### **IN THE MATTER OF** the *Public Utilities Act*, R.S.N. 1990, c. P-47 (the "Act"), and

**IN THE MATTER OF** a General Rate Application (the "Application") by Newfoundland and Labrador Hydro for approvals of, under Section 70 of the Act, changes in the rates to be charged for the supply of power and energy to Newfoundland Power, Rural Customers and Industrial Customers; and under Section 71 of the Act, changes in the Rules and Regulations applicable to the supply of electricity to Rural Customers

### FINAL SUBMISSION OF THE CONSUMER ADVOCATE

### **Introduction**

- I. On the 21<sup>st</sup> of May, 2003, the Board of Commissioners of Public Utilities (the "Board") received an Application from Newfoundland and Labrador Hydro ("Hydro") requesting an Order of the Board pursuant to the *Public Utilities Act* (the "Act"), for approval of rates to be charged to Newfoundland Power, Rural Customers and Industrial Customers, and for changes in the rules and regulations applicable to the supply of electricity to rural customers.
- II. The Application of Hydro was subsequently amended on the 12<sup>th</sup> of August, 2003.
- III. In particular, by its Application, as amended, Hydro requested an Order of the Board relating to the following matters:
  - (1) fixing and determining the 2004 Rate Base of the Applicant at \$1,485,468,000;
  - (2) determining a just and reasonable rate of return for 2004 on average Rate Base of 8.15%;
  - (3) Approving, pursuant to Section 70 of the Act, the rate of 54.45 mills per kWh to be charged Newfoundland Power as set out in the Rates Schedules 2004 p. 1 of 32 attached to the Application;

- (4) Approving, pursuant to Section 70 of the Act, the firming up charge of 6.41 mills per kWh for secondary energy supplied by Corner Brook Pulp and Paper Limited to the Applicant and delivered as firm power and energy to Newfoundland Power as set out in the Rates Schedules 2004 p. 1 of 32 attached to the Application;
- (5) Approving, pursuant to Section 70 of the Act, the rate of \$6.49 per kW per month demand charge and an energy charge of 27.55 mills per kWh to be charged Island Industrial Customers for firm power and energy, plus the annual specifically assigned charge as follows:

Abitibi-Consolidated Company of Canada – Grand Falls	\$ 2,043
Abitibi-Consolidated Company of Canada – Stephenville	110,666
Corner Brook Pulp and Paper Limited	177,184
North Atlantic Refining Limited	183,497

As set out in the Rates Schedules 2004 p. 2 of 32 attached to the Application.

- (6) Approving, pursuant to Section 70 of the Act, the rate for non-firm service to Industrial Customers as set out in the Rates Schedules 2004, p. 3 attached to the Application;
- (7) Approving, pursuant to Section 70 of the Act, the rate of 4.49 mills per kWh as a wheeling fee to be charged Abitibi-Consolidated Company of Canada as set out in the Rates Schedules 2004, p. 4 of 32 attached to the Application.
- (8) Approving, pursuant to Section 70 of the Act, the rates for 2004 to 2008 for Rural Customers set out in the Rates Schedules attached to the Application;
- (9) Approving, pursuant to Section 70 of the Act, changes to the Rules and Regulations applicable to providing service to Rural Customers which govern the provision of service to Rural Customers be made to eliminate the statement preparation fee; to reduce the fee applicable for customer name changes from \$14 to \$8; and to extend the application of the reconnection fee to circumstances where customers request reconnection of service following a request from a landlord to disconnect.
- (10) Granting such alternative, additional or further relief as the Board shall consider fit and proper in the circumstances.
- IV. By Order-in-Council dated the 11<sup>th</sup> day of July, 2003, and under authority of Section 117 of the Act, the Lieutenant-Governor in Council appointed the Consumer Advocate to represent the

interests of domestic and general service consumers in the Province of Newfoundland and Labrador at the aforesaid hearing.

V. At the conclusion of the hearing, the Board ordered the parties to file a written submission. The Consumer Advocate's submission follows.

### Hydro's Requested Return on Rate Base/Return on Equity

- Hydro has applied for an 8.15% return on its proposed, average 2004 rate base of \$1,485,468,000.
- 2. Schedule IV, October 31, 2003, of the evidence of John Roberts adjusts Hydro's return on rate base by excluding an equity return on Hydro's rural inter-connected and isolated assets, and thus restates the level of return sought on the adjusted rate base to be 8.048%.
- 3. A significant component of Hydro's calculation of its return on rate base is the level of return on equity which Hydro is currently seeking by its application, of 9.75%.
- 4. Hydro's capital structure is referenced at Schedule V of the evidence of John Roberts dated October 31, 2003, and indicates Hydro's capital structure is as follows:

Debt	-	86.04%
<b>Employee Future Benefits</b>	-	1.70%
Equity	-	12.26%

5. Hydro's retained earnings, or "equity", on average is projected to be \$206,449,000 in 2004.

(Source: Schedule V John C. Roberts Oct. 31/03)

6. Hydro would require approximately \$19,000,000 in revenue from its ratepayers in 2004 to allow Hydro a level of return of 9.75% on its equity of \$206,449,000.

