, the determination of a "just and reasonable return" on that rate base and then the approval of a schedule of rates, tolls and charges that would be appropriate to generate the revenue which, in the Board's estimation, would be necessary to provide the determined rate of return. Once rates, tolls and charges are set by the Board they continue to apply until altered under the Act, as a result of a reapplication by the utility for an increase, a complaint by the public or an order for a reexamination initiated by the Board itself.

4 It is important to remember, however, that in addition to its periodic adjudicative role which itself involves a large measure of policy implementation in arriving at its decisions, the Board has, because of its duty of "general supervision of all public utilities", an ongoing supervisory role of the activities of the utility between hearings as well, which is facilitated by statutory requirements for periodic reporting of financial information to the Board.

5 In 1991 the Board made Orders⁵ determining a just and reasonable return for Newfoundland Light and Power Co. Ltd.⁶ and approving a schedule of rates, tolls and charges based on estimated revenue requirements necessary to cover operating expenses and to provide that level of return. The essential features of the 1991 order determining the just and reasonable rate of return were that:

- (a) The just and reasonable return was determined to be between a stated range (10.6% - 11.19%) of the company's average rate base;
- (b) The rate base was determined on the basis of a hypothetical test year (1992);
- (c) The Board determined that the just and reasonable return, as defined, would provide an opportunity to NLP to earn a rate of return on common equity between a certain stated range (13% to 13.5%);
- (d) The schedule of rates, tolls and charges was determined applying a rate of return equal to the mid-point between the stated range of returns on rate base;
- (e) The Board ordered that a particular capital structure of NLP be adopted and continue to be the basis of NLP's financial plan.

6 The Board had previously adopted a policy allowing NLP to retain earnings above the allowed range of return on rate base, provided those earnings were within the allowed range of rates of return on common equity. Where the earnings exceeded the allowed rate of return on common equity, the Board, in purported exercise of its statutory powers to regulate NLP's accounting procedures, as well as other powers, required NLP to set up a reserve account in which these excess earnings would be held and dealt with in accordance with subsequent direction by the Board.

7 In April of 1996, NLP petitioned the Board for another order fixing and determining a new rate base, determining a just and reasonable return and approving a revised schedule of rates, tolls and charges, amongst other matters. One of the parties represented at the hearing was the "Consumer Advocate", who was appointed⁷ by the Government of Newfoundland and Labrador to represent the interests of domestic and general service consumers in respect of the rate hearing.

8 During the years between the making of the 1991 orders and the 1996 hearing, NLP had filed annual returns with the Board, as required by s-s. 59(2) of the Act, which indicated that in the years 1991, 1992 and 1993 the company's rate of return on rate base was in excess of the range determined in the 1991 Order. However, as calculated by NLP, the rate of return on common equity was always within the range that had been stipulated by the Board. The rates of return on rate base and on common equity were calculated based on actual expenses and on the actual capital structure of NLP.

9 In its periodic reports to the Board, NLP disclosed that its actual advertising costs in 1992 exceeded the amounts projected to the Board as a forecast for 1992 which had been approved as reasonable and prudent by the Board in its 1991 Order in the course of fixing and determining the rate base.

10 During the course of the 1996 hearing, certain submissions were made to the Board respecting, amongst other things,

(a) whether NLP should be regarded as having earned revenue in excess of its allowed range of rate of return where its rate of return on common equity was nevertheless within the stated allowable range;

(b) whether the manner of calculation of excess revenue and the proposed manner of the disposition of any excess was permitted;

(c) whether NLP could and should be required to alter its capital structure so as to obtain its capital requirements in a manner other than the way in which it was presently doing;

(d) whether the Board could and should take account, in setting future rates, of past expenditures which were in excess of amounts deemed reasonable and prudent at the time of a previous hearing.

11 Questions arose as to the jurisdiction and power of the Board to entertain and act on the sorts of submissions that were made. This prompted the Board to state the current case to this Court. NLP and the Consumer Advocate were granted standing to appear and be heard at the hearing.

The Specific Questions

12 The Stated Case poses for consideration by this Court the following questions:

(1) Does the Board have jurisdiction pursuant to the Act to set and fix the return which a public utility may earn annually upon:

(i) the rate base as fixed and determined by the Board for each type of service applied by the public utility; and/or

(ii) the investment which the Board has determined has been made in the public utility by the holders of common shares.

(2) Does the Board have jurisdiction to set the rates of return referred to in Question (1) as a range of permissible rates of return.

(3) Should a public utility earn annually a rate of return which is in excess of the rate of return determined by the Board to be just and reasonable, either on:

(i) the base rate as fixed and determined by the Board for each type of service applied by the public utility; or

(ii) the investment, which the Board has determined, has been made in the public utility by holders of common shares,

does the Board have jurisdiction to:

(i) require the public utility to use the excess earnings to reduce revenue requirements for the succeeding year; or

(ii) require the public utility to place the excess earnings in a reserve fund for the purpose of adjusting rates, tolls and charges of the public utility at a future date, or

(iii) require the public utility to rebate the excess earnings to customers of the public utility.

(4) Does the Board have jurisdiction to order that the rates, tolls and charges of a public utility shall be approved taking into account earnings in excess of a just and reasonable return upon,

(i) the rate base as fixed and determined by the Board for each type of service applied by the public utility, or

(ii) the investment, which the Board has determined, has been made in the public utility by the holders of common shares,

in prior years.

(5) Does the fact that the Board has advised the public utility that it is permitted to retain earnings in excess of the rate of return determined by the Board to be a just and reasonable return, upon the rate base as fixed and determined by the Board for each type of service supplied by the public utility, but not in excess of the return determined by the Board to be a just and reasonable return upon the investment which the Board has determined has been made in the public utility by the holders of common shares, affect the jurisdiction of the Board to approve rates, tolls and charges on the basis queried in Question (4).

(6) Does the Board have jurisdiction to order the rates, tolls and charges of the public utility shall be approved taking into account the amount of expenses previously incurred by the public utility which the Board may now consider inappropriate to be allowed as reasonable and prudent and properly chargeable to operating account notwithstanding that such classes of expenses were allowed as reasonable and prudent and properly chargeable to operating account.

(7) Does the Board have jurisdiction to require a public utility to maintain:

(i) a ratio; or

(ii) a ratio within a stated range of ratios

of equity and debt, as the means of obtaining the capital requirements of the public utility.

(8) Does the Board, upon an application pursuant to Section 91 or otherwise, have the jurisdiction to require a public utility to obtain its capital requirements by the issue of specific financial instruments, whether common shares, preferred shares, stocks, bonds, debentures or evidence of indebtedness payable in more than one year.

Although the questions are stated above as they appear in the Stated Case filed with the Court, there are several obvious typographical errors in the language used. This was recognized by the participants in references to the questions in their written arguments. In particular "supplied" was at times substituted for the word "applied" in questions 1(i), 3(i) and 4(i) and "base rate" in Question 3(i) was replaced by "rate base." In addition, the phrase "In the event that a public utility should ..." at the beginning of Question 3 was used at times in the written submissions in preference to the phrase "Should a public utility ..." Nothing turns on these informal changes. They do, however, make the import of the questions clearer and I will interpret the questions in that light.

The Legislative Framework

13 The answers to the questions which have been posed must, of course, be given taking account of the legislative framework within which the Board operates. The Board is a creature of statute and its jurisdiction and powers to deal with matters brought before it, and the manner of dealing with such matters, must be found, either expressly or impliedly, within the statutes conferring jurisdiction on and governing the operation of the Board.

14 While a number of specific provisions of the Act and related legislation will have to be referred to in the course of this opinion, certain legislative provisions, which are central to this analysis, can be conveniently set forth here:

Public Utilities Act

58. The board may prescribe the form of all books, accounts, papers and records to be kept by a public utility and a public utility shall keep its books, accounts, papers and records and make its returns in the manner and form prescribed by the board and comply with all directions of the board relating to those books, accounts, papers, records and returns.

69.(1) A public utility, if so ordered by the board, shall, out of earnings, set aside all money required and carry it in a depreciation account.

(2) The depreciation account shall not, without the consent of the board, be spent otherwise than for replacements, new constructions, extensions or additions to the property of the company.

(3) The board may by order require a public utility to create and maintain a reserve fund for a purpose which the board thinks appropriate, including the improvement of the public utility's status as a borrower or seeker of funds for necessary maintenance or expansion of its operations.

(4) The board, in a case where it has made an order which has the effect of increasing a public utility's revenues, may require the public utility to refrain from distributing as dividends until further order the whole or a part of the extra revenue which is in the board's opinion attributable to the order.

(5) An order under this section shall be made only after hearing the public utility concerned.

70.(1) A public utility shall not charge, demand, collect or receive compensation for a service performed by it whether for the public or under contract until the public utility has first submitted for the approval of the board a schedule of rates, tolls and charges and has obtained the approval of the board and the schedule of rates, tolls and charges so approved shall be filed with the board and shall be the only lawful rates, tolls and charges of the public utility, until altered, reduced or modified as provided in this Act.

75.(1) The board may make an interim order unilaterally and without public hearing or notice, approving with or without modification, a schedule of rates, tolls and charges submitted by a public utility, upon the terms and conditions that it may decide.

(2) The schedule of rates, tolls and charges approved under subsection (1) are the only lawful rates, tolls and charges of the public utility until a final order is made by the board under section 70.

(3) The board may order that the excess revenue that was earned as a result of an interim order made under subsection (1) and not confirmed by the board be

(a) refunded to the customers of the public utility; or

(b) placed in a reserve fund for the purpose that may be approved by the board.

76. The board may upon notice to the public utility and after hearing as provided in this Act, by order rescind, alter or amend an order fixing rates, tolls, charges or schedules, or other order made by the board, and certified copies of the order shall be served and take effect as provided in this Act for original orders.

78.(1) Except as otherwise provided in this Act, the board may fix and determine a separate rate base for each kind of service provided or supplied to the public by a public utility, and may revise the base.

(2) In fixing a rate base the board may, in addition to the value of the property and assets as determined under section 64, include

.....

(h) other fair and reasonable expenses which

(i) the board thinks appropriate and basic to the public utility's operation, and

(ii) has, with the approval of the board, been charged to capital account,

but the expenses shall be allowed only to the extent not amortized in previous years.

80.(1) 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 for each type or kind of service supplied by the public utility but where the board by order requires a public utility to set aside annually a sum for or towards an amortization fund or other special reserve in respect of a service supplied, and does not in the order or in a subsequent order authorize the sum or a part of it to be charged as an operating expense in connection with the service, the sum or part of it shall be deducted from the amount which otherwise under this section the public utility would be entitled to earn in respect of the service, and the net earnings from the service shall be reduced accordingly.

(2) The return shall be in addition to those expenses that the board may allow as reasonable and prudent and properly chargeable to operating account, and to all just allowances made by the board according to this Act and the rules and regulations of the board.

(3) Reasonable payments each year to former employees of a public utility who have retired and are receiving payments of supplemental income from the public utility are expenses that the board may allow as reasonable and prudent and properly chargeable to the operating account of the public utility.

(4) The board may use estimates of the rate base and the revenues and expenses of a public utility.

84.(1) Upon a complaint made to the board against a public utility by an incorporated municipal body or the Newfoundland and Labrador Federation of Municipalities or by 5 persons, firms or corporations, that the rates, tolls, charges or schedules are unreasonable or unjustly discriminatory or that a regulation, measurement, practice or act affecting or relating to the operation of a public utility is unreasonable, insufficient or unjustly discriminatory or that the service is inadequate or unobtainable, the board shall proceed, with or without notice, to make the investigation that it considers necessary or expedient.

(2) The board may order the rates, tolls, charges or schedules reduced, modified or altered, and make other orders as to the reduction, modification or change of the regulation, measurement, practice or acts that the case may require, and may order on the terms and subject to the conditions that are just that the public utility provide reasonably adequate service and facilities and make extensions that may be required, but an order shall not be made or entered by the board without a public hearing or inquiry.

87.(1) Where upon an investigation the rates, tolls, charges or schedules are found to be unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or in violation of this Act, the board has power to cancel those rates, tolls, charges or schedules and declare void all contracts or agreements, either oral or written, dealing with them upon and after a day named by the board, and to determine and by order substitute those rates, tolls or schedules that are reasonable.

91.(1) A public utility shall not issue shares, which for the purposes of this section shall include preferred shares, stocks, bonds, debentures or evidence of indebtedness payable in more than 1 year from the date of issue, except as provided in subsection (2) until it has obtained approval from the board for the proposed issue;...

.....

(3) After hearing the application and where satisfied that the proposed issue by a public utility of its shares, stocks, bonds, debentures or other evidence of indebtedness is to be made in accordance with law and for a purpose approved by the board, it is the duty of the board to make an order approving the proposed issue to the amount that it considers appropriate, and also to prescribe the purpose to which the issue or the proceeds of the issue are applied.

.....

(5) Without first obtaining the approval of the board,

(a) a public utility shall not make a material alteration in the characteristics of its stocks or shares, or its bonds, debentures, securities, or other evidence of indebtedness as those characteristics are described by the board in granting its approval of the issue;...

Electrical Power Control Act, 1994⁸

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,

(ii) should be established, wherever practicable, based on forecast costs for that supply of power for 1 or more years,

(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, and

.....

(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,...

.....

4. In carrying out its duties and exercising its powers under this Act or under the *Public Utilities Act*, the public utilities board shall implement the power policy declared in section 3, and in doing so shall apply tests which are consistent with generally accepted sound public utility practice.

Approach to Interpretation

15 The Court was not referred to any decisions in this or other jurisdictions which directly addressed, let alone answered, the specific types of questions which have been posed. To answer the questions, therefore, it is necessary to develop a theoretical frame of reference within the context of the general language of the existing legislation so as to determine the approach to be taken to its application in concrete situations.

16 It is necessary to examine the specific legislative provisions in the larger regulatory context and against the background of the purposes of the legislation and the general principles which have been developed as part of regulatory practice⁹. This approach follows from s. 118 of the Act which provides:

118.(1) This Act shall be interpreted and construed liberally in order to accomplish its purposes, and where a specific power or authority is given the board by this Act, the enumeration of it shall not be held to exclude or impair a power or authority otherwise in this Act conferred on the board.

(2) The Board created has, in addition to the power specified in this Act, all additional implied and incidental powers which may be appropriate or necessary to carry out the powers specified in this Act.

(3) A substantial compliance with the requirements of this Act is sufficient to give effect to all the rules, orders, acts and regulations of the Board, and they shall not be declared inoperative, illegal or void for an omission of a technical nature.

17 In addition, the EPC Act¹⁰, provides that the Board, in carrying out its duties and exercising its powers under the *Public Utilities Act* must implement the power policy of the province, as declared in s. 3 of the Act, and in so doing must "apply tests which are consistent with generally accepted sound public utility practice".

18 It follows from these provisions that a literal and technocratic interpretation and application of the provisions of the Act is to be avoided, in favour of an interpretation which will advance the underlying purpose of the legislation¹¹ as well as the power policy of the province and be consistent with generally accepted sound public utility practice.

19 In answering the questions posed, therefore, it is necessary to identify generally accepted principles of sound public utility practice and to give to the legislation an interpretation which follows those principles and advances the stated legislative policy of the Province.

20 The trade off for the regulation by the state of the rates, tolls and charges of monopolistic utilities in the interests of consumers is the statutory recognition that the utility should be entitled to earn a fair return for its efforts. Although differing in details, the regulatory statutory regimes existing throughout North America can, as a generalization, be said to be broadly similar in approach¹², although in recent years the regulatory schemes and their coverage are being affected more and more by the trends towards deregulation.

21 The regulatory body in question (in Newfoundland, the Board of Commissioners of Public Utilities) is generally charged with balancing the competing interests of consumers and the investors in the utility¹³. As deGrandpré¹⁴ observed:

This involves the Board attempting to make sure that, in the consumers' interests, the service provided is adequate and provided at just and reasonable rates and, for the utility and its investors, that those rates provide a sufficient income.

22 This balancing of interests is found in the province's stated power policy in s. 3 of the *EPC Act* where, emphasizing the interests of the utility, it is declared that the rates charged for the power should provide sufficient revenue to the utility to enable it to earn a just and reasonable return "so that it is able to achieve and maintain a sound credit rating in the financial markets of the world"¹⁵ while at the same time declaring that the rates should be "reasonable"¹⁶ and that the utilities' facilities should be managed and operated in a manner that would result in power being delivered to consumers "at the lowest possible cost consistent with reliable service"¹⁷. This policy finds legislative expression in the regulatory mechanisms of the Act itself, which provides that a utility must provide service and facilities which are "reasonably safe and adequate and just and reasonable"¹⁸ and prohibits a utility from charging rates, tolls and charges unless they have been approved by the Board¹⁹ while at the same time stating as a general principle that the utility is entitled to earn annually a just and reasonable return on its rate base²⁰.

23 This statutory entitlement of the utility to earn a "just and reasonable" return is the linguistic touchstone for the balancing exercise. This phrase emphasizes the fairness aspect, both to the utility, in earning sufficient revenues to make its continued investment worthwhile and to maintain its credit rating in financial markets, and to the consumer, in obtaining adequate service at reasonable rates. It also emphasizes the need for a tempering of each interest group's economic imperative by consideration of the interests of the other.

24 Having said that, the entitlement of the utility to a fair return on its investment is always regarded as of fundamental importance²¹. In the United States, controls which fail to allow a fair return have the potential of running afoul of constitutional strictures against confiscation of property without due compensation. While the same constitutional concerns may not be present in Canada, the case law has at times nevertheless referred to the entitlement to a fair return as a "common law right"²² which should be read into the legislation even where it is not specifically expressed.

25 There is no uniform methodology employed in the regulatory jurisdictions in North America for the determination of a just and reasonable rate of return²³. What recurs, however,

is a theme that the process is not an exact science and depends on a variety of factors necessary to balance the competing interests involved. Rate setting is essentially a prospective exercise where determinations are made on the basis of estimates and information that will not necessarily remain static.

26 Most jurisdictions adopt a "multiple factor" approach. The *Bluefield Waterworks* case²⁴ in the United States emphasized early on that the determination of a fair rate of return

...depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts.²⁵

27 Statements such as "the company will be allowed as large a return on the capital invested in the enterprise ... as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise"²⁶ often occur. For the rationale for such statements one need look no further than the provincial policy, stated in paragraph 3(a)(iii) of the *EPC Act* that the utility must be "able to achieve and maintain a sound credit rating in the financial markets of the world" so as to be able to raise the money necessary for the proper performance of its functions. To achieve such a goal of attracting capital, factors such as comparisons with other comparable enterprises, the respective costs of debt and equity, the capital breakdown between debt and equity and general economic conditions, amongst other things, are considered.

28 In *Federal Power Commission v. Hope Natural Gas Co.*²⁷, another landmark United States case, the court emphasized that it is the "end result of the process which has to be judged as to whether the rate is "just and reasonable". As a result, in the words of deGrandpré:

In stating that the end result was the only point of consideration, whatever the means of arriving thereat, the court opened the door to a wide variety of ways and means to arrive at a proper calculation of returns. In effect, it left the valuation of rate bases to the Commission's or Court's discretion.²⁸

DeGrandpré's conclusion, based on his survey of North American regulatory regimes, is later stated as follows:

The constantly changing economic conditions are perhaps a good reason why there should be no stringent rules for determining a rate of return. As was often stated, the process is one which calls for common sense, good judgment and a proper appreciation of all surrounding factors.²⁹

29 This approach is also reflected in the decision of this Court in *Newfoundland Light & Power Co. v. Newfoundland (Public Utilities Commissioners Board)* where O'Neill, J.A., speaking for the Court in rejecting an argument that the Board of Commissioners of Public Utilities had exceeded its jurisdiction in determining a just and reasonable rate of return by not adopting a particular methodology (a "comparable earnings" test), stated:

...it is within the discretion of the Board, having heard all the evidence and giving consideration to the various tests which may be used, to make its ruling on the basis of what in the Board's opinion will give to the applicant a just and reasonable return and permit it to maintain a sound financial credit rating.³⁰

The Board therefore has a broad discretion to adopt appropriate methodologies for the calculation of allowable rates of return. So long as the methodologies chosen are not inconsistent with generally accepted sound public utility practice and the purposes and policies of the Act, and can be supported by the available opinion evidence, the determination of what constitutes a just and reasonable return in a given case will generally be within the

province of the Board and will not normally be interfered with³¹. The jurisdiction of the Board must therefore be defined to enable that process to occur.

30 Because setting the rate of return is not an exact science no matter what methodology is chosen, because the viewpoint is essentially prospective, it has been recognized that there is a "zone of reasonableness" within which a rate of return chosen by the Board should be regarded as just and reasonable. This has been expressed by the United States Supreme Court in the following language:

Statutory reasonableness is an abstract quality represented by an area rather than a pinpoint. It allows a substantial spread between what is unreasonable because too low and what is unreasonable because too high³².

This notion has also at times been recognized in Canada³³.

31 This leads to another point: because the setting of the rate of return is based on projections, one cannot be sure that the rate of return will be achieved in practice. Although the utility is "entitled" by s. 80 of the Act to have the Board determine a just and reasonable rate of return based on appropriate predictive techniques and methodologies, it is not "entitled", in the sense of being guaranteed, to that rate of return³⁴. The utility therefore takes the risk that its chosen management techniques and the future economic climate may not yield its expected success. Although some of the activities of the utility are regulated within the framework of the statutory objectives, the utility nevertheless remains subject to business risks and the effects of management decisions. To that extent, the financial risks associated with the operation of the utility, just as in the case of any private business, are to be born by the investors in the enterprise, not the consumer of the service.

32 The corollary of this position is that the utility must be accorded a degree of managerial flexibility in decision-making in order to be able to minimize the risks to which it must respond. Thus, it is often said that the powers of the Board must be regulative and corrective, but not managerial, and they do not therefore contemplate a retroactive adjustment of the actions of management.

33 This leads to the general principle of non-retroactivity which prevents a utility from recovering expenses incurred in the past out of current rates. The utility must live with the decisions it makes and the economic vicissitudes that occur.³⁵

34 By the same token, it is sometimes argued that the occurrence of the reverse situation, of the utility doing better than expected, should mean that the utility should be able to reap the advantage of better and more efficient management techniques and favourable economic conditions and keep any surplus. The concern for the consumer interest is often put forward as a brake on this idea, however. The requirement that the consumer receive power "at the lowest possible cost"³⁶ consistent with the utility's requirement of earning a just and reasonable return for its purposes means, it is often argued, that the regulator ought to have power to ensure that excessive returns are somehow accounted and compensated for.

35 Another factor that is referred to in the cases is the recognition that the capital structure of the utility will often have a bearing on the total cost of capital and this will therefore be important where the determination of the rate base depends on the total debt and equity capital requirements. DeGrandpré observes that "the reasonableness of the ratio of debt to equity is a question of fact left to the appreciation of the Board or Court"³⁷. Thus, issues such as whether

the Board can dictate to the utility a particular mix of debt and equity or, for the purpose of setting the rate of return, do so on the basis of a notional blend of capital requirements if the actual blend is not in accordance with what the Board feels is optimal to ensure a fair return as well as low rates, tolls and charges, often surface. Indeed, this issue is presented in this case.

36 Having conducted this brief survey, I will now attempt to state some general principles to be used in the interpretation and application of the local legislation:

1. The Act should be given a broad and liberal interpretation to achieve its purposes as well as the implementation of the power policy of the province;
2. The Board has a broad discretion, and hence a large jurisdiction, in its choice of the methodologies and approaches to be adopted to achieve the purposes of the legislation and to implement provincial power policy;
3. The failure to identify a specific statutory power in the Board to undertake a particular impugned action does not mean that the jurisdiction of the Board is thereby circumscribed; so long as the contemplated action can be said to be "appropriate or necessary" to carry out an identified statutory power and can be broadly said to advance the purposes and policies of the legislation, the Board will generally be regarded as having such an implied or incidental power;
4. In carrying out its functions under the Act, the Board is circumscribed by the requirement to balance the interests, as identified in the legislation, of the utility against those of the consuming public;
5. The setting of a "just and reasonable" rate of return is of fundamental importance to the utility and must always be an important focus of the Board's deliberations; however, the "entitlement" of the utility to a just and reasonable rate of return does not guarantee it that level of return. The "entitlement" is to have the Board address that issue and to make its best prospective estimate, based on its full consideration of all available evidence, for the purpose of setting rates, tolls and charges.
6. The Board has jurisdiction, which will not generally be interfered with on judicial review, to make a determination of what is a just and reasonable rate of return within a "zone of reasonableness" and in so doing is not constrained in its choice of applicable methodologies, so long as they can be rationally justified in accordance with sound utility practice and are not inconsistent with the achievement of the purposes and policies of the legislation.

37 It is now necessary to consider each of the specific questions that have been posed. In approaching them, it is worth remembering that the questions have been posed in the abstract and ask for answers to broadly-identified issues of jurisdiction. The case is not an appeal and there can be no findings of fact made by this Court in arriving at its conclusions. The information provided by the Board as to past hearings was given as background only so as to assist the Court in better understanding the scope and potential importance of the questions. While the answers given may provide guidance with respect to specific issues that have arisen in hearings in the past, they cannot be taken as an adjudication of those issues in the specific factual context in which they arose.

Question No.1

(1) Does the Board have jurisdiction pursuant to the Act to set and fix the return which a public utility may earn annually upon:

- (i) the rate base as fixed and determined by the Board for each type of service applied by the public utility; and/or
- (ii) the investment which the Board has determined has been made in the public utility by the holders of common shares.

38 It will become apparent from the ensuing discussion that a number of the questions posed on this stated case are interrelated in the sense that the answer to some of them will provide a strong impetus for a particular response in others. This is particularly evident in Question 1.

39 The answer to Question 1 in fact involves a consideration of two sub-issues. The first relates to the legal significance of a determination by the Board on a given application of the just and reasonable return to which the utility is entitled. The second sub-issue, which is affected by the decision on the first, relates to the powers of the Board to make determinations with respect to the rate of return on a utility's common equity portion of its capital structure.

(a) *The Legal Significance of a "Determination"*

40 It is to be noted that Question 1 asks whether the Board has jurisdiction to "set and fix" the utility's return whereas s-s. 80(1) of the Act speaks in terms of the utility being entitled to earn a return as "determined" by the Board. The use of this differing terminology in the question, as explained by counsel for the Board at the hearing, was designed deliberately to raise the issue as to whether the Board may, by determining the level of return, be said to be prescribing that level as an upper limit to the level of earnings to which the utility may be entitled and thereby exercise certain powers with respect to disposition of any excess that may in fact be earned. This issue becomes more focused when Question 3 is considered. The answer to that question will, to some extent, be influenced by the power which the Board can be said to have under s. 80 with respect to the setting of a level of return.

41 It is obvious, of course, that in the process of approving rates, tolls and charges under s-s. 70(1) the Board must determine what is a just and reasonable return on the utility's rate base in order to determine the level of revenue needed by the utility³⁸. This flows from the utility's "entitlement" in s-s. 80(1) to earn that level of return. The determination of a just and reasonable return on rate base is therefore an essential component in the series of calculations which the Board must undertake in the process of approving rates, tolls and charges.

42 If the determination of a just and reasonable return is merely a step in the process of approving rates, tolls and charges under s-s. 70(1), that is, if it is only an intermediate calculation necessary to arrive at the final result of consumer rate approval, the "determination" of a just and reasonable level of return will have no independent legal significance, in the sense of prescribing the limit of the utility's return for other purposes of the Board's functions.

43 On the other hand, if the determination of a just and reasonable level of return has, as it were, an independent life of its own, in the sense of it not being a mere intermediate calculation but can be "set and fixed", in the sense of being prescribed, it could, for example, be used to support an argument that a utility is not entitled to earn in excess of a just and reasonable return. As indicated, this impacts directly on Question 3. While counsel for NLP suggested that there may be other mechanisms available to deal with excess earnings (by

means of the use of a designated excess revenue reserve fund), that would not require the derivation of such a power from s. 80, counsel for the Board and the Consumer Advocate both indicated that they were concerned about the legal basis for the derivation of the operation of an excess revenue account from other parts of the legislation, such as the administrative and supervisory power of the Board to regulate a utility's accounts. It is appropriate therefore that this matter be addressed.

44 The issue boils down to this: If the power to "determine" the return encompasses the notion of fixing, in the sense of prescribing the limits of entitlement, one would be able to derive from s-s. 80(1) a power in the Board to say to the utility that it may earn that level of return and no more. If not, the power to determine would simply be part of a calculation that leads to consumer rate setting with no independent existence or significance for regulatory practice generally.

45 *Black's Law Dictionary*³⁹ explains "determine" in part as follows:

To bring to a conclusion, to settle by authoritative sentence, to decide.... To adjudicate on an issue presented...

To estimate...

To decide, and analogous to "adopt" or "accept"...

46 The *Concise Oxford Dictionary*⁴⁰ defines the word in pertinent part as:

1. v.t. & i. settle, decide, (dispute, person's fate ...), come to a conclusion, give decision, be the decisive factor in regard to ...; ascertain precisely, fix;...

3. v.t. & i. (esp. Law) bring or come to an end.

4. v.t. limit in scope, define; fix (date) beforehand.

47 For what limited value these definitions can have in this context, it would appear that the primary meaning of the word determine, with its emphasis on coming to a final decision and amounting to a decisive factor as well as the notion of ascertaining something precisely and "fixing", encompasses something more than a mere calculation in a broader process.

48 Having said that, it is to be noted that s-s. 80(1) is structured in such a way that its emphasis is on the entitlement of the utility to a just and reasonable return, as determined by the Board, rather than involving the express conferral on the Board of a power to prescribe the level of return. The structure of the subsection could be said to be directed towards establishing a minimum base line of entitlement without saying anything expressly about the power of the Board to create a cap. To put the matter beyond doubt, the insertion of the words "and no more" after the language entitling the utility to a just and reasonable return would certainly have clearly indicated a prescriptive power in the Board, if that had been intended. Furthermore, although the return is referred to as being "determined" by the Board, the subsection goes on to indicate that the return so determined is applied to the rate base "as fixed and determined" by the Board. On a strict linguistic analysis alone, the use of the word "fixed" in conjunction with "determined" in one place would imply that its absence in the other was deliberate.