- Hydro maintains, throughout its evidence at the hearing, that it is entitled to a return of 9.75%, essentially since this was the level of return allowed to Newfoundland Power ("NP") by the Board, earlier in 2003, by the Board's Order P.U. 19 (2003).
- 8. Notably, in P.U. 19 (2003), the Board allowed NP a range of return on equity of 9.75% to 10.25%.
- 9. The Consumer Advocate submits that it is not clear from the evidence whether Hydro is seeking a similar range, or whether Hydro considers the 9.75% figure as the high end of a range. The following is the evidence of William Wells, CEO of Hydro, on this point, in response to the Consumer Advocate's cross-examination:
  - Q. Mr. Wells, you stated in your Application that you're seeking a rate of return on equity comparable to that of Newfoundland Power of 9.75 percent, is that correct?
  - A. That's correct.
  - Q. Are you aware that in the Board's decision granting Newfoundland Power a 9.75 percent rate of return on equity and that the Board also allowed Newfoundland Power to earn up to 10.25 percent on equity before it would consider ordering another hearing, are you aware of that?
  - A. Yes, I'm aware of that fact.
  - Q. Are you, in fact, therefore, seeking 10.25 percent, are you seeking the same terms and conditions that the Board gave to Newfoundland Power?
  - A. No, we haven't proposed the variation on the actual return. That hasn't been, as yet, a subject matter of this discussion in this proceeding.
  - Q. So Hydro, just to make it clear, Hydro is stating that the uppermost limit it is seeking is 9.75 percent?
  - A. Yes. We are proposing in our revenue requirement a return that would result in a 9.75 percent return on equity.
  - Q. So anything over and above the 9.75, should the Board consider granting you that, would be returned to consumers, to your consumers?
  - A. That would depend on the circumstance of the Board's order and the issue of how, if the Board would determine a variability around the mean of 9.75

because, as you've suggested, it could be a variable in either lower or higher return.

(Source: Transcript, Oct. 6/03, p. 77, ln. 4-25) (Source: Transcript, Oct. 6/03, p. 78, ln. 1-14)

- 10. The Consumer Advocate submits that the evidence of Hydro must be interpreted to mean that Hydro considers the 9.75% as the upper end of a range of return on equity.
- In any event, the 9.75 10.25% range on return on equity allowed by this Board in favour of NP in its decision P.U. 19 (2003), was premised on the fact that NP is an investor owned utility.
- 12. As regards Hydro's status as an investor owned utility, in P.U. No. 7 (2002), this Board made the following findings regarding Hydro's status in this regard at that time:

The Board finds no statutory basis for treating NLH as an investor owned utility. The Board concludes approval in principle of NLH's request to be treated as an investor owned utility is not justified based upon its current operating characteristics. The Board believes NLH's request is premature in the absence of a sound plan by NLH of how it will achieve financial targets similar to an investor owned utility and what impact this will have on its customers. The Board notes that NLH's debt is guaranteed by Government and this ensures NLH's continued access to the capital markets of the world.

(Source: P.U. 7 (2002-2003), June 7/2002, p. 42)

13. The Consumer Advocate submits that since P.U. No. 7 (2001) Hydro has not displayed any significant changes in its operating characteristics, nor has it proposed a sound plan of how it will achieve financial targets similar to those of an investor owned utility, and what impact this plan will have on its customers.

(Source: Transcript Oct. 7/03, p. 154-165 inclusive)

- 14. The following is an exchange between Hydro's CEO, William Wells, and NP's solicitor:
  - Q. ... In P.U. 7, the Board concluded that Hydro's request to be treated as an investor owned utility was not justified based on its operating

characteristics. And it indicated that the request was premature in the absence of a sound plan by Hydro as to how it would achieve the financial target similar to an investor owned utility and what the impact would be on its customers. Has Hydro prepared any kind of written plan which will indicate the impact on Hydro's customers?

A. No, we have not.

(Source: Transcript Oct. 7/03, p. 155, ln. 21-25) (Source: Transcript Oct. 7/03, p. 156, ln. 1-7)

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- Q. ... Now, when we looked at the rural deficit a few moments ago, we saw that continuing to grow and we talked about the 44 million dollars. And in the middle of this year, we saw that government in its direction to the Board has indicated certain preferential rates should continue, in effect?
- A. That's correct.
- Q. That's correct. Has Hydro, itself, prepared any financial plan, either alone or in combination with government or any department of government to address the rural deficit and reduce it?
- A. No. What we have done is, and it's attached, filed with the corporate evidence, is directed by the Board, we have, since the last rate hearing, the Board wanted to see an evidentiary dialogue that's not the right word, but it's close enough on this matter, an evidentiary record, yeah. And so we had, as we have indicated in the evidence, the various briefings with government, the Planning and Priorities Committee in Cabinet, the Minister of Mines and Energy and all culminated again in doing up the paper that submitted here and attached to the evidence with respect to the rural deficit and made that known to government and reviewed it with the appropriate ministers, as I've indicated. ... And then laterally, beyond the letters that were written as well, we put in this discussion paper for them and that is the result.