49 Notwithstanding these matters, I am not satisfied that a linguistic analysis of the

subsection can provide the answer in this case. Even a cursory perusal of the remaining provisions of the Act indicates that there is no uniform terminology chosen to describe the various decision-making functions in which the Board may engage. For example, the Act provides that the Board may "inquire into and determine"⁴¹ the valuation of a utility's assets and may "determine"⁴² those values in accordance with a number of stated rules. It may "ascertain and determine"⁴³ what are proper and adequate rates of depreciation of classes of utility property. Its role with respect to the utility's rates, tolls and charges is one of "approval"⁴⁴. Indeed, if there is any decision of the Board which is contemplated as having operative legal effect and to amount to a "fixing" of the utility's rates, tolls and charges from which the utility may not deviate, it is the "approval" contemplated in this regard; yet the word "fix" does not appear. In another context, the Board may "fix and determine"⁴⁵ a separate rate base for each kind of service supplied by a utility; yet when describing what is to be included in the calculation of rate base, the reference to "determine" is dropped and it is simply described as "fixing a rate base"⁴⁶. Finally, the term "approval" surfaces again in the context of the power of the Board to authorize new stock issues of the utility⁴⁷.

50 To resolve this conundrum, resulting from inconsistency in terminology, resort must be had to the purposes of and policies underlying the legislation as mandated in s-s. 118 of the Act as well as s. 4 of the *EPC Act*. As indicated previously,⁴⁸ the Board is required, in carrying out its functions under the Act, to balance the interests, as identified in the legislation, of the utility against those of the consuming public. The notion of a "just and reasonable return" in s-s. 80(1) is the benchmark against which fairness to the utility and the consumer is to be measured. It is pivotal in the balancing exercise. The interests of the consuming public in obtaining power at the lowest possible cost consistent with reliable service⁴⁹ must accommodate the utility's interest in being afforded the opportunity to earn a fair rate of return for its efforts. In the methodology adopted by the Board, the approval of appropriate rates, tolls and charges necessarily factors the just and reasonable return, and only that level of return, into that calculation. Otherwise, the interests of the consumer would not be protected in obtaining power at the lowest possible cost. It is therefore inherent in the process that in determining a just and reasonable return for the utility, the utility should have the opportunity of earning that return but, other things being equal, should not expect to earn any more. Accordingly, determining the just and reasonable return necessarily involving prescribing the return and in that sense can be said to amount to "setting and fixing" the rate of return.

51 It follows from this that the use of the word "determine" can, in the context of the use of that and other terminology in the Act, encompass something more than the notion of mere calculation and extends to the idea of prescribing, or fixing, a level of return in the nature of a legal decision which can bind and have effect on the utility for other purposes related to the Act.

(b) The Power to Set and Fix the Level of Return on Common Equity

52 In order to determine the just and reasonable return on rate base to which the utility is entitled by s-s. 80(1), the Board must first determine the cost to the utility of the various components of its sources of funds. The costs associated with long term debt and preference shares are generally static over the period covered by a particular rate hearing. Accordingly, they are often described as "embedded costs". The rate of return necessary to be earned on rate base to cover the cost of debt and preference shares can therefore usually be easily determined based on the interest rates or dividend rates applicable to such instruments. In the case of common equity, however, the cost to the utility of this source of funds depends upon a number

of factors, especially current market conditions which, by nature, can be volatile.

53 At a rate hearing, therefore, the Board usually faces a greater difficulty in determining the component of rate of return on common equity than on the other sources of funds because their embedded costs are usually well defined.

54 Since the rate base is financed by a combination of debt, preference shares and common equity, the rate of return on which is different for each component, the overall rate of return on rate base is calculated as a weighted average of the rates of return on the various individual components.⁵⁰

55 As a generalization, it is sometimes said that the cost of common equity is often higher than that of debt⁵¹. The rate of return on common equity may therefore be expressed as a percentage which is higher than the overall rate of return on the full rate base because the higher equity cost will be weighted downwards by the rates for the other components.

56 The issue raised by Question 1(ii) is whether the Board may set and fix the rate of return on common equity, as a component of the overall rate of return on rate base in a manner such that it can be used as an independent benchmark for other purposes in the same way as the overall determination of return on rate base can be. Alternatively, is the "determination" of the rate of return on common equity to be treated in the narrower sense of a mere calculation leading to the final determination of overall return?

57 Subsection 80(1) makes no reference at all to determining, let alone setting and fixing, the rate of return on common equity. The calculation of an appropriate rate of return on common equity is truly a mere component in the overall process of determining a just and reasonable return on rate base. Furthermore, there is nothing in the purpose of the Act or the policies which the Board is to implement which would lead inexorably to the conclusion that the Board ought to have the power to prescribe a rate of return on common equity as a component of an overall return or rate base, any more than it ought to have a power to prescribe a return on any other component.

58 The Consumer Advocate submitted that inasmuch as s-s. 80(1), by its express language, contemplates that the only measure of what NLP may earn annually is to be determined by a just and reasonable return on rate base, to allow the utility to measure what it may earn annually based upon a different factor, such as a rate of return on common equity which could very well be higher than the overall rate of return on rate base and might lead to a higher overall return that could be said to be justified, would be to allow the utility to earn more than that to which it is statutorily entitled.

59 It is to be noted, however, that in its previous orders⁵² the Board has not sought to determine the level of return on the basis of anything other than a rate of return on rate base. For example, in the 1991 Order, the Board ordered:

A just and reasonable return for [NLP] is determined to be between 10.96% and 11.19% on its average rate base for 1992, which will provide an opportunity to earn a rate of return on common equity between the range of 13.00% to 13.50%.

[Emphasis added]

The reference to the range of rates of return on common equity appears to have been inserted

more as information in support of a rationale for the determination of the overall return on rate base, since the Board states that the determination of the return on rate base "will provide" an "opportunity" to earn a rate of return on common equity. Similarly, the 1996-97 Order simply described the rate of return on rate base as being "derived from" a given range of return on common equity. This is the correct approach.

60 As to whether the Board may make other decisions, for example relating to the manner in which an excess revenue fund should be maintained, by reference to the contemplated rate of return on common equity, is a separate matter which should be dealt with in that context.

61 I therefore conclude that the power to "determine" a just and reasonable return on rate base, as contained in s-s. 80(1) does not include within it a power to "set and fix a rate of return on common equity" but it obviously does contemplate that the analysis of appropriate rates of return on common equity will be undertaken and factored into the conclusion as to what is a just and reasonable return on rate base.

62 Accordingly, giving the words "set and fix" in the question a meaning which implies the notion of prescribing, I would answer Question 1 as follows:

As to:

1. (i) - Yes

1. (ii) - No

Question No. 2

(2) Does the Board have jurisdiction to set the rates of return referred to in Question (1) as a range of permissible rates of return.

63 In light of my answer to the second part of Question 1, it is only necessary to address Question 2 in the context of whether the Board has jurisdiction to set the rate of return on rate base as a "range of permissible rates of return".

64 It has already been stressed that the determination of a just and reasonable return on rate base involves a consideration of the differing costs of the components of the utility's capital structure and that in arriving at the overall rate of return, it is permissible for the Board to use a weighted average of the rates associated with each individual component. It has also been pointed out that the cost of common equity is often difficult to estimate with precision. The best that experts are often able to do is estimate rates within a reasonable range. Inasmuch as the cost of common equity is weighted into the overall rate of return on rate base, that range would also have to be reflected in the ultimate rate of return on rate base, as determined by the Board.

65 In *Edmonton (City) v. Northwestern Utilities Ltd.*⁵³ Smith, J. emphasized:

The question of a fair rate of return on a risky investment is largely a matter of opinion, and is hardly capable of being reduced to certainty by evidence, and appears to be one of the things entrusted by the statute to the judgment of the Board.

66 It is evident, as *Newfoundland Light & Power Co. v. Newfoundland (Public Utilities Commissioners Board)*⁵⁴ demonstrates, that the determination of a just and reasonable return

is an area in which the Board is accorded a broad discretion as to the methodology to be adopted. Obviously, the striking of a balance between the interests of the utility and the consumer, whilst at the same time attempting to comply with the Board's obligation to approve rates which will produce a fair return to the utility, cannot be done with the precision of a simple mathematical calculation. Realistically, the balance can only be struck within a reasonable range. It is for that reason that the courts have, on subsequent appeal or applications for judicial review, generally deferred to the determinations of boards in this regard provided the determination is not arbitrary or capricious and can be said to fall within a reasonable range.⁵⁵ As indicated in the earlier discussion⁵⁶, in the United States the notion of a "zone of reasonableness" as an "area rather than a pinpoint" has been recognized. Whilst this notion has been enunciated as a justification for deference to Board decisions in the context of challenges on appeal or judicial review, it nevertheless indicates a recognition of what is inherent in the rate setting process.

67 I see no reason, therefore, why, instead of attempting to justify a particular decision ex post facto by an argument that a particular rate falls within a zone of reasonableness, the Board could not expressly indicate what it believes that area of reasonableness to be by expressing what it believes to be a just and reasonable return in terms of a range of rates of return. This indeed is a practice that has been adopted elsewhere⁵⁷

68 It is to be noted that s-s. 80(1) does not speak in terms of a "rate" or "rates" of return; rather, it speaks of a just and reasonable "return". It is not limited by its language to the pinpointing of a particular rate of return. I conclude that a liberal construction of the word "return" in the context of s-s. 80(1) leads to the conclusion that it can include a range of rates of return.

69 Of course, in applying the rate of return to the rate base, as ascertained by the Board, a single figure will have to be used since rates, tolls and charges are expressed as finite numbers. The Board in practice has chosen the mid-point of its stated range of rates of return as the figure to be used for this purpose. This is a perfectly acceptable practice for the purpose of setting the rates. By expressing a range, however, the Board leaves open to the utility the flexibility of earning more than the mid-point up to the maximum end of the range so as, in effect, to give the benefit of the doubt to the utility that the expert evidence favouring the upper end of the range turns out to be the more accurate and to provide an incentive to the utility towards managerial efficiency.

70 The Consumer Advocate expressed concern in argument that the use of the word "permissible" in Question 2, as qualifying the phrase "rates of return", might be misleading. As I understand the argument, the concern is that the adoption of a range approach might lead to the conclusion that the "entitlement" of the utility to a just and reasonable return would be regarded as an entitlement, or guarantee, of earning up to the maximum end of the range. While the utility, if it earned as much as the maximum would be entitled to keep that amount of earnings, it is not, for reasons already given, guaranteed that level of return if it is not in fact successful in earning them. The Board is under no obligation to adjust future rates or to take other steps to make up any such shortfall. Any rate of return earned within the range would be regarded as permissible and it is only when a rate of return exceeds the upper limit of the range that it would be regarded by the Board as subject to any excess revenue regulation.

71 Accordingly, recognizing that, on my analysis, Question 2 only relates to whether the Board has jurisdiction to set rates of return as a range in relation to its determination of a just and reasonable return on rate base, the answer I would give to Question No. 2 is: "Yes".

Question Nos. 3 and 4

(3) Should a public utility earn annually a rate of return which is in excess of the rate of return determined by the Board to be just and reasonable, either on:

(i) the base rate as fixed and determined by the Board for each type of service applied by the public utility; or

(ii) the investment, which the Board has determined, has been made in the public utility by holders of common shares,

does the Board have jurisdiction to:

(i) require the public utility to use the excess earnings to reduce revenue requirements for the succeeding year; or

(ii) require the public utility to place the excess earnings in a reserve fund for the purpose of adjusting rates, tolls and charges of the public utility at a future date, or

(iii) require the public utility to rebate the excess earnings to customers of the public utility.

(4) Does the Board have jurisdiction to order that the rates, tolls and charges of a public utility shall be approved taking into account earnings in excess of a just and reasonable return upon,

(i) the rate base as fixed and determined by the Board for each type of service applied by the public utility, or

(ii) the investment, which the Board has determined, has been made in the public utility by the holders of common shares,

in prior years.

72 The analysis leading to the answers to Questions 3 and 4 can be considered together since they both address the same general theme: the scope of the Board's powers to deal with situations where a utility in fact earns a rate of return that is greater than that determined to be a just and reasonable return.

73 It was suggested by counsel for NLP that the concept of "excess earnings" does not exist under the Act other than by reference to a definition of what is to be deposited into a reserve fund which the utility may be ordered to create and maintain pursuant to s-s. 69(3) of the Act. This submission follows from the position taken by NLP that the Board has no power under s-s. 80(1) to "set and fix", in the sense of prescribing, a maximum rate of return. NLP had submitted that the Board's power to deal with excess earnings comes solely from its statutory powers to prescribe the form of accounts to be maintained by the utility⁵⁸ and to create a reserve fund "for a purpose which the Board thinks appropriate"⁵⁹ which could include the purpose of dealing with excess returns. This argument has already been rejected in the analysis relating to Question 1. It follows, therefore, that the issue of excess earnings may present itself for consideration by the Board in circumstances even where a reserve account has not been ordered to be set up. For the purpose of regulation by the Board, the concept of excess earnings is derived from the process of prescribing a just and reasonable return on rate base and not by the decision to require the creation of a reserve account. The question to be considered is what enforcement mechanisms the Board may use to deal with excess earnings so identified.

74 If, as determined in the answer to Question 1, the Board has jurisdiction flowing from s-s. 80(1) to prescribe the maximum rate of return which a utility may earn in a given year, it is a necessary consequence of such a determination that revenue earned in excess of the maximum of the prescribed range of return is excess revenue to which, by definition, the utility will not be entitled. The Board accordingly must have jurisdiction to regulate how that excess revenue is to be dealt with.

75 Question 3 requires the Court to consider the range of enforcement mechanisms which the Board may employ to ensure that the utility does not benefit from any windfall profits resulting from earnings in excess of the just and reasonable return to which it is entitled. Three scenarios are proposed:

- (1) use excess earnings to reduce revenue requirements for the succeeding year ("Revenue Reduction Approach");
- (2) place the excess earnings in a reserve fund to enable an adjustment of rates, tolls and charges at a future date ("Reserve Fund Approach");
- (3) require a rebate of excess earnings to consumers ("Rebate Approach").

Question 4 is really a subset of the Revenue Reduction Approach. In one sense it really asks the same question as in Question 3(i) but does not limit the process to the application of excess earnings to only the year next succeeding the year in which the excess earnings have been achieved. It appears to ask the Court to address the question of whether, in the absence of the existence of a reserve account, the Board may, upon being made aware of excess earnings in prior years, reach back into those prior years and take account of those excess earnings by using them to reduce rates, tolls and charges in subsequent periods below what would otherwise be indicated.

76 In approaching these questions, it is important to bear in mind the nature of the rate setting process and the general principles which are recognized as being applicable to govern the manner in which that process is carried out.

77 The process of rate setting is generally prospective by nature. Although the Board must set rates for the future, it only has data from past experience, the evidence from utility officials as to planned changes in operations and the opinions of experts as to future economic trends as a guide to what the revenue requirements of the utility will likely be. It is, therefore, necessarily speculative. In developing the utility's requirements, the Board focuses on a "test year" as the basis for its estimates and adjustments. Traditionally, in North America the test year was chosen as the latest 12 month period for which complete data were available.⁶⁰ More recently, due largely to inflation, boards adopted a forward-looking test year which in effect amounts to a forecast of what expenses and costs, and hence revenue requirements, will be. This has been the practice of the Board⁶¹ and is supported by the Act⁶² and the *EPC Act*⁶³. Past experience of course remains relevant, however, insofar as it gives insight into the possibility of forecasting error.⁶⁴

78 Because the process is prospective, there is a good possibility that all of the assumptions will not be achieved in practice. The actual rate of return may therefore differ from the rate, or range of rates, prescribed at a previous hearing. On paper, this difference may appear to redound to the benefit or detriment of the utility depending upon whether the actual rate is greater or less than the rate or range prescribed.