(Source: Transcript Oct. 7, p. 156, ln. 13-25) (Source: Transcript Oct. 7, p. 157, ln. 1-17) (Source: Transcript Oct 7, p. 158, ln.14-17)

Q. ... Now, you point out to the Minister in this particular discussion paper that the Board outlined the following options regarding funding of the rural deficit. And you laid them out, reinstatement of the government subsidy, continuing cross-subsidization, full cost recovery or some combination of the above and you pointed out that in the 2002 Order, the Board again, reiterated these options ... Now did you have any meetings with government concerning funding the deficit in any of the alternative ways ... A. There were no—other than that these issues as described where, government was made aware and in the briefings with respect to options that the Board had outlined and they were made aware of that, but subsequent to all of that, there were no specific meetings where we were reviewing any one of those or in combination –

> (Source: Transcript Oct. 7, p. 158, ln. 22-25) (Source: Transcript Oct. 7, p. 159, ln. 9-13) (Source: Transcript Oct 7, p. 159, ln.14-19)

A. They did not engage us in any discussion with respect to that or any representative of government.

(Source: Transcript Oct. 7/03, p. 160, ln. 9-11)

Q. So, Hydro's shareholder government made a policy decision to continue with that existing methodology, do we agree on that?

A. That's correct.

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(Source: Transcript Oct. 7/03, p. 160, ln. 20-23)

- 15. Furthermore, the evidence indicates that Hydro has been unable to achieve the financial targets regarding its capital structure as forecast in 2002. At that time, Hydro had forecast its debt equity ratio to be at 83/17. However, Hydro's debt/equity ratio forecast for 2004 has slipped to 86/14.
- 16. Hydro's CEO William Wells explained the difficulty encountered by Hydro in establishing its financial targets at page 162 to 165 of the transcript of October 7, 2003:
  - Q. And you wrote Mr. Maynard on March 25th.
  - A. That's correct.
  - Q. Did you have any response, did you have any meetings with Mr. Maynard or other government officials over the question of the capital structure and dividend policy?
  - A. The March 25th letter was intended to capsulize again, the issues that we wanted clarification from with respect to the rural deficit and we'd also brought the government's attention after P.U. 7 was issued, the comments with respect to our capital structure, and the requirement for dividends and

the Board's expression and view on matters related to a stable dividend policy being helpful. So, all this was brought to government, so there had been briefings of the Ministers in office at time of over that period in Mines and Energy, we also had meetings with the Priority and Policy Committee of Cabinet. And the intent of this letter and the discussion paper attached to it of March 7th was the end of, you know, sort of the line. We were recapturing the whole of the issue and putting the facts in play, again, for government.

(Source: Transcript Oct. 7, p. 162, ln. 8-25)	)
(Source: Transcript Oct. 7, p. 163, ln. 1-3)	)

- Q. Now, then after you sent this letter in, did you have a reply?
- A. There's a reply filed.

(Source: Transcript Oct. 7, p. 163, ln. 17-19)

(Source: Transcript Oct. 7/03, p. 164, ln. 8-14)

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- Q. ... Now, after that letter in June 10, did you receive anything further from government with respect to capital structure and dividend policy issue?
- A. No.
- Q. That's the last answer?
- A. That's the last, yes.
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- Q. Did I not understand it correctly that you were recommending a move to a 50 percent payout ratio?
- A. Well, our target was that we should move to an 80/20 debt to equity ratio. And as discussed, as the Board had confirmed, as you said earlier, back in '92 and, you know, 80 percent by our expert witness is the high range, so our objective in Hydro and the Board of Directors of Hydro is to get to an 80 percent debt to capital structure. To get there, assuming, taking the assumptions that we outlined, we could achieve that in a time frame dependent on the dividend payout.

(Source: Transcript Oct. 7, p. 165, ln. 14-25) (Source: Transcript Oct. 7, p. 166, ln. 1-2)

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Q. ... "Hydro is suggesting that the current dividend payout policy of 75 percent would be replaced by a dividend policy of paying out 50 percent of

net operating income." So, that was a concrete proposal by Hydro, was it not?

- A. Yes.
- Q. Okay. "This policy would be fixed for the next five years and facilitates movement to the proposed debt to capital structure. It would also contribute to rate stability and predictability. Failure to adhere to such a policy could result in similar disallowances by the Board, thereby adversely impacting on the shareholder return". So, you gave that advice to government, didn't you?
- A. Yes.
- Q. And government has chosen, to date, not to respond with any further direction to Hydro, have they?
- A. That's correct.

(Source: Transcript Oct. 7, p. 165, ln. 7-25) (Source: Transcript Oct. 7, p. 166, ln. 1-2)

- 17. From the foregoing, therefore, it is quite obvious that Hydro has failed to demonstrate to this Board that there has been any significant change in its key operating characteristics and in fact negative change has occurred regarding Hydro's capital structure. The Consumer Advocate therefore submits that Hydro should not be treated by this Board as an investor owned utility. Hydro's ratepayers (with the exception of the Industrial Customers) remain burdened with the cost of a massive rural deficit of \$41 million (at the behest of Hydro's shareholder) and Hydro has been frustrated in achieving financial targets similar to investor owned utilities, again through the direction of its shareholder, being the Provincial Government.
- 18. In light of these facts, the Consumer Advocate submits that Hydro should not be entitled to the level of return on equity of 9.75% as applied for, when, *inter alia*, it is Hydro's shareholder who is directing that Hydro's ratepayers provide subsidization at the level as currently reflected in the rural deficit for the benefit of the Provincial Government.
- 19. The Consumer Advocate does not take issue with the Government's policy to subsidize rural rates *per se*, however, the Consumer Advocate does take issue with Government, as

shareholder of Hydro, also receiving a 9.75% return on its equity in Hydro, at the same time. Essentially, Hydro's ratepayers should not be required to pay both for the \$41 million rural deficit and the further \$19 million amount representing Hydro's 9.75% return on equity.

- 20. It is clear that Hydro is governed by the *Electrical Power Control Act*, S.N.L., c. E-5.1 (hereinafter referred to as the "EPCA").
- 21. In particular, Section 3(a)(iii) of the EPCA states as follows:

### Part I

### **Declaration of Policy and Implementation**

- 3. It is declared to be the policy of the province that
  - (a) the rates to be charged, either generally or under specific contracts, for the supply of power within the province
    - (iii) should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under the *Public Utilities Act* so that it is able to achieve and maintain a sound credit rating in the financial markets of the world,
- 22. The Consumer Advocate submits that it would not be "just and reasonable" for this Board to allow Hydro to charge consumers electricity rates at a level to "allow" Hydro to achieve and maintain a sound credit rating (including a 9.75% return on its equity) without recognizing that Hydro's sound credit rating is really established by the Provincial Government's complete guarantee of all of Hydro's debt.
- 23. Furthermore, Hydro's cost of capital witness, Kathleen McShane, has indicated that the soundness of Hydro's credit rating is also based on Hydro's "consolidated" financial parameters.
- 24. CA-99 NLH posed the following question to Ms. McShane:

- Q. In Ms. McShane's pre-filed testimony (p. 17 lines 24-26) she indicates that debt rating agencies are concerned with NLH's financial parameters on a consolidated basis and she notes that NLH's debt ratio has been under 70% since 1996. Does NLH agree that its ability to achieve and maintain a sound credit rating in world financial markets is determined by its financial parameters on a consolidated basis.
- A. Yes. However, the fair return for the regulated utility should be based on the regulated utility business risk and capital structure.
- 25. As for Hydro's consolidated financial parameters, Table 6 of CA-3 at page 12 (reproduced below), indicates that Hydro's "consolidated" forecast returns on equity will be on average in the range of 23.5% over the next four years.

Rate of Return on Equity (Percent)		Income from Operations (\$000,000)		
Year	Corporate	Regulated	Corporate	Regulated
2003	10.8	(3.8)	22.5	(7.8)
2004	22.9	9.6	46.5	<b>19.4</b>
2005	24.4	9.1	50.8	18.9
2006	23.6	8.6	50.1	18.2
2007	23.2	8.6	50.4	18.6

- 26. The Consumer Advocate submits that in the case of Hydro, Section 3(a)(iii) of the EPCA, which allows a utility to charge electricity rates that generate sufficient revenue to enable the utility to earn a return, for the purpose of maintaining a sound credit rating, creates a redundancy, since Hydro's sound credit rating is established by other means, namely the Government Guarantee and Hydro's consolidated financial parameters. (Emphasis added)
- 27. The Consumer Advocate therefore submits that there is absolutely no necessity for this Board to allow Hydro to earn 9.75% on its equity, which, as stated above, would require consumers to pay approximately \$19,000,000 in 2004 in increased electricity charges.