79 When, as a result of actual experience, it appears that the actual rate of return was greater than the rate prescribed for the same period, it becomes necessary to address what the Board can do, if anything, to ensure that the earnings in excess of the prescribed level, (which by definition will be regarded as greater than a just and reasonable return on the rate base), are not allowed to remain with the utility or its investors. In the *Bell Rebate* case⁶⁵, Gonthier, J. observed that differences between projected and actual rates "call for a high level of flexibility in the exercise of the [Board's] regulatory duties".

80 Those opposing a broad jurisdiction on the part of the Board to define and deal with excess revenue couch the objection, at least in part, in terms of a violation of the non-retroactivity principle.⁶⁶ In its narrow sense, it is a principle of benefit to consumers, that "today's rate payers should pay the cost of today's services and not the cost of past or future services"⁶⁷. More broadly, it also yields a presumption (which is of benefit to the utility as well), flowing from the idea that the Board acts prospectively in setting rates, that the Board cannot or, even if it has jurisdiction, should not as a general rule, make orders that have the retroactive effect of disturbing existing rights already enjoyed by the utility. In practical terms, it leads to the argument that where rates, tolls and charges have been approved by the Board as being permissible for the utility to charge, the Board cannot or should not make a subsequent order that has the direct or indirect effect of reducing or otherwise changing those rates. In other words, changing past transactions or attaching new consequences to past transactions would be prohibited.

81 As Penning points out⁶⁸ the retroactivity rule has its genesis in general rules of statutory interpretation that guard against interpreting a statutory provision as having a retrospective operation unless it is clear that such an effect was intended. It is not an immutable rule but can give way to contrary legislative intention.

82 Doctrinally, in the context of utility rate regulation, the retroactivity principle is described by Penning in this way:

...the rule is concerned more with issues of fairness, both to customers and to utility shareholders. The customer-related fairness issue is often referred to as the "inter-generational equity" problem, which, broadly stated, means that today's customers ought not to be held responsible for expenses associated with services provided to yesterday's customers. The fairness concern in terms of utility shareholders arises because to attract and maintain reasonably-priced equity investment in a utility, shareholders require some certainty that matters already dealt with by the regulator have some degree of finality associated with them.⁶⁹

83 It was argued that one of the questions that is theoretically presented in this case is the degree to which the Board is authorized to trespass on the no-retroactivity principle in fulfilment of its legislative powers, specifically, to enforce a prescription that a utility may earn a just and reasonable return and no more.

84 In reality, however, in light of the prospective nature of this Opinion, the non-retroactivity principle is not, in practical terms engaged by Question No. 3. The answers to previous questions have already established that the concept of excess revenue is to be determined by reference to the meaning of a "just and reasonable return" as that phrase is understood in ss. 80 (1); and not by the definition used to operate an excess revenue account. All participants in the regulatory process must therefore take account of that concept and conduct their activities accordingly. The "rules of the game" are known.

85 Section 59 of the Act requires the utility, unless otherwise ordered by the Board, to close

its accounts at the end of each calendar year and to file with the Board its balance sheet, together with such other information as may be required by the Board, before April 2nd of the following year. Effectively, therefore, within 3 months after the utility's year end, both the utility and the Board will know the financial position of the company for the previous year and from that, as well as any other information which the Board may require, a determination of the actual level of return earned by the utility in the previous year can be made. Applying the known definition of excess revenue, by reference to the upper end of the range of return on rate base, as determined by the Board's prior orders under ss. 80(1), it can be determined whether there has been any excess revenue earned. There is no revisiting and revision of a prior order respecting the allowable return on rate base. The examination of actual results in the context of a comparison with the previously prescribed rate merely leads to enforcement of the original order. Any decision by the Board with respect to disposition of excess revenue will therefore not retroactively interfere with past revenues which the utility assumes belong to it and which may be disbursed to shareholders or otherwise spent. Given the concept of excess revenue, as explained in this option, the utility knows in advance that it is not entitled to excess revenue so defined and may institute whatever accounting practices are necessary to segregate and deal with such revenues pending direction from the Board.

86 The situation is conceptually no different from the concept behind an excess revenue account set up under ss. 69(3), which the utility accepts as a legitimate way of dealing with such revenue. Just as in the case of an excess revenue account, the definition of excess revenue is known in advance and the utility can account for such revenue accordingly.

87 The scenario contemplated by Questions 3 & 4 is unlike the situation which arises where an interim order setting rates, tolls and charges is subsequently superseded by a final order, resulting in excess revenue being earned in the intervening period because the rates, tolls and charges charged in that period pursuant to the interim order were higher than those which were ultimately found to be justified in the final order. In that situation, if the final order is treated as being operative as and from the date of the interim order that was superseded, the final order will, indeed, have a retroactive effect. In the context of the Newfoundland legislation, that situation is specifically contemplated and authorized by ss. 75(3) of the Act.

88 In the situation presently under consideration, however, there is no subsequent order of the Board which retroactively changes previously-approved rates, tolls or charges or revises the prescribed level of return to which the utility is entitled. All that occurs is the subsequent examination of actual results and a determination of whether excess revenue was in fact earned by applying a pre-existing standard derived from a previous Board order made under ss. 80(1).

89 I recognize that, to the extent that the utility in the past may have been operating under the impression, perhaps engendered by positions taken by the Board, that excess revenue need only be calculated by reference to the excess over the rate of return on common equity as defined for the purpose of operating the existing excess revenue account, it may consider that if the concept of excess earnings as discussed in this Opinion is applied at this stage to those previous years, there may effectively be a change in the "rules of the game". In that practical sense, there would be a "retroactive" readjustment.

90 The Court is not being asked, however, to determine the position of the utility specifically in relation to the years 1991 through 1996 and to determine the entitlement of the utility to excess revenues as calculated by reference to the current definition. The degree of NLP's misapprehension, if any, the actions of the Board in dealing with the excess revenue issue in the past, the degree to which NLP may have acted to its prejudice, and the degree to which the

utility may nevertheless be required to disgorge excess revenues in previous years in accordance with presently understood concepts raise complex issues of mistake of law in the law of restitution and the defence of change of position which require for their resolution a detailed factual base. It would be inappropriate to attempt to answer such questions in this Opinion.

91 The issue, therefore, is not whether the Board may revise the definition of excess revenue and then apply the revised definition to the results of previous years. That might well engage the principle of non-retroactivity. Here, assuming (without deciding) there was a misapprehension in the past as to how excess revenue should be calculated, the "change" in calculation method comes about, not because of a retroactive change in the rule by the Board but by a (perhaps) unanticipated declaration and clarification by the Court of what the law is and how it is or should be applied.

92 I turn now to the determination of the powers of the Board to deal with excess revenue once it has been determined to exist.

93 The only express provisions of the Act dealing with excess revenue are s-s. 69(4) which provides a power to require a utility to refrain from distributing extra revenue as dividends until further order, and s-s. 75(3) which enables the Board to order that excess revenue earned as a result of an "interim order" made under s-s. 75(1) and not confirmed by final order be either refunded to customers or placed in a reserve account for an approved purpose. Does the fact that similar powers are not expressed in respect of "final" orders mean that they were not intended to be available?

94 I do not believe so. The power to deal with excess revenue is inherent in the nature of the regulatory scheme the Board is required to administer. The starting point is the power, found to exist in the answer to Question 1, that the Board may prescribe a rate of return under s-s. 80 (1) which carries with it the necessary corollary that the utility is only entitled to earn that level of return, as determined by the Board to be just and reasonable. It follows that unless the Board is to be a "toothless tiger" it must be accorded the means by which revenues earned in excess of the prescribed level of return are used in furtherance of the objectives and policies of the legislation and not simply for the benefit of the utility's investors. Such policies as the maintenance of a sound credit rating by the utility⁷⁰, the efficient production, transmission and distribution of power⁷¹, the delivery of power at the lowest possible cost⁷² and the provision of reliable service⁷³ are all candidates for the use of the excess. It does not follow, as the Consumer Advocate argued, that any dealing with the excess should involve only a return or rebate to consumers so as to ensure that the goal of delivery of low cost power is vindicated. While the maintenance of low rates is an important objective of the legislation, it is not the only one. As emphasized earlier,⁷⁴ the Board is always engaged in a balancing exercise between the interests of the consumer and the interests of the utility. It is not correct to say that any revenues earned in excess of a just and reasonable return belong to the consumer. Just as the utility is not "entitled" to earn and retain revenues in excess of such a level of return, so also the consumer is not absolutely "entitled" to the excess. The Board, having identified that an excess exists, must deal with it in furtherance of the objectives of the legislation.

95 The means whereby the excess is dealt with should not be, unless expressly limited by the legislation, rigidly prescribed provided the means chosen comport with the objectives and policies of the legislation. It is worth repeating Gonthier, J.'s observation in the *Bell Rebate* case that the fact that the differences between projected and actual rates of return are common calls for "a high level of flexibility in the exercise of the [Board's] regulatory duties".⁷⁵

96 Counsel for NLP argued that the only power of the Board to deal with excess revenue, aside from interim order situations, flows from its power in s. 58 to prescribe the form of books and accounts to be kept by the utility and that, if it ordered, pursuant to s-s. 69(3), the creation of a reserve fund "for a purpose which the Board thinks appropriate", it could stipulate that the accounts should be kept in such a way as to require excess revenues to be accounted for in such a reserve account. I do not find the jurisdiction to deal with excess revenue in the power to prescribe the utility's accounts. That is only a procedural means of exercising powers, the jurisdiction for which must be found elsewhere. Whilst the creation, pursuant to s-s. 69(3), of a reserve fund to deal with excess revenues could be said to be "a purpose which the Board thinks appropriate" (provided that purpose is consistent with the powers otherwise conferred on the Board), there is nothing in the language of s-s. 69(3) which expressly makes it applicable to an excess revenue situation and there is certainly nothing there which would purport to make the use of a reserve fund for the purpose of dealing with excess revenue as the only mechanism which would be at the Board's disposal to deal with this issue.

97 I conclude that, bearing in mind the approach to interpretation mandated by s-s. 118(2) of the *Act*, the Board must of necessity have broad powers to deal with revenue earned by a utility in excess of the prescribed rate of return. Inasmuch as the ascertainment of the existence of excess revenue can only be made following a subsequent review, any order dealing with excess revenue will of necessity have certain retrospective elements about it. But that is not the same as saying that an order dealing with excess revenue ascertained by application of a pre-existing concept of what constitutes excess revenue is a retroactive order. It was argued by NLP that the setting up of a reserve account would be the only method that would not involve any trespass on the principle of non-retroactivity because the utility would know in advance that it had to set up its reserve account and could therefore provide for it without running the risk of spending or distributing excess revenues in ignorance of the fact that they would have to be held accountable for them.

98 For reasons already given, this argument is unconvincing. By virtue of the answers given to Question 1, the utility knows that it is only entitled to earn a just and reasonable rate of return pursuant to any order made by the Board to that effect under s-s. 80(1). It can monitor its financial progress and can organize its accounts in such a way as to account for excess revenue so as to prevent the possibility of it being disposed of before any subsequent order dealing with the excess may be made. The utility does not need an express order of the Board requiring it, as a general rule, to set up a reserve account for this purpose. Nevertheless, the use of a reserve account is a convenient way of doing this. It may well be, however, that the Board may, through other directions with respect to the manner of keeping accounts, develop other accounting procedures that will enable the utility to identify excess returns and to segregate them for other use.

99 A reserve fund could be ordered by the Board to be used in the future to improve service, or to keep rates low or for some other purpose that is consistent with the objectives and policies of the legislation. Whether the advancement of these policies is done formally through the use of a reserve fund or through some other mechanism such as an order setting further rates, tolls and charges taking the prior excess revenue into account, the utility should not be prejudiced, in light of the fact that it knows that it is not entitled to earn a return in excess of a just and reasonable return.

100 A rebate to consumers would also be permissible since it would have the indirect effect of ex post facto keeping the rates low. While it is true that any rebate would not, because of the fluid nature of the customer base, result in a return to exactly the same body of consumers

who had paid the original rates, this is not an insuperable objection to using this type of mechanism. Penning⁷⁶ observes:

As a practical matter, however, at least some of this concern appears misplaced. By far the majority of today's rate payers for the majority of regulated public service utilities were also yesterday's rate payers - especially since the time frames at issue are typically not more than a year or two. So the unfairness argument about cost allocation loses some of its force. Furthermore, to the extent it is still present, it can be dealt with through the choice of mechanism design - so instead of adjusting all rates, through either surcharges or refunds, the individual customers who met the timing criteria would receive an adjustment to their bill.

101 This recognition was echoed by Gonthier, J. in the *Bell Rebate* case⁷⁷ as follows:

...it is true that the one time credit ordered by the appellant will not necessarily benefit the customers who are actually billed excessive rates. However, once it is found that the appellant does have the power to make a remedial order, the nature and extent of this order remain within its jurisdiction in the absence of any specific statutory provision on this issue. The appellant admits that the use of a one time credit is not the perfect way of reimbursing excess revenues. However, in view of the cost and the complexity of finding who actually paid excessive rates, where these persons reside and of quantifying the amount of excessive payments made by each, and having regard to the appellant's broad jurisdiction in weighing the many factors involved in apportioning respondent's revenue requirement among its several classes of customers to determine just and reasonable rates, the appellant's decision was imminently reasonable...

102 Accordingly, I conclude that each of the Revenue Reduction, Reserve Fund and Rebate approaches to dealing with excess returns are within the jurisdiction of the Board and could, in particular circumstances, all constitute reasonable responses to a finding that the utility has earned in excess of a just and reasonable return.

103 I would also add that the setting up of a reserve fund in a given case does not exhaust the ways in which the Board may deal with excess revenue. The methodologies proposed are not mutually exclusive. The Board has jurisdiction to deal with all revenue in excess of a just and reasonable return on rate base using one, or a judiciously blended combination, of the methodologies identified.

104 Having said that, it must be emphasized that just because the Board has the jurisdiction to use these approaches, the particular circumstances may well dictate that one or more of them may be inappropriate in a given case. For example, the ordering of a rebate to consumers of the total amount of an excess return might not, in the light of the general financial condition of the utility, be appropriate when measured against such legislative objectives as the maintenance of the utility's sound credit rating. It might be appropriate, when all of the interests are properly balanced, for the Board, for example, to order that only the excess over a stipulated rate of return on equity, or some other measure, be refunded or otherwise dealt with. These are all matters to be considered by the Board in a given case.

105 The answers to Questions 3 and 4 can be given as follows:

As to: 3(i) - Yes

3(ii) - Yes

3(iii) - Yes

106 The answer to Question 4 is also "yes" on the assumption that what is being asked is not whether the Board may retroactively revise a previous order but merely whether, applying a

defined and understood concept of excess revenue, (ie. an excess of a just and reasonable return on rate base) the excess so determined to have existed in prior years may then be taken account of and applied in setting future rates, tolls and charges.