- 28. The Consumer Advocate further submits that there appears to be no justification from the evidence before the Board to award anymore than the 3% return on equity allowed Hydro in P.U. 7 (2002-2003).
- 29. Essentially, if consumers are expected to pay \$19,000,000 in 2004 to satisfy Hydro's request for a return of 9.75% percent on its equity, then there should be some real purpose behind such a payment. If the purpose behind this payment is to maintain Hydro's sound credit rating, then this is an artificial and wasted effort, since Hydro's credit rating is established by other means.
- 30. The Consumer Advocate also submits that when considering the appropriate range of return on equity to which Hydro is entitled, the Board should consider the fact that Hydro's shareholder, being the Provincial Government, is entitled to collect a 1% guarantee fee annually from Hydro. In 2004 this guarantee fee is projected to be \$14.5 million.

(Source: Grant Thornton Financial Report, Sept. 2003, p. 12)

- 31. The combination of the revenue required for the guarantee fee of \$14.5 million and the revenue required for a 9.75% return on equity, being \$19,000,000, equals an approximate amount of \$34,000,000, or 16% of Hydro's total equity of \$206 million. While this \$34 million amount would not be regarded as Hydro's total return on equity *per se*, it does give some perspective of the level of return that Hydro's shareholder is in fact receiving for its \$206 million stake in Hydro.
- 32. The Consumer Advocate repeats the foregoing paragraphs and requests that this Board maintain Hydro's level of return on equity at 3% as ordered in P.U. No. 7 (2002-2003).
- 33. The Consumer Advocate further submits that CA-173 illustrates that if the Board were to maintain Hydro's level of return at 3%, Hydro's revenue requirement in 2004 would be reduced by \$12.1 million. (Notably, CA-173 also indicates that if the Board were to allow a 4% return, the reduction in revenue requirement would be \$10.3 million, and likewise, if the Board allowed a 5% return on equity, the reduction in revenue requirement would be \$8.5 million.)

### **Evidence of the Cost of Capital Experts**

34. Should the Board determine that Hydro should be treated as an investor owned utility, then the Board must then have regard to the evidence of the several cost of capital experts that presented evidence at the hearing. In summary, their evidence was as follows.

### Kathleen McShane – Cost of Capital expert called by NLH

- 35. In her pre-filed evidence dated April 2003 Kathleen McShane presented the Board with her opinion that to treat Hydro as an investor owned utility, Hydro should be entitled to a return on equity ("ROE") in the range of 11.25 12%, or approximately 11.5%. This range of return was re-stated by Ms. McShane on December 3, 2003, and her revised recommendation is for a return on equity of between 11 11.25%.
- 36. Ms. McShane arrived at these figures by applying certain recognized tests, measuring expected ROEs, in particular the equity risk premium test, the discounted cash flow test and the comparable earnings test.
- 37. The following are the results Ms. McShane presented in her pre-filed evidence, as amended by her oral testimony, arising from the application of the aforementioned tests:

Equity Risk Premium	10.10 - 10.50 %
<b>Discounted Cash Flow</b>	10.00 - 10.50%
<b>Comparable Earnings</b>	12.75 - 13.25%

 Based on these results, Ms. McShane recommended a fair return on equity for Hydro of approximately 11 - 11.25%.

### Dr. Basil Kalymon – Cost of Capital Expert called by the Consumer Advocate

 Dr. Kalymon employed similar tests in arriving at his recommended rate of return on equity for Hydro. 40. Dr. Kalymon's results are summarized at pages 38 and 39 of his pre-filed evidence (as amended by his oral testimony of December 4, 2003). The following is an excerpt from Dr. Kalymon's evidence:

The results of my application of the alternative tests of the cost of equity to Hydro can be summarized as follows:

#### **Risk Premium Test:**

Cost of Equity:	7.53% to 8.03%
Indicated Risk Premium:	2.00% to 2.50%

6% to 9.28%
3% to 3.75%
8% to 8.82%
5% to 3.29%

### **DCF Test:**

Low-risk Industrials:	
Cost of Equity:	8.05% to 9.36%
Indicated Risk Premium:	2.52% to 3.83%
Utility Sample:	

unty Sample:	
Cost of Equity:	7.40% to 8.56%
<b>Indicated Risk Premium:</b>	1.87% to 3.03%

With the now well established trends in the bond market yields and the general instability in the low risk industrial sample results, I have placed the greatest reliance on the risk premium test and the results of the utility sample. My conclusion is that the risk premium which would reflect the cost of equity to Hydro regulated operations is in the range of 2.00% to 3.25% before consideration of market pressure and 2.50% to 3.75% with a 50 basis point allowance.

Given that the current yield on 30 year Canada bonds is 5.26%, I would recommend that Hydro be allowed a return on equity in the range of 8.50% and 9.00% on a deemed equity component of 40%.

- 41. Dr. Waverman arrived at his recommendation regarding Hydro's ROE by employing a methodology which differed from that employed by Ms. McShane and Dr. Kalymon.
- 42. Dr. Waverman's approach is summarized at pages 3 and 4 of his testimony, an excerpt of which is reproduced below:

It has long been a fundamental tenet of utility rate making that prices be based on cost. Indeed, Professor Bonbright, long considered a key figure in the articulation of the elements of sound utility rates stated:

Nevertheless, one standard of reasonable rates can fairly be said to outrank all others in the importance attached to it by experts and by public opinion alike – the standard of cost of service ...

Thus, it is *cost* that determines the schedule of utility rates for both investor owned and public owned utilities throughout North America – not ability to pay or harmony of one utility's rates with the rates of a utility in a neighbouring province or state or the rates of investor owned utilities.

(Source: Pre-Filed Evidence of Leonard Waverman, Sept/03, p. 3-4)

43. In applying Dr. Waverman's theory to Hydro, it appears from his testimony of December 4, 2003, that Dr. Waverman has recommended that the allowed "cost" for Hydro's shareholders' equity would be at 5.8%.

(Source: Transcript Dec. 4/03, p. 58, ln. 2-21)

44. However, Dr. Waverman also allows for a further 1% to be added to this figure, although it appears from his pre-filed evidence at page 15 that this 1% would be recognized as an additional "opportunity cost of debt" arising from the provincial guarantee.

## Consumer Advocate's Position re Rate of Return on Equity Should the <u>the Board Decide That Hydro is to be Treated as an Investor Owned Utility</u>

45. If the Board decides that Hydro should be treated as an investor owned utility, then the Consumer Advocate submits that Dr. Waverman's approach should be considered and thus

Hydro's ROE would be set at the marginal cost of its new debt, which may be in the range of 5.8-6.8%.

- 46. If the Board does not accept Dr. Waverman's methodology, then the Consumer Advocate would submit that the evidence of Dr. Kalymon on the issue of rate of return of equity should be preferred over that of Kathleen McShane for the following reasons:
  - (a) Ms. McShane's recommendations to other regulators regarding other corporations' returns have been consistently higher than ROEs that have ultimately been awarded by these regulators.

(Source: CA-92)

- (b) Ms. McShane has added a fifty basis point "financing flexibility" amount to the results of her equity risk premium test and her discounted cash flow test. This methodology has been rejected by the Board in P.U. 19 (2003). (The Consumer Advocate would submit that this approach should likewise be rejected here.)
- (c) Ms. McShane relies upon forecast interest rates in assessing risk premiums instead of actual rates. The Board in P.U. 19 (2003) relied upon actual, observable rates.
- (d) Ms. McShane relies heavily upon American results in her analysis, and the Consumer Advocate submits that this reliance introduces an upward bias to her results.
- 47. The Consumer Advocate submits therefore that, should this Board treat Hydro as an investor owned utility, and Dr. Waverman's methodology is not accepted, then the evidence of Dr. Kalymon should be preferred on the issue of Return on Equity.

### Hydro's Wholesale Rate to Newfoundland Power

48. The Public Utilities Board should direct Hydro to implement the sample rate design identified in Exhibit RDG-2 for wholesale power sales to Newfoundland Power. The sample rate, with

demand and energy components, should replace the current energy only wholesale rate. The new rate should be effective within a month of the Board's decision related to this hearing.

- 49. The reasons the Board should implement this rate now are in evidence. The report prepared by Stone & Webster Management Consultants Inc., provides some history:
  - 1. During Newfoundland Power's rate hearing in November of 1989, discussions occurred regarding the alternatives to the energy only rate structure that Hydro was using to bill Newfoundland Power. As a result of the discussions, the Board of Commissioners of Public Utilities issued a report in January 1990, summarizing the issue with this statement, "This rate form makes it difficult for the Company (NP) to send its retail customers proper pricing signals". During the hearing, NP witnesses explained that the "energy only" rate causes NP problems in trying to design rates that send proper pricing signals to their General Service Customers.
  - 2. During Hydro's 1990 rate hearings, the issue of a demand versus an energy rate was again raised by NP. NP indicated that in order to implement "effective Demand Side Management (DSM) programs, customers must receive proper pricing signals". The energy only rate was perceived to give NP little incentive to engage in DSM activities that reduce peak load.
  - 3. The Board in its June 1990 report to the Minister, recommended: "at its next rate hearing Hydro present whatever information it may have with regard to a rate with a demand charge component, for discussion and determination of a date for filing a rate proposal."
  - 4. In 1992 Hydro proposed a three part rate to become effective January 1, 1993. However, discussions between the companies broke down over the inclusion of a twelve month ratchet in the demand rate. In the result, nothing was done.
  - 5. On April 13, 1992, the Board recommended, "that Hydro and NP develop an acceptable rate form for review by the Board at the hearing to be held on Hydro's Cost of Service methodology".
  - 6. Following 1992 Hydro and NP held several meetings with the objective of resolving the outstanding issues by developing a mutually acceptable rate structure, however, nothing was resolved.
  - 7. In Newfoundland Power's 1996 General Rate proceeding, the Board ordered Newfoundland Power to follow the direction given in the 1993 Cost of Service Methodology report. Again, nothing happened.
  - 8. In P.U. 7 (2002-2003) June 7, 2002, the Board directed Hydro to provide further insight and an update on the matter of a demand charge component to the NP rate structure.