Question 5

Does the fact that the Board has advised the public utility that it is permitted to retain earnings in excess of the rate of return determined by the Board to be a just and reasonable return, upon the rate base as fixed and determined by the Board for each type of service supplied by the public utility, but not in excess of the return determined by the Board to be a just and reasonable return upon the investment which the Board has determined has been made in the public utility by the holders of common shares, affect the jurisdiction of the Board to approve rates, tolls and charges on the basis queried in Question (4).

107 In order to understand the import of this question, it is necessary to review the approach taken by the Board to the definition of excess earnings in past years.

108 In correspondence passing between NLP, Newfoundland Telephone Company Limited (which at that time was regulated by the Board) and the Board during the late 1980's, there was considerable discussion as to the manner of defining "excess revenue" for the purpose of the operation of the reserve account which the Board had required the utilities to maintain for that purpose. As a result of these discussions, the Board approved a change in the utilities' systems of accounts to recognize a new definition of excess earnings. As indicated, this was accomplished by defining the excess revenue account in the utilities' system of accounts as follows:

This account shall be credited with any revenue in excess of the maximum return on common equity determined by the Board at the previous rate hearing to be refunded to customers or used for such purposes as the Board may order.

109 By the operation of this definition, the situation could occur whereby the utility might earn a rate of return on rate base in excess of the maximum range of returns determined by the Board pursuant to s-s. 80(1) but could nevertheless be within the range of return on common equity used by the Board for the purpose of determining a just and reasonable return on rate base under s-s. 80(1). If that eventuality occurred, there would be no requirement on the utility to pay anything into the excess revenue account; yet, the result would be that the utility would have earned more than a just and reasonable return on rate base. In light of the answer given to Question 1, the benchmark for determining excess revenue is the range of return on rate base determined by the Board to be just and reasonable. Does the Board have jurisdiction to deal with this money as excess earnings in light of the fact that it has defined excess earnings for the purposes of the utility's accounting by reference to the maximum return on common equity?

110 Question 5, we were told, attempts to address this issue. As phrased, however, the question merely asks whether the fact that the Board has "advised" (presumably, in the form of its order changing the definition of excess revenue for the purposes of the establishment of the excess revenue account) the utility of this new definition of excess revenue "affect" the jurisdiction of the Board to approve rates, tolls and charges. The short answer to this question, strictly construed, is "no". The Board cannot limit its jurisdiction, in the sense of its legal power, by determinations made in exercise of its powers. It either has the jurisdiction or it does not. Whether it chooses to exercise the jurisdiction is another matter.

111 As a result of the discussions at the hearing, however, it is apparent that there is a more fundamental issue at stake. The assumption appears to be that if the Board chooses to define

excess revenue for the purpose of establishment of the excess revenue account in terms of revenue earned in excess of the maximum return on common equity, it is in effect saying that revenue earned below that maximum but which happens to be in excess of the just and reasonable return on rate base as determined by the Board under s-s. 80(1) is necessarily money which the utility can keep. This position is obvious from the arguments made by counsel for NLP since his position has been throughout that excess revenue has no meaning other than by reference to the definition used for the purposes of the excess revenue account. As indicated previously,⁷⁸ this is not a correct interpretation of the situation. The same assumption is also apparent from the position taken by the Consumer Advocate who argues that the decision of the Board to define excess revenue for the purpose of the excess revenue account in terms of exceeding the return on common equity, as opposed to rate base is ultra vires the Board because the Board must determine excess revenue by reference to revenues which are earned in excess of a just and reasonable return on rate base.

112 The assumption that the definition of excess revenue for the purpose of the operation of the reserve account is equivalent to the concept of excess revenue flowing from earnings in excess of a just and reasonable return on rate base as prescribed under s-s. 80(1), is false. I agree with the Consumer Advocate, for reasons already given⁷⁹, that any revenues earned in excess of the maximum range of a just and reasonable return on rate base are revenues to which the utility is not automatically entitled. It does not follow, however, that for the purposes of regulating the accounts of the utility, the Board is prevented from requiring payment into an excess revenue account on a different basis (provided it does not deprive the utility of the level of return on rate base to which it has been determined to be entitled). The Board can and should deal with all revenue earned in excess of a just and reasonable return on rate base; however, it does not have to require that all of it be paid into an excess revenue account.

113 As indicated in the answer to Question 3 and 4, the Board has a broad jurisdiction as to how to deal with the excess and it may well be that, in the circumstances obtaining, it will determine that only a portion (i.e. that portion above the maximum return on common equity) should be paid into a reserve account. It might determine that the rest should be rebated to consumers or used by the utility in furtherance of the objective of ensuring that it maintains a sound credit rating in the financial markets of the world. In short, there is nothing wrong in principle with the Board defining excess revenue for the purposes of a reserve account differently from the notion of excess revenue as determined by a comparison with a just and reasonable return on rate base as determined by s-s. 80(1). In so doing, however, the Board ought not to assume that any additional excess revenue ought necessarily to be returned to the utility to be used as it sees fit. The Board has jurisdiction, and in exercise of its legislative mandate it ought to exercise that jurisdiction, to make a determination as to how that remaining excess revenue, if any, should be dealt with consistent with the objectives and policies of the legislation.

114 Accordingly, the technical answer to Question 5 is "no" but so as to limit any confusion over the implications of the wording of the question, I would add that the Board has jurisdiction to define excess revenue for the purposes of maintenance of a reserve account by reference to the maximum level of return on common equity (or any other appropriate measure for that matter) but that does not mean that the Board may for all purposes define the level of excess revenue to which the utility is not entitled by reference to that measure; rather, the Board must determine, on the specific circumstances of the case, what is to be done with respect to any excess revenue measured against a just and reasonable return on rate base. If all or a portion of the excess revenue, measured against the return on rate base, is not ordered to

be paid into a reserve account, it must nevertheless be dealt with in some other manner consistent with the objects and policies of the legislation. It should not be simply assumed that such excess revenue if not required to be paid into a reserve account belongs to the utility to be dealt with as it sees fit.

Question 6

Does the Board have jurisdiction to order the rates, tolls and charges of the public utility shall be approved taking into account the amount of expenses previously incurred by the public utility which the Board may now consider inappropriate to be allowed as reasonable and prudent and properly chargeable to operating account notwithstanding that such classes of expenses were allowed as reasonable and prudent and properly chargeable to operating account.

115 The just and reasonable return on rate base which the Board determines that the utility is entitled to earn annually is "in addition to those expenses which the Board may allow as reasonable and prudent and properly chargeable to the operating account..."⁸⁰. Thus, in the process leading up to the prospective setting of rates, the Board may look at the type and level of projected expenses of the utility in the test year and determine whether they are reasonable and, if not, only allow, for the purposes of calculation of a just and reasonable return on rate base, such types and levels of expenses as are, in the opinion of the Board, reasonable.

116 In the 1991 rate hearing, certain types and levels of projected advertising expenses were approved by the Board. At the 1996 rate hearing, it was suggested that in the light of what actually happened in the years subsequent to 1991, the utility had in fact incurred advertising expenses well in excess of the amounts approved as reasonable and also of a type different from those which were approved, i.e. for corporate image building rather than related to the supply of service. The issue posed by Question No.6 is whether expenses of a class which were previously approved as reasonable but which are in excess of the projected amounts can be disallowed by the Board for the purposes of rate regulation.

117 The level of operating costs is obviously an important factor in fixing rates. It is generally accepted that Board supervision as to reasonableness of such costs is therefore essential to effective regulation.⁸¹ Phillips describes the matter thus:

Commissions seldom challenge expenditures controlled by competitive forces, such as those for plant maintenance, raw materials and labor. Conflicts do arise over whether certain expenditures should be charged to operating expenses or paid for by owners out of earnings.

Management might vote itself high salaries and pensions. Payments to affiliated companies for fuel and services might be excessive. Expenses for advertising, rate investigations, litigation and public relations should be closely scrutinized by the commissions to determine if they are extravagant or if they represent an abuse of discretion. In all cases, moreover, the commissions should require proof as to the reasonableness of a utility's charges to operating expenses.⁸²

Accordingly, the power to determine reasonable rates necessarily requires supervision of operating expenses.

118 In defining the parameters of such supervisory power, however, the Board must account for a competing principle, namely, that the Board is not the manager of the utility and should not as a general rule substitute its judgment on managerial and business issues for that of the officers of the enterprise⁸³.

119 Nevertheless, it is recognized that regulatory boards have a wide discretion to disallow

or adjust the components of both rate base and expense⁸⁴. In an American case⁸⁵ the matter was put as follows:

The contention is that the amount to be expended for these purposes is purely a question of managerial judgment. But this overlooks the consideration that the charge is for a public service, and regulation cannot be frustrated by a requirement that the rate be made to compensate extravagant or unnecessary costs for these or any other purposes.

120 Having said that, however, there will normally be a presumption of managerial good faith and a certain latitude given to management in their decisions with respect to expenditures. In the United States, the test for disallowance is usually "abuse of discretion" showing "inefficiency or improvidence" or "extravagant or unnecessary costs".⁸⁶

121 When the issue becomes a retrospective examination of actual expenses as compared with what was projected and determined to be reasonable and prudent, there ought, similarly, to be caution exercised before determining that an expense was improperly incurred. The circumstances facing a utility are not static and a considerable latitude has to be given to the decisions of management in making expenditures to respond to the new situations as they present themselves.

122 Nevertheless, it is still within the jurisdiction of the Board to supervise and review both the type and level of expenses incurred by the utility in respect of its operations. If it did not have that jurisdiction, the actual rate of return earned on rate base in a given year would be subject to manipulation by the utility as, for example, in a year where near the close of the fiscal period it appears that the rate of return will be more than anticipated, the utility, if totally unsupervised, could make large expenditures, unrelated to the delivery of service, simply to bring the rate of return in line with what had been projected.

123 The jurisdiction of the Board to take account of deviations from estimates of expenses when setting future rates does not differ from that pertaining to its jurisdiction with respect to taking account of excess revenue. The disallowance of an expense may lead, in effect, to a greater rate of return, and potentially to excess revenue if the resulting actual adjusted rate of return is in excess of the previously determined acceptable range of return. The excess revenue over a just and reasonable range of return on rate base can be dealt with by the Board as discussed in the answers to Questions 3 and 4. It does not remain the property of the company.

124 Accordingly, the answer to Question 6 is "yes". In giving this answer, however, I would emphasize that the question that was asked is a jurisdictional one. It does not give, in the circumstances of a particular case, a wide unfettered power to "second guess" managerial decisions with respect to expenses. In this regard, I agree with the comments of Phillips:

Public utilities ... cannot spend freely and expect all expenditures to be included as allowable operating expenses. In effect, this means the commissions are permitted to question both the judgment and integrity of management. And if rates must be high enough to yield sufficient revenue to cover all operating expenses, the consumer has the right to expect that such expenditure will be necessary and reasonable.

At the same time, managerial good faith is presumed. Public utilities must be given the opportunity to prove the necessity and reasonableness of any expenditure challenged by a commission (or intervenor). To justify an expenditure, a company must show that the expenses were actually incurred (or will be incurred in the near future), that the expense was necessary in the proper conduct of its business or was of direct benefit to the utility's rate payers, and that the amount of the expenditure was reasonable. Moreover, it must be emphasized again that a public utility may still spend its money in any way it chooses. Management's function is to set the level of expenses; the commission's duty is to determine what expense burden the rate payer must bear.

Question Nos. 7 and 8

(7) Does the Board have jurisdiction to require a public utility to maintain:

(i) a ratio; or

(ii) a ratio within a stated range of ratios

of equity and debt, as the means of obtaining the capital requirements of the public utility.

(8) Does the Board, upon an application pursuant to Section 91 or otherwise, have the jurisdiction to require a public utility to obtain its capital requirements by the issue of specific financial instruments, whether common shares, preferred shares, stocks, bonds, debentures or evidence of indebtedness payable in more than one year.

125 These two questions will be considered together because the issues they raise are interrelated.

126 In theory, both the overall level of capitalization and the individual components of a utility's structure are of interest to regulatory boards. Clearly, if a utility is allowed to engage in financing practices which result in overcapitalization, the whole viability of the enterprise may be threatened with consequent impact on the delivery of service to the public.

127 Furthermore, unlike in competitive conditions where the enterprise would not be able effectively to raise its prices over those of its competitors even if its costs of capital were excessive, overcapitalization of a regulated utility may well affect rates. That is because, in principle, rates must be set at such a level as to allow for recovery of the utility's costs, including its costs of capital, as well as a just and reasonable return. Overcapitalization, if uncontrolled, would increase the utility's costs and hence its rates. If the utility is not permitted to recover its costs in this regard it will, like any unregulated business, face bankruptcy with the consequence of disruption of service to customers. Overcapitalization may therefore indirectly put an upward pressure on rates to ensure the continued viability of the utility to enable service to be maintained. Alternatively, service may suffer.

128 Arguably, the purpose of s. 91 of the *Act* is to enable the Board to control the risk of overcapitalization and its impact on the viability of the utility, or at least on its credit standing. By examining each proposed new security issue in advance, the Board has a chance of minimizing the adverse effects of overcapitalization before the occur.

129 The composition of a utility's capital structure, that is, the mix of debt and equity, is also a matter that is necessarily of interest to regulatory boards.

130 Because the costs of the individual components of a utility's capital structure, i.e. the embedded costs of debt and preference shares and the reasonable rate of return on common equity, are given a weighted cost, proportional to their share of the total capital structure, for the purpose of deriving a reasonable rate of return on rate base, the level of the actual proportional share of each component will necessarily have an effect on the result of the overall determination of a just and reasonable return on rate base. The makeup of the utility's capital structure can therefore influence that determination.⁸⁷

131 Phillips⁸⁸ expresses it this way:

...the traditional theory of business finance holds that the average cost of capital to a firm varies with the capital structure upon which it is based. The interest rate on debt is normally lower than the cost of equity capital. Consequently, within limits determined by such factors as the risk of a business, the overall cost may be somewhat lower when the debt-equity ratio is high than when the debt-equity ratio is low.

It is too simplistic, however, to say that in all cases, the higher the debt equity ratio, the lower will be the overall costs of capital. As deGrandpré⁸⁹ points out:

It is often argued that if utilities increased their debt ratio, their cost of capital would be reduced since the cost of debt is less than the cost of equity. This may be true, but then the rate of return would have to be increased under the risk factor since the interest has to be paid before dividends and the investor might find himself deprived of dividends because of insufficient earnings.

The debt equity ratio can, therefore, have a complicated effect. What is undeniable, however, is that the debt-equity mix does have an effect on the rate of return. Hence, it is something which, in principle, should come within the regulatory umbrella in fulfilment of the policies of keeping the costs to consumers low and of ensuring a sound credit rating for the utility. The higher the cost of capital, the higher will be the return necessary to be awarded to the utility to enable it to maintain a sound credit rating in world financial markets. This would inevitably lead to higher rates, tolls and charges which would work against the policy of providing power to consumers at the lowest possible cost consistent with reliable service.

132 From this, the Consumer Advocate and the Board itself argued that it is a necessary and appropriate power on the part of the Board to regulate the ratio of debt to equity in a utility's capital structure. Without such a power, the Board is limited, it was suggested, in its ability to ensure that sources and facilities for the production, transfer and distribution of power are managed and operated in a manner that would result in power being delivered to consumers at the lowest possible cost consistent with reliable service.