- 50. It is now 2004. While every reputable jurisdiction in North America has developed a demand and energy rate, this province remains an outlier and the Board has yet to assume any authoritative jurisdiction in reference to this issue. The consumers of the province have been the primary losers in this situation; the utilities the beneficiaries. A remedy is now required.
- 51. Each of the cost of service and rate design experts participating in this hearing recommends that a demand/energy rate similar to the Sample Rate identified in Exhibit RDG-2 be implemented. (Board's Experts, page 22, lines 40 to 42, Pre-filed Evidence of EES Consulting; IC Experts, page 45, lines 17 to 19, Pre-filed Evidence of Osler/Bowman; Hydro Expert, page 18, lines 5 to 13, Pre-filed Evidence of Greneman; Consumer Advocate Expert, page 4, lines 5 to 12, Pre-filed Evidence of Bowman) Although Mr. Brockman does not support the rate structure in this hearing, he fully supported the demand/energy rate structure previously before the Board in 1990, and again in 1992.

(Source: IC-7 and IC-8).

52. Newfoundland Power has demand/energy rates for its own large retail customers. Newfoundland Power's explanation for subjecting its large retail customers to demand/energy rates is provided in the Pre-filed Evidence of Perry and Henderson:

# Rate 2.4 was created to ensure that larger general service customers paid a rate that better reflected the cost of service. This structure is commonly used by utilities in Canada in billing large customers. (Emphasis added)

(Source: Exhibit LCH-1, p. 5)

53. The same logic holds for the wholesale rate. The same cost of service and marginal cost data and information are available and relevant at both the wholesale and retail levels. It is important to note that in its Rate Application completed in 2003, Newfoundland Power made no attempt to change the rate structure for its large retail customers to an energy-only rate. Newfoundland Power believes a demand/energy rate is appropriate for its large retail customers. It is, likewise, appropriate for Newfoundland Power to be subjected to a demand/energy rate.

54. Mr. Brockman at one time agreed, in concept, with the proposal to adopt a three part NP rate with the energy charges set at the marginal energy cost and the demand charge calculated as a residual. Mr. Brockman provided testimony in 1990 stating that the cost of service study contains sufficient information to provide a demand and energy rate structure to NLP. The same arguments are relevant today - there is no valid reason for further delaying implementation of a demand/energy rate at this time.

(Source: IC-7, p. 14, ln. 2-3) (Source: IC-8, p. 21, ln. 17-20)

- 55. Newfoundland Power has made no attempt to file an alternative demand/energy rate structure even though directed by the Board to file information pertaining to a demand/energy rate as far back as 1992. Given that Newfoundland Power has not filed an alternative, the Sample Rate design proposed in Exhibit RDG-2 is the only evidence of a rate design before the Board.
- 56. The Stone and Webster Management Consultant Report is a comprehensive review of all issues which pertain to rate design for Newfoundland Power. The report, after considering all relevant issues, made the following recommendations:
  - An energy-only rate to a wholesale customer the size of NP is an anomaly in terms of current industry practice.
  - The ability to send a proper price signal to NP is a key element in controlling island interconnected peak and conserving capital costs.
  - In order to send a price signal, Hydro must accept a degree of risk and the level of risk that Hydro assumes should be commensurate with the response in terms of conservation efforts by NP.
  - A demand-energy rate can be designed that does not permit a windfall to either Hydro or NP due to weather variations.

- A demand-energy rate can be designed that will allow both Hydro and NP to achieve virtually the same operational efficiencies as under the currently energy-only rate structure.
- The rate recommendations discussed in sections 4 and 6 of this report can effectively address the above concerns.

### **Demand/Energy (Greneman)**

57. In this proceeding, there was overwhelming support by experts for the immediate introduction of the demand/energy rate in this jurisdiction. Mr. Robert Greneman testified:

Yes. I think its, in my observation it's very unusual to observe an entity the size such as Newfoundland and Labrador Hydro selling to an entity as large as Newfoundland Power on an energy-only rate. And within Stone and Webster, whoever we mention this to finds it surprising as, finds it ... equally surprising.

(Source: Transcript, Nov. 14/03, p. 5, ln. 19)

- 58. Mr. Greneman does not agree that a marginal cost study is a prerequisite to the immediate implementation of a demand/energy rate. Mr. Greneman testified:
  - Q. But the first step would be to implement the Demand Energy Rate?
  - A. Absolutely. I think it would be a mistake to wait for the Marginal Cost Study ... It's my feeling ... we would never have a demand and energy rate because if we can't agree on something so simple as a demand and energy rate, with the added complexity of marginal cost, it just becomes too involved, in my view.