133 In like manner, it was argued that the Board has the power, as a necessary incident of the legislative scheme, to stipulate, from time to time, that a public utility must obtain its capital requirements by the issue of financial instruments of a specified nature.

134 Granting that the level of overall capitalization and the composition of the capital structure of a utility are both matters of regulatory concern, at least insofar as they affect the utility's rate of return on rate base and hence the cost to consumers of the delivery of reliable service, the question to be determined is the degree of intrusion which the Board may undertake into the financial affairs of the utility. Can it be proactive and, as Question 7 suggests, "require" the utility to maintain a particular debt-equity ratio or, as Question 8 implies, "require" the utility to finance its activities in a particular way, or is it limited to passive disallowance of particular financing in a particular financing proposals either in the process of setting rates or in the course of other applications?

135 In approaching these questions, it has to be remembered that there is no such thing as one ideal capital structure. It is a function of economic conditions, business risks and "largely a matter of business judgment".⁹⁰ Furthermore, a given capital structure cannot be changed easily or quickly. As well, the long-term effects of changes on capital structure on the enterprise and on the future cost of capital may not be easily predictable. Capitalization decisions also have other business dimensions that transcend the considerations relevant to this issues directly presented in the regulatory process.

136 All of these considerations favour an approach that, in principle, should limit the degree

of intrusion by the Board into the managerial control by the utility over financial decision-making. As emphasized earlier⁹¹ the powers of the Board should be generally regulatory and corrective, not managerial. A debate has nevertheless occurred over whether regulatory agencies can and should "fix" debt-equity ratios and restrict new financing techniques to specified types of instruments.⁹² Phillips notes that:

These methods, however, have limitations. For example, since the financial conditions of individual utilities vary, no one ratio of debt to equity is correct. The refusal to approve a bond issue may lead to no issue at all, since, if a utility's earnings are insufficient to maintain its stock at par, it is in no position to issue more stock; bonds are the only way new capital can be raised. As a result of these problems, few commissions are willing to substitute their judgments for those of management...⁹³

137 An alternative to actual intrusion into the utility's financial affairs in the form of a direction as to how the enterprise should be structured is for the regulator, *for the purpose of setting rates*, to base its estimates of the cost of capital on a hypothetical appropriate capital structure, thereby disregarding the utility's actual capitalization⁹⁴. The justification for this approach is given by Phillips who, citing other authors, states:

Locklin has argued that most commissions 'disregard actual capital structures and set up an ideal or normal structure for the purpose. To do otherwise would burden the public with the higher costs of obtaining capital that result from a capital structure that is something less than ideal, and may, in fact be quite unsound'. And Rose argues: 'When a commission in determining cost of capital disregards the actual capital structure or a capital structure proposed by management it is no more invading the domain of management than when it disregards unreasonable expenses for labor, fuel, or other productive factors in prescribing rates'.⁹⁵

It appears, however, that actual capitalization has also been used as a basis⁹⁶. Nevertheless, the arguments in favour of the ability of the Board to disregard the actual capital structure in an appropriate case and base its determination upon a hypothetical structure are convincing. Indeed, this has occurred in Canada.⁹⁷ Without such a power, the Board would not be able effectively to fulfill its mandate of promoting the delivery of reliable service to consumers at the lowest possible cost and at the same time maintaining a sound credit rating for the utility in the financial markets of the world. Having said that, in exercising that power, it goes without saying that the Board ought to have a healthy respect for managerial judgment⁹⁸ in such matters since if a hypothetical capital structure is used that is too far off the mark of the actual structure, it may in practical terms make the utility unable to meet its actual commitments, thereby threatening its credit standing and possibly affecting service to customers.

138 It is not necessary to go further, for the purpose of promotion of the objectives and policies of the legislation, and accord to the Board a power of actual intrusion into the capital structure of the utility. The distinction between actual intrusion and disallowance for rate making purposes is justified in the context of the existing legislation and enables the Board to respect the principle of general deference to managerial decisions.

139 The question that remains is whether s. 91 of the Act, which is the only provision expressly dealing with the powers of the Board respecting capital structure, can be said, either expressly, or by necessary implication, to accord greater powers to the Board.

140 On its face, s. 91 appears to be limited to a situation where the Board may approve or disapprove of a particular proposal from the utility for the issuance of a proposed form of securities. It is expressed in terms of a power of negative disallowance rather than positive direction.

141 As noted previously⁹⁹, s. 91 enables the Board to control the level of overall capitalization. Is that the only purpose for which a disallowance under s. 91 can be made? Obviously, an indirect effect of an approval or refusal of a particular security issue could be to affect the utility's future proposed debt-equity ratio and hence the composition of its capital structure. In practical terms, the power to disallow a specific proposal will enable the Board to exercise at the very last, by means of moral suasion in discussion, a degree of positive influence over total capitalization as well as capital structure. The power of disallowance under s.91 may, in my view, be used, in appropriate cases, to further such objectives. Subsection 91(3) requires the Board, before approving a security issue, to be satisfied that it is in accordance with law and "for a purpose approved by the Board". Accordingly, so long as the power of approval or disallowance under s. 91 is exercised in a manner that is consistent with and in furtherance of any of the policies which the legislation was designed to serve, it will be within the jurisdiction of the Board to so act. In what way, the Board may influence the total level of capitalization as well as the particular debt-equity ratio. It does not, however, permit the Board to direct the utility to raise money in a particular way or to maintain a particular debt-equity ratio. In other words, it cannot be used as a springboard for an aggressive intrusion into the day to day financial and managerial decision making of the utility with respect to the capital structure of the enterprise. Nor can the general policies underlying the legislation justify such a power. As indicated, financing is undertaken for considerations that are not necessarily directly related to utility regulation. Furthermore, it has also been noted that, within the regulatory context, the utility is still subject to business risks and the effects of management decisions and the utility, other things being equal, ought to have the power to respond to that zone of risk. To that extent, the utility must be able to make financial decisions related to the overall health of the enterprise for reasons other than strictly regulatory ones, provided that in so doing it does not trespass on the objectives and policies of the legislation.

142 Accordingly, while recognizing that a degree of influence over the utility's capital structure and over the choice of financial instruments to be used in financing the enterprise can be exercised by means of the powers conferred by s. 91 and the powers inherent in the regulatory scheme itself, the answers to Questions 7 and 8, insofar as the questions imply an ability to directly stipulate particular financing results, is, in each case, "no".

General Observations

143 In answering the foregoing questions, it is worth emphasizing that the answers are given in terms of the jurisdiction of the Board. The fact that the Board may have jurisdiction, in the sense of legal power, to do something does not mean that, in a particular case, the power ought to be exercised. In the arguments which were presented on the hearing of the stated case, it was apparent that some of the positions taken by a party were being advanced out of a concern that if the jurisdiction was conceded, it would necessarily follow that the Board would exercise its power in a manner adverse to that party.

144 The question of whether the Board should in fact exercise powers within its sphere of jurisdiction and the question of the manner in which those powers should be exercised raise very different considerations. It must always be remembered that, as has been emphasized throughout this opinion, the Board is charged with balancing the competing interests of the utility and the consumers of the service it provides. Neither set of interests can be emphasized in complete disregard of the interests of the other. Thus, in choosing to exercise a particular power within the Board's jurisdiction, the Board must always be mindful of whether, in so acting, it will be furthering the objectives and policies of the legislation and doing so in a manner that amounts to a reasonable balance between the competing interests involved.

Opinion

145 Pursuant to s. 101 of the *Act*, I would summarize my opinion on the questions posed as follows:

Question 1(i) Yes

Question 1(ii) No

Question 2 Yes

Question 3(i) Yes

Question 3(ii) Yes

Question 3(iii) Yes

Question 4 Yes

Question 5 No

Question 6 Yes

Question 7 No

Question 8 No

I emphasize that inasmuch as the import of the answers given depends on my interpretation of the questions posed, it is necessary to read the answers in the context of the rest of this Opinion.

146 Pursuant to s. 102, the Deputy Registrar of the Court is directed to remit this Opinion to the Board.

O'Neill, J.A.:

147 The Board of Commissioners of Public Utilities (the Board) is a statutory body existing under the provision of the Public Utilities Act, R.S.N. 1990, c. P-47, as amended (the Act).

148 The general powers of the Board are set out in s. 16 of the Act:

The board shall have the general supervision of all public utilities, and may make all necessary examinations and inquiries and keep itself informed as to the compliance by public utilities with the law and shall have the right to obtain from a public utility all information necessary to enable the board to fulfil its duties.

149 In addition to the powers and obligations given to and imposed on the Board by the Act, the Board has certain duties and powers under the Electrical Power Control Act, 1994, Chapter E-5.1, as amended and, by s. 4 of that Act, is specifically directed to "implement the power policy" of the Province, as set out in s. 3 of that Act, and in doing so to apply tests "which are consistent with generally accepted sound public utility practice".

150 By s. 101 of the Act, the Board may, of its own motion, state a case in writing for the

opinion of the Court upon a question which in the opinion of the Board is a question of law.

151 On August 14, 1996, the Board stated a case requesting the opinion of the Court with respect to certain specific questions as set out therein. Following an application for directions, the court ordered that, inter alia, certain parties be notified of the proposed hearing. Subsequently Newfoundland Light & Power Co. Ltd., a utility, and "the Consumer Advocate" were granted status to appear and be heard at the hearing before the court.

152 In its application to the Court, the Board stated that in the course of a hearing before it, the submissions of various parties raised questions as to the jurisdiction of the Board under the Act and the Board thereupon stated a case for the Court upon the following questions:

(1) Does the Board have jurisdiction pursuant to the Act to set and fix the return which a public utility may earn annually upon:

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility; and/or

(ii) the investment which the Board has determined has been made in the public utility by the holders of common shares.

(2) Does the Board have jurisdiction to set the rates of return referred to in Question (1) as a range of permissible rates of return.

(3) Should a public utility earn annually a rate of return which is in excess of the rate of return determined by the Board to be just and reasonable, either on:

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility; or

(ii) the investment, which the Board has determined, has been made in the public utility by holders of common shares,

does the Board have jurisdiction to:

(i) require the public utility to use the excess earnings to reduce revenue requirements for the succeeding year; or

(ii) require the public utility to place the excess earnings in a reserve fund for the purpose of adjusting rates, tolls and charges of the public utility at a future date; or

(iii) require the public utility to rebate the excess earnings to customers of the public utility?

(4) Does the Board have jurisdiction to order that the rates, tolls and charges of a public utility shall be approved taking into account earnings in excess of a just and reasonable return upon:

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility, or

(ii) the investment, which the Board has determined, has been made in the public utility by the holders of common shares,

in prior years.

(5) Does the fact that the Board has advised the public utility that it is permitted to retain earnings

in excess of the rate of return determined by the Board to be a just and reasonable return, upon the rate base as fixed and determined by the Board for each type of service supplied by the public utility, but not in excess of the return determined by the Board to be a just and reasonable return upon the investment which the Board has determined has been made in the public utility by the holders of common shares, affect the jurisdiction of the Board to approve rates, tools and charges on the basis queried in Question(4).

(6) Does the Board have jurisdiction to order the rates, tolls and charges of the public utility shall be approved taking into account the amount of expenses previously incurred by the public utility which the Board may now consider inappropriate to be allowed as reasonable and prudent and properly chargeable to operating account notwithstanding that such classes of expenses were allowed as reasonable and prudent and properly chargeable to operating account.

(7) Does the Board have jurisdiction to require a public utility to maintain:

(i) A ratio; or

(ii) A ratio within a stated range of ratios

of equity and debt, as the means of obtaining the capital requirements of the public utility.

(8) Does the Board, upon an application pursuant to Section 91 of the Act or otherwise, have the jurisdiction to require a public utility to obtain its capital requirements by the issue of specific financial instruments, whether common shares, preferred shares, stocks, bonds, debentures or evidence of indebtedness payable in more than one year.

Question #1

(1) Does the Board have jurisdiction pursuant to the Act to set and fix the return which a public utility may earn annually upon:

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility; and/or

(ii) the investment which the Board has determined has been made in the public utility by the holders of common shares.

153 It may be useful to set out here the relevant parts of ss. 37, 70 and 80 of the Act:

37 (1) A public utility shall provide service and facilities which are reasonably safe and adequate and just and reasonable.

70.(1) A public utility shall not charge, demand, collect or receive compensation for a service performed by it whether for the public or under contract until the public utility has first submitted for the approval of the board a schedule of rates, tolls and charges and has obtained the approval of the board and the shall be the only lawful rates, tolls and charges of the public utility, until altered, reduced or modified as provided in this Act.

80.(1) 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 for each type or kind of service supplied by the public utility but where the board by order requires a public utility to set aside annually a sum for or towards an amortization fund or other special reserve in respect of a service supplied, and does not in the order or in a subsequent order authorize the sum or a part of it to be charged as an operating expense in connection with the service, the sum or part of it shall be deducted from the amount which otherwise under this section the public utility would be entitled to earn in respect of the service, and the net earnings from the service shall be reduced accordingly.

(2) The return shall be in addition to those expenses that the board may allow as reasonable and prudent

and properly chargeable to operating account, and to all just allowances made by the board according to this Act and the rules and regulations of the board.

(4) The board may use estimates of the rate base and the revenues and expenses of a public utility.

154 In the past, the Board has ordered that a just and reasonable return for a utility is "determined" to be between two stated percentages of its annual rate base for a test year, and ordered the utility to file, for examination by the Board, a schedule of rates, tolls and charges which will comply with the Board's determination, and, if so found to comply, approval is granted for those rates, tolls and charges.

155 The rate base is arrived at by calculating the utility's net investment in plant and equipment required for the rendering of the regulated service.

156 While not having fixed the return which the utility may earn, the Board has, in its orders, directed that a utility establish an "excess revenue reserve" into which revenue exceeding a certain rate of return on equity is to be deposited.

157 The Board, in its order dated December 4, 1991, having fixed the average rate base for Newfoundland Power for the year 1992, and having determined a just and reasonable return for Newfoundland Power on its average rate base for that year, noted that that return would provide an opportunity for it to earn a somewhat higher rate of return on common equity:

A just and reasonable return for [Newfoundland Power is determined to be between 10.96% and 11.19% on its average rate base for 1992, which will provide an opportunity to earn a rate of return on common equity between the range of 13.00% to 13.50%.

158 The Board's position before the court was that since what is a just and reasonable return on rate base is influenced by the proportion of the various financing components, including long term and short term debt and preferred shares, it is imperative that the Board be able to set and fix the return which the holders of the common shares in the utility may earn since the market conditions for debt could alter the return to the holders of the common shares significantly.

159 Although s. 80 does not specifically provide for a rate of return for common shares, the determination of a rate of return on the common shares of a utility is very much a part of the rate making process. Further, it must be noted that by s. 3 of the Electrical Power Control Act, the policy of the Province is declared to be that the rates to be charged, either generally or under specific contracts, for the supply of power within the Province "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...".

160 For Newfoundland Power it was argued that the Board has the jurisdiction to determine the just and reasonable return on the rate base and, as part of that process, the jurisdiction to determine the return on common equity, it being one of its sources of funds. I see no distinction between "determine" and "set and fix" insofar as the jurisdiction of the Board here is concerned. The calculations and projections made by the Board in arriving at the rate of return, whether specifically on rate base or the return on common equity, involve by their very nature, looking into the future, estimating as best can be done the revenues and expenditures contemplated for the utility's operations, the costs of money which may vary substantially, up and down, and then to fix a rate base, and a just and reasonable return on that base upon which

the rates, tolls and charges will be based and approved.

161 Although the Board is supplied on a regular basis and has the authority to demand all the financial information it requires of a utility, the rates are, in effect, established for relatively long periods, (in excess of one year) and the likelihood of the accuracy of the forecasts which are necessarily made in setting the rate base and the rates of return is somewhat diminished.

162 For the Consumer Advocate it was argued that s. 80(1) only gives the Board the jurisdiction to calculate the rate of return on rate base and does not allow a calculation of what return the common equity shares will have.

163 As noted earlier, common shares constitute one of the components of the financial make-up of a utility and, as argued by counsel for the Board, while, theoretically, the Board only determines a just and reasonable return on the rate base as fixed and determined by it, in a practical sense, the return on common equity must be considered as part of the mix in setting the return on rate base, just as are the rates of interest paid on preferred shares, bonds and other financial obligations.

164 In the result, in my opinion, questions 1(i) and 1(ii) should be answered in the affirmative.

Question #2

Does the Board have jurisdiction to set the rates of return referred to in question (1) as a range of permissible rates of return?

165 There is no question but that the rate setting process of the Public Utilities Board is prospective and is performed by the Board's making estimates of the myriad of factors which have to be considered. The problem is exacerbated by the fact that the process is not one which is contemplated to be reviewed regularly or on a short term basis. The meaningful interpretation of the word "return" as it appears in s. 80(1) allows for and, in the circumstances, contemplates a range of rates of return. It follows then that a just and reasonable return, though it may be stated as a fixed percentage, may be a range of rates which is determined to be just and reasonable. In making such a determination, the Board is clearly acting within its jurisdiction. As noted earlier, a consideration of a just and reasonable return on common equity as one of the components of the financial investment in the company is a necessary part of the process of arriving at a just and reasonable return on rate base, and this return may also be stated as a range.

166 I would answer question 2 in the affirmative.

Question #3

Should a public utility earn annually a rate of return which is in excess of the rate of return determined by the Board to be just and reasonable, either on;

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility; or

(ii) the investment, which the Board has determined has been made in the public utility by holders of common shares,

does the Board have jurisdiction to:

- (i) require the public utility to use the excess earnings to reduce revenue requirements for the succeeding year; or
- (ii) require the public utility to place the excess earnings in a reserve fund for the purpose of adjusting rates, the tolls and charges of the public utility at a future date, or
- (iii) require the public utility to rebate the excess earnings to customers of the public utility?

167 Under s. 69 of the Act, the Board has very broad powers including requiring a public utility to set aside from earnings monies in a depreciation account and creating and maintaining a reserve fund. Section 69 of the Act is as follows:

- 69.(1) A public utility, if so ordered by the board, shall, out of earnings, set aside all money required and carry it in a depreciation account.
- (2) The depreciation account shall not, without the consent of the board, be spent otherwise than for replacements, new constructions, extensions or additions to the property of the company.
- (3) The board may by order require a public utility to create and maintain a reserve fund for a purpose which the board thinks appropriate, including the improvement of the public utility's status as a borrower or seeker of funds for necessary maintenance or expansion of its operations.
- (4) The board, in a case where it has made an order which has the effect of increasing a public utility's revenues, may require the public utility to refrain from distributing as dividends until further order the whole or a part of the extra revenue which is in the board's opinion attributable to the order.

168 The answer to the question also requires a consideration of the powers of the Board as set out in ss. 58 and 59 of the Act.

169 By ss. 58 and 59, the Board may prescribe the form of all books of account and records to be kept by the public utility and to make its returns to the Board on such forms as may be prescribed by it. By s. 59, unless otherwise ordered by the Board, the utility shall close its accounts at the end of each calendar year and shall file with the Board its balance sheet, together with such other information as may be required by the Board, before April 2nd of the year following. In effect, approximately three months after the close of the utility's financial year, the Board is made aware of the exact financial position of the company at the end of the previous year and of any other information which it may require.

170 It will be seen from s. 69(3) that the Board has the power to direct a utility to set up reserves out of revenue to be used for replacement of equipment, new construction, extensions or additions to the property of the company. As well, reserves may be ordered to be created which would have the effect of "improving the status of the utility as a borrower or seeker or funds for necessary maintenance or expansion". There is a further power which comes to the Board from s. 69(4) and that is to require the utility to set up a reserve of monies which may have been in excess of those anticipated by the Board at the time of setting the rate of return and to prevent the distribution of that money or any part of it as dividends until the further order of the Board.

171 In the setting of rates, the Board is looking into the future and addressing the anticipated revenues and expenses of the utility with the many variables which may occur. It follows then that it must have the authority to anticipate that there will be variations from what was forecast. While the rates, tolls and charges are set following a hearing and only by an order following a hearing, the constant reporting which a utility must make to the Board allows the Board to be kept informed as to the financial operations of the utility and, in the result, to be

aware of how these revenues and expenditures affect the rate of return anticipated by the Board and set out in its order. At the same time, as stated earlier, the rate of return on rate base and on common equity are set not as specific percentages but as a range.

172 In order P.U. 6-1991, the following appears at p. 56:

The applicant has applied for a rate of return on common equity in the range of 13.5% to 14.0%, with rates set at 13.75%. The midpoint of the range was chosen since it is consistent with past practice and gives the Company the motivation to strive for a higher range (up to 14.0%) while giving them an opportunity to remain within the range if they are unable to come in on forecast (i.e. earn 13.5%)

And later at p. 72:

The Board orders a range of 13.00% to 13.50% be adopted as the Company's rate of return on common equity with rates being set at the mid-point of the range, 13.25%. In the Opinion of the Board this will give [Newfoundland Power] the opportunity to earn a fair and reasonable return and will increase [Newfoundland Power's] interest coverage in 1992 to 2.87 times.

The Board believes that [Newfoundland Power's] interest coverage in 1991 of 2.81 times at existing rates, which is an increase from 2.7 times in 1990, together with the increase to 2.87 in 1992 is satisfactory.

173 In my view, when rates, tolls and charges are set, the revenues generated belong to the company. If the net revenues are less than forecast and result in a return on rate base or on common equity less than as set out in the Board's order, then that loss is the company's loss. Revenues which are greater than anticipated belong to the company and any revenues in excess of those forecast by the Board as reflected in its order belong to the company and cannot be used, except as discussed in the following paragraph, to reduce the revenues of the utility in the future.

174 I see nothing to preclude the Board's directing that those revenues of a utility in excess of the top of the range allowed by the Board in its order as a return on common equity, be set aside and maintained in a reserve fund by an order of the Board, as contemplated by s. 69 "for a purpose which the [B]oard thinks appropriate, including the improvement of the public utility's status as a borrower or seeker of funds for necessary maintenance or expansion of its operations." I do not view any revenues of a utility in excess of those required to achieve the higher point of the range of return either on rate base or on common equity as becoming excess funds unless and until they are set aside by an order of the Board as authorized by s. 69. Until such order, these funds remain the property of the utility and may be treated as such. The creation of a reserve fund is a power given to the Board to be exercised as it sees fit. Indeed, s. 69(4) gives the Board the authority to "require the utility to refrain from distributing as dividends until further order the whole or a part of the extra revenue which is in the [B]oard's opinion, attributable to the order". Indeed, it may happen from time to time that circumstances may so change following the making of an order that a utility may need to and may actually earn revenues in excess of those contemplated by the Board when the last order was issued.

175 It follows from what I have said that the Board does not have the power to order rebates to the customers of the utility other than out of such a reserve fund. To order a rebate from revenues other than those which have been placed in a reserve fund and, in that sense, not available to the company directly, would be to make a retroactive order. A sufficiently good reason for this is that just as additional billings are not permitted to be made to customers because of revenues which have fallen below the range set when the order was made, so any additional revenues may not be paid out. The role of rate making is prospective and this is itself in my view would preclude any reaching back.

176 Reference should also be made to s. 80(1) which in my view contemplates, by the use of the words "earn annually", that each year becomes a separate unit and the revenues from one year may not be applied to another year so as to effect any change in the financial makeup of the utility, except through the use of the reserve fund, which, on its creation by order of the Board, has the effect of removing funds from the particular financial year affected by the order of the Board creating or ordering the placing of funds in the reserve fund and, in effect, makes those monies unavailable for the general use of the utility, including the payment of dividends to the holders of common equity.

177 I would answer question 3(i) in the negative, 3(ii) in the affirmative and 3(iii) in the negative.

Question #4

Does the Board have jurisdiction to order that the rates, tolls and charges of a public utility shall be approved taking into account earnings in excess of a just and reasonable return upon,

(i) the rate base as fixed and determined by the Board for each type of service supplied by the public utility; or

(ii) the investment which the Board has determined has been made in the public utility by the holders of common shares,

in prior years?

178 Although the Board's jurisdiction is to fix and determine a rate base which will enable the utility to earn annually a just and reasonable return on that rate base, it follows that, depending on the range settled upon by the Board in its order and considering that the rates, tolls and charges are set using the mid-point of that range as a basis, the utility may, from time to time, record net revenues which are less than or more than that contemplated by the range as set. Although the wording of s. 80 of the Act states that the utility is entitled to earn a just and reasonable return, it does not follow that it may not nor should not have revenues in excess of those contemplated. At the same time, for reasons which may be beyond the complete control of the utility, the revenues received might be substantially below those anticipated when the rates, tolls and charges were set and approved.

179 In my view, the Board cannot set rates, as argued by counsel for the Board, in a manner that would compensate for prior "excess" earnings. At the same time, in setting rates, as it must do prospectively, the Board must be alive to the various factors which may have caused the utility in any previous year to earn more or less than that anticipated by the Board in its order, and it must factor those causes into the percentages and ranges for return on rate base and for return on common equity in future orders.

180 I would answer question 4 in the negative.

Question #5

Does the fact that the Board has advised the public utility that it is permitted to retain earnings in excess of the rate of return determined by the Board to be a just and reasonable return, upon the rate base as fixed and determined by the Board for each type of service supplied by the public utility, but not in excess of the return determined by the Board to be a just and reasonable return upon the investment which the Board has determined has been made in the public utility by the holders of common shares, affect the jurisdiction of the Board to approve rates, tolls and charges on the basis queried in Question 4.

181 Counsel for the Board argued that the authority of the Board to amend, alter or rescind any order made by it is plenary and the Board has full power to reconsider any order made previously by it, notwithstanding that there is a right of appeal in respect of its decisions on questions of law. Further, he argued that the fact that the Board has previously ruled or ordered a particular basis for the calculation of excess revenue does not preclude the Board from considering the effect of such earlier decisions in determining what revenues will be required by the utility in setting new rates based on a just and reasonable return in accordance with a new method of calculation.

182 Counsel further argued that since there is no fixed term for the continuing application of any approved rates, tolls or charges, the Board is not precluded from altering its previous order and assessing what is a just and reasonable return based upon its current assessment of the utility. Counsel argued that s. 87(1) of the Act clearly sets out that power:

87.(1) Where upon an investigation the rates, tolls, charges or schedules are found to be unjust, unreasonable, insufficient or unjustly discriminatory, or to be preferential or in violation of this Act, the board has power to cancel those rates, tolls, charges or schedules and declare void all contracts or agreements, either oral or written, dealing with them upon and after a day named by the board, and to determine and by order substitute those rates, tolls or schedules that are reasonable.

183 The investigation undertaken under s. 87(1) follows upon a complaint made to the Board as set out in s. 84(1) and following upon the procedures set out in ss. 85 and 86 of the Act.

184 The legislation empowers and indeed directs the Board to conduct a constant monitoring of the financial position of the utility and gives the Board the authority to institute a correction process at any time. It does not, in my opinion follow, as argued by counsel for the Board, that the Board in setting new rates, tolls and charges may take into account earnings of the utility in previous years in excess of a just and reasonable return upon the rate base or upon the investment which the Board has determined has been made in the public utility by the holders of common shares. This is so notwithstanding that the Board has previously ordered or advised a utility that it is permitted to retain earnings in excess of the rate of return determined by the Board to be a just and reasonable return upon the rate base as fixed and determined by the Board where not in excess of the return determined by the Boards to be a just and reasonable return upon the investment made by the holders of common shares.

185 Counsel for the utility argued that the Board does not have jurisdiction to order that the rates, tolls and charges shall be approved taking into account earnings in excess of a just and reasonable return, either on rate base or on common equity, in prior years. Counsel further argued that such a power would "constitute retroactive appropriation of past revenues for future purposes". He further argued that the only mechanism available to the Board, where a utility earns in excess of the rate of return on rate base or on common equity, is to require the utility to deposit excess revenue, as defined by the Board, into a reserve account in the year earned. It is then, he argued, that the Board may approve the application of these funds as revenue in determining the rates, tolls and charges for a future period but any funds not ordered to be deposited in the reserve account are funds of the utility, belong to the utility, and cannot be considered in setting future rates. To do so, he argued, would be to change the system of accounts so that funds which were not excess in a previous year will then become excess and be brought forward - a retroactive order which is beyond the jurisdiction of the Board.

186 For the Consumer Advocate it was argued that although the Board had advised the utility that it was permitted to retain earnings in excess of the rate of return as determined by the Board, it is not precluded from later making an order under s. 80(1) and s. 76 of the Act

rescinding, altering or amending any existing order and in declaring these earnings as excess revenue. The Consumer Advocate also argued that in light of its position taken in response to question 4, the Board does not have jurisdiction to order that the "excess revenue" earned in previous years by the utility should be taken into account in setting rates, tolls and charges in subsequent years but that the Board must order that it be rebated to customers of the utility.

187 I agree with the position taken by the utility. I would answer question 5 in the negative.

Question #6

Does the Board have jurisdiction to order the rates, tolls and charges of the public utility shall be approved taking into account the amount of expenses previously incurred by the public utility which the Board may now consider inappropriate to be allowed as reasonable and prudent and properly chargeable to operating account notwithstanding that such classes of expenses were allowed as reasonable and prudent and properly chargeable to operating account.

188 The example given by the Board in its factum illustrative of the situation giving rise to question 6 is as follows:

In determining in 1991 what was a just and reasonable return on the basis of projection for test year, 1992, the Board was presented with projections for the future cost of operating expenses including advertising. The actual cost of advertising for 1995 exceeded the projection for 1992 by some \$314,000.00. As such, the amounts for advertising contemplated by the Board as being reasonable, prudent and properly chargeable to operating account vary significantly for the year 1995 from the estimate upon which the Board determined a just and reasonable rate of return.

189 Counsel for the Board argued that "the circumstances of a significant increase in expenses over the estimates used for the test year is indistinguishable from the circumstances of an increase in net earnings. For the same reasons as advanced by it in question 5, it argued that the Board had jurisdiction to order that the rates, tolls and charges could be approved taking into account these expenses, previously incurred, but now considered inappropriate to be allowed as reasonable and prudent.

190 For the utility, it was argued that once rates, tolls and charges are set, the resulting revenue belongs to the utility except for any amounts which the Board may order to be deposited into an excess revenue account. Further, although the Board has the authority to determine whether the expenses comply with s. 80(2), which jurisdiction is necessary to ensure the integrity of the excess revenue account, the Board does not have jurisdiction to disallow the amount of any operating expenses which is reasonable or which had previously been allowed as a just allowance. Further, it argued that the Board may not disallow an expenses because it is of the opinion that had it been the manager, it would not have made that expenditure. The question is whether the expenditure is one that could have been made by a reasonable and prudent manager.

191 The utility further argued that there should be no "microscopic review" especially with the benefit of hindsight. Counsel argued that the Board makes its annual review of the returns made by the utility and, in the specific example here, the Board had obviously made the decision that that expense, although it exceeded predictions, was reasonable (or at least the fact that it didn't say anything about it would indicate that it was reasonable). That expense should not, except in very rare circumstances, be later held to be unreasonable. The utility's position was stated in its factum as follows:

The Board does not have jurisdiction to order that rates, tolls and charges shall be approved taking into account the amount of such "disallowed" expenses. The Board's jurisdiction is limited to disallowing

expenses which it determines not to be "reasonable and prudent and properly chargeable to operating account" or otherwise not a "just allowance" under s. 80(2). The disallowance of an expense would lead to the company earning a somewhat greater return on common equity for the purpose of the excess revenue account for the year in which the expense was incurred. However, this revenue remains the property of the company and its shareholders unless the amount disallowed would mean that the company's return on common equity would exceed the maximum return on common equity previously allowed by the Board. If that were to occur, the amount which would be beyond the maximum return on common equity would be deposited into the "excess revenue account".

192 For the Consumer Advocate, it was argued that the Board may take into account past expenses in order to forecast more accurately future revenues and expenditures. However, its counsel argued that the Board does not have jurisdiction to set future rates, tolls and charges designed to compensate for past expenses that the Board may now consider inappropriate to be allowed as reasonable and prudent and properly chargeable to operating account.

193 I agree with the arguments proffered by the utility and the Consumer Advocate.

194 I would answer question 6 in the negative.

Questions #7 & 8

Question #7

Does the Board have jurisdiction to require a public utility to maintain:

- (i) A ratio; or
- (ii) A ratio within a stated range of ratios

of equity and debt, as the means of obtaining the capital requirements of the public utility.

Question #8

Does the Board, upon an application pursuant to Section 91 or otherwise, have the jurisdiction to require a public utility to obtain its capital requirements by the issue of specific financial instruments, whether common shares, preferred shares, stocks, bonds, debentures or evidence of indebtedness payable in more than one year.

195 In his decision which I have read in draft, Green, J.A. considered questions 7 and 8 together because, as he stated, the issues they raise are interrelated. I agree with the reasoning of Green, J.A. in dealing with these questions and I would answer both questions, as he did, in the negative.

196 I would also agree with the comments made by Green, J.A. in that part of his decision, entitled "General Observations".

Conclusion

197 In the result then I would answer the questions posed as follows: 1(i) yes, 1(ii) yes, question 2 - yes, question 3(i) - no, question 3(ii) - yes, question 3(iii) - no, question 4 - no, question 5 - no, question 6 - no, question 7 - no, and question 8 - no.

Order accordingly.

¹ R.S.N. 1990, c. P-47 as amended (hereinafter the "Act")

² *Act*, s. 16

³ *Act*, s. 70

⁴ *Act*, s. 80

⁵ Board Orders P.U.6 (1991) and P.U.7 (1991)

⁶ Hereinafter, "NLP"

⁷ Pursuant to s. 117 of the Act. See OC 96-226; OC 96-236

⁸ S.N. 1994, c. E-5.1, as amended (hereinafter, the "EPC Act")

⁹ I acknowledge a large indebtedness to the following sources for much of the information referred to herein about general regulatory principles and practice in North America: Charles F. Phillips, Jr. *The Regulation of Public Utilities* (Arlington: Public Utilities Reports Inc., 1993); A.J. deGrandpré, "Fair Returns for Utilities-Concept or Reality?" (1970), 16 McGill L.J. 19; A.B. Jackson, "The Determination of the Fair Return for Public Utilities" (1964), 7 Canadian Public Administration 343.

¹⁰ s. 4

¹¹ See *Bell Canada v. Canada (Canadian Radio-Television & Telecommunications Commission)*, [1989] 1 S.C.R. 1722 (S.C.C.) (hereinafter referred to as the "Bell Rebate case") where Gonthier, J. in response to an argument that a regulatory board did not have a particular power because it was not expressly provided for in the legislation stated at p. 1758: "This approach to the interpretation of statutes conferring regulatory authority over rates and tariffs is only the expansion of the wider rule that the Court must not stifle the legislator's intention by reason only that a power has not been explicitly provided for."

¹² "Nearly all the boards and commissions in the United States and Canada that regulate public utility rates do so on the basis of allowing a public utility a 'return' on the 'value' of the public utility property. The return that must be allowed is usually referred to as the 'fair return' ..." per Jackson, op.cit. fn.9, p. 343. See also *Union Gas Ltd. v. Ontario (Energy Board)* (1983), 1 D.L.R. (4th) 698 (Ont. Div. Ct.) per Anderson, J. at page 710: "By way of general observation ... there are substantial similarities between the situation here and in the United States, and authorities of courts in the United States are frequently referred to and considered..."

¹³ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (U.S. 1944), per Douglas J. at page 603: "The rate-making process under the Act, i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests"; *Edmonton (City) v. Northwestern Utilities Ltd.*, [1929] S.C.R. 186 (S.C.C.), per Lamont, J. at pages 192-193: "The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer on the one hand, and which, on the other hand, would secure to the company a fair return for the capital invested".

¹⁴ deGrandpré, op.cit. fn. 9, p. 20. See also *Union Gas Ltd. v. Ontario (Energy Board)* (1983), 1 D.L.R. (4th) 698 (Ont. Div. Ct.) per Anderson, J. at page 710: "...it is the function of the [Board] to balance the interest of the [utility] in earning the highest possible return on the operation of its enterprise (a monopoly) with the conflicting interests of its customers to be served as cheaply as possible". See also *Bell Canada v. Canada (Canadian Radio-Television & Telecommunications Commission)*, [1989] 1 S.C.R. 1722 (S.C.C.) per Gonthier, J. at p. 1748.

¹⁵ *EPC Act*, s. 3(a)(iii)

¹⁶ *EPC Act*, s. 3(a)(i)

¹⁷ *EPC Act*, s. 3(b)(iii)

¹⁸ *Act*, s. 37(1)

¹⁹ *Act*, s. 70(1). Although, unlike the legislation of some other jurisdictions, s. 70 does not expressly state that the rates approved by the Board must be "reasonable" or "just and reasonable", that standard is nevertheless imported into the approval process by virtue of the *EPC Act*, s. 3(a)(i) which declares the policy of the province to be that rates must be "reasonable".

²⁰ *Act*, s. 80(1)

²¹ *British Columbia Electric Railway v. British Columbia (Public Utilities Commission)*, [1960] S.C.R. 837 (S.C.C.), per Locke, J. at page 848: "The obligation to approve rates which will produce the fair return to which the utility has been found entitled is, in my opinion, absolute..."

²² *Ibid.*, per Locke, J. at pages 845, 847.

²³ *Ibid.*, per Locke, J. at page 848: "I do not think it is possible to define what constitutes a fair return upon the property of utilities in a manner applicable to all cases ...". This observation was adopted and followed by this Court in *Newfoundland Light & Power Co. v. Newfoundland (Public Utilities Commissioners Board)* (1987), 25 Admin. L.R. 180 (Nfld. C.A.) at page 193.

²⁴ *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (U.S. W. Va. 1923). (This case has often been referred and relied upon in subsequent decisions in the United States and Canada, including in this Court. See *Newfoundland Light & Power Co. v. Newfoundland (Public Utilities Commissioners Board)* supra, fn. 23 at page 193.)

²⁵ *Ibid.*, page 692.

²⁶ *Edmonton (City) v. Northwestern Utilities Ltd.*, [1929] S.C.R. 186 (S.C.C.), per Lamont, J. at page 193.

²⁷ 320 U.S. 591 (U.S. 1944)

²⁸ deGrandpré op.cit. fn. 9, page 28

²⁹ Ibid., page 37

³⁰ supra, fn. 23 at page 194

³¹ Ibid. page 194

³² *Montana-Dakota Utilities Co. v. Northwestern Public Service Co.*, 341 U.S. 246 (U.S. S.D. 1951), per Jackson, J. at page 251

³³ *Bell Telephone Co. of Canada, Re* (1966), 56 B.T.C. 535 at page 731: "We are ... not persuaded that reasonableness can, in practical terms, be expressed as a fixed point from which there can be no deviation. We therefore propose to use a range of percentage earnings on total average capitalization."

³⁴ *Federal Power Commission v. Hope Natural Gas Co.* Supra fn. 13 per Douglas, J. at page 603

³⁵ In *Northwestern Utilities, Re* (1978), 89 D.L.R. (3d) 161 (S.C.C.), Estey, J. stated at p. 164: "The statutory pattern is founded on the concept of the establishment of rates *in futuro*... [T]he Board must act prospectively and may not award rates which will recover expenses incurred in the past and not recovered under the rates established for past periods." [Of course, such an approach assumes that without such rates, the utility will continue to be economically viable. If poor management leads to losses that threaten the very continued existence of the utility, the Board may well have to set future rates at a level that will enable the utility to remain operative so as to ensure continued service to customers. This is an unlikely scenario in view of the close monitoring that the Board should exercise between rate hearings.]

³⁶ *EPC Act*, s. 3(1)(b)(iii)

³⁷ deGrandpré op.cit. fn. 9, page 26

³⁸ "The fixing of tolls and tariffs that are just and reasonable necessarily involves the regulation of the revenues of the regulated entity": per Gonthier, J. in *Bell Canada v. Canada (Canadian Radio-Television & Telecommunications Commission)* supra, fn. 11 at page 1747

³⁹ 4th ed. rev., 1968

⁴⁰ J.B. Sykes (ed), 7th ed.

⁴¹ s. 64(1)

⁴² s. 64(2)

[43](#) s. 68(4)

[44](#) s. 70(1). This provision makes the scheme administered by the Board a "positive approval scheme" (requiring advance approval of rates as being reasonable) rather than a "negative disallowance scheme" (permitting the utility to set its own rates subject to user objection, which would only then trigger a review into reasonableness), as those terms were explained by Gonthier, J. in the *Bell Rebate* case, *supra*, fn. 11 at p. 1758.

[45](#) s. 78(1)

[46](#) s. 78(2)

[47](#) s. 91(1), (3)

[48](#) *supra*, paragraphs [21]-[23]

[49](#) *EPC Act*, s. 3(b)(iii)

[50](#) See, e.g., Board Order P.U.6 (1991), page 72

[51](#) Phillips, *op.cit.*, fn. 9, p. 389

[52](#) See, e.g. P.U. 6 (1991) and P.U. 7 (1996-97)

[53](#) *Supra* fn. 13 at p.199

[54](#) *supra* fn. 23

[55](#) *Union Gas Ltd. v. Ontario (Energy Board)*, *supra* fn. 12

[56](#) para.[30]

[57](#) See *Bell Canada v. Canada (Canadian Radio-Television & Telecommunications Commission)*, *supra*, fn. 11 at page 1733. Yvonne Penning, "The 1986 Bell Rate Case: Can Economic Policy and Legal Formalism be Reconciled" (1989), 47 U of T Fac. L.R. 607 observes at p. 617: "The CRTC has developed the practice of setting the allowed ROE on the basis of a one percentile range. While only one actual ROE - usually the middle of the range - is used in the calculation of rates to be charged customers, all rates encompassed by the range, in theory, represent a reasonable return. One reason for setting such a range is that it explicitly provides some incentive for the company to be efficient; financial rewards due to efficiency or productivity gains would accrue to the company's shareholders, rather than being passed on to consumers through lower prices." Another rationale for a range approach is given by Penning later in her article at p. 621 where, after noting that the U.S. Federal Communications Commission also employs ranges, states: "...it also serves a very useful administrative function in that it limits the circumstances under which it would be necessary to alter rates on a prospective basis, within the time period for which the range of rates of return was deemed to be reasonable, in response to changing economic circumstances."

[58](#) s. 58

[59](#) s. 69(3)

[60](#) Phillips, op cit. fn. 9, page 196

[61](#) See, eg. Board Order P.U.6(1991), page 81

[62](#) S. 80(4)

[63](#) S. 3(a)(ii)

[64](#) *Northwestern Utilities, Re*, supra fn. 35, per Estey, J. at p. 170: "...the Act does not prevent the Board from taking into account past experiences in order to forecast more accurately future revenues and expenses of a utility".

[65](#) supra, fn. 11 at p. 1734.

[66](#) See supra, para. [33]

[67](#) *Wabush (Town) v. Power Distribution District of Newfoundland & Labrador* (1988), 71 Nfld. & P.E.I.R. 29 (Nfld. C.A.), per Goodridge, C.J.N. at p. 33.

[68](#) op cit. fn. 57, pp. 608-610

[69](#) Ibid, p. 610

[70](#) *E.P.C. Act*, s. 3(b)(iii)

[71](#) s. 3(b)(i)

[72](#) s. 3(b)(iii)

[73](#) s. 3(b)(iii)

[74](#) Paras. [21]-[23]

[75](#) Supra fn 11, at p. 1734

[76](#) Op.cit. fn. 57 at page 619

[77](#) supra, fn. 11 at page 1762 - 3

[78](#) para.[73]

[79](#) paras.[31], [50]

⁸⁰ *Act*, s.80(2)

⁸¹ Phillips, op.cit. fn. 9, pages 256-257

⁸² Ibid. page 256

⁸³ *supra*, para. 32

⁸⁴ *Union Gas Ltd. v. Ontario (Energy Board)* *supra* fn. 12 per Anderson, J. at page 712.

⁸⁵ *Acker v. United States*, 298 U.S. 426 (U.S. Ill. 1936), per Roberts, J. at pages 430-431

⁸⁶ Phillips, op. cit. fn. 9, at page 258

⁸⁷ deGrandpré op cit. fn. 9, page 26; Phillips op. cit. fn. 9, page 233

⁸⁸ Phillips, op. cit. fn. 9, pages 388-389

⁸⁹ op. cit. fn. 9, page 26. See also to the same effect Phillips, op. cit. fn. 9, page 233

⁹⁰ Phillips, op. cit. fn. 9, p. 234

⁹¹ paragraphs [31] - [32]

⁹² Phillips, op. cit. fn. 9, p. 236

⁹³ Ibid.

⁹⁴ Phillips, op. cit. fn. 9, pages 388-392

⁹⁵ Ibid., page 389

⁹⁶ Ibid., page 391

⁹⁷ *Bell Telephone Co. of Canada, Re*, *supra* fn. 33 at page 723: "...the Board has, when the circumstances so warrant it, seen fit to adjust the company's debt-ratio *for rate making purposes*."

⁹⁸ No doubt as a practical matter, the Board would also be hesitant to make assumptions respecting a utility's capital structure for rate-making purposes, that are different from the actual structure which will have been created as a result of previous approvals given by the Board (though perhaps in not as focused a context as a rate hearing and without the benefit of argument from rate hearing participants, such as the Consumer Advocate) to the issuing of individual share or other financial instruments in the past pursuant to s. 91.

⁹⁹ paragraph [128]

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