(Source: Transcript Nov. 14/03, p. 12)

59. Mr. Greneman stated that even if Hydro doesn't undertake a marginal cost study a demand/energy rate should be introduced, making the point that these two events were in no way connected. Mr. Greneman stated:

"Well, they're not in no way connected. Marginal cost can serve as a guide on how to tweak demand energy rate. There's a connection, but certainly a marginal cost does not in any way serve as a prerequisite to implementing a demand energy rate."

(Source: Transcript, Nov. 14/03, p. 36, ln. 14)

### 59. In reference to volatility, Mr. Greneman stated:

... Hydro has gone a long way in offering to weather normalize the demand, and that goes a very large way in mitigating volatility. That is to say, it's recognized that there'll be colder winters and there'll be warmer winters but we're proposing to use a weather normalized demand. So that goes a long distance to stabilizing volatility. In addition, the volatility that NP has shown in their evidence is based upon plus and minus five percent deviation. That was really a rounded number. Within recent history, actually, the maximum deviation has been in the order of 3.6 percent. It was just rounded up to five percent as a whole number. And even considering that 3.6 percent, that's a before tax effect.

(Source: Transcript Nov. 14/03, p. 14-15, ln. 14)

60. Mr. Greneman granted that with a demand/energy charge, it would be his expectation to see reduced capital budgetary expenditures by the utility. That in itself would be beneficial to consumers.

... it may defer the next plant and therefore there will eventually be a lower outlay, and there actually could be a present worth effect of that.

(Source: Transcript Nov. 14/03, p. 21-22, ln. 14)

61. In reference to the failure to implement a demand/energy rate in 1990 and 1991, Mr. Greneman stated:

... Had it been put in earlier, I think efforts could have been made earlier on to change, apply – to put in plans and road (sic) management techniques to lower the demand at this point in time ... It would have instilled the need to conserve capital and demand ... there would have been an intellectual recognition of the fact that there are two components of supply, namely capacity and energy.

(Source: Transcript, Nov. 14/03, p. 29, ln. 3)

62. In reference to Newfoundland Power's opposition to the demand/energy charge, Mr. Greneman stated:

I don't think the volatility issue in and of itself is sufficient to oppose it, in my view and that's the only evidence I've seen put forth. It's not clear to me why they would be opposing it.

(Source: Transcript, Nov. 14/03, p. 30, ln. 16)

63. Mr. Greneman acknowledged that the failure to implement the wholesale rate to Newfoundland Power could be viewed as unfair to Hydro's other customers. Mr. Greneman stated that the introduction of the demand/energy rate "hopefully it would have the effect of reducing Newfoundland Power's cost to Hydro for purchase power and hopefully it would also have the effect to reducing to the extent that they could pass it on to their customers and their customers can respond, of reducing NP's rate base as well. So there can be that double effect."

(Source: Transcript, Nov. 14/03 p. 34, ln. 13)

64. Mr. Greneman stated:

Demand and energy rate, in my view, is more efficient that an energy only rate, and it would only add to increase system efficiency and it's more efficient in allocating society's resources.

(Source: Transcript, Nov. 14/03, p. 38, ln. 8)

65. Mr. Greneman described the demand/energy rate as more fair ultimately to the consumer. Mr. Greneman offered that the demand/energy rate could be put into effect within a month of the Board's Order.

(Source: Transcript Nov. 14/03, p. 40-41, ln. 24)

66. Mr. Greneman took exception by and large to the comments of Mr. Brockman as found in his pre-filed evidence of September 2, 2003, to justify the continuation of the energy only rate. Mr. Greneman stated that in fact Mr. Brockman's contention that the sample rate will

encourage Newfoundland Power to spend up to \$84.00 per kilowatt to reduce peak demand when Hydro has provided evidence of \$28.20 per kilowatt as follows:

### ... I think that statement is, in a sense, slight (sic) of hand. I think it's a confusing statement, but if I can, I'd like to try to clarify it.

(Source: Transcript Nov. 14/03, p. 54, ln. 5)

And in terms of that clarification writes:

What's attempting to be said here is that what's being done sound ridiculous, but it's not at all ridiculous when viewed in the proper context. You can't compare – you can't put the \$84 next to the \$28. They're not comparable. The \$28 is a component of the \$84 conceptually.

(Source: Transcript Nov. 14/03, p. 55, ln. 7)

67. In reference to Mr. Brockman's objections, Mr. Greneman states at page 63 of his evidence of November 14, 2003:

... I think the advantages of a demand energy rate outweigh the stated disadvantages of a demand energy rate, stated by Mr. Brockman.

(Source: Transcript Nov. 14/03, p. 63, ln. 2)

### **Demand/Energy (Chymko / Tabone)**

68. Both Mr. Chymko and Ms. Tabone supported the demand/energy rate. Mr. Chymko noted that it was important to give a customer a correct price signal:

I think at the end of the day there's two parts to the system. One is supply and planning for supply and the second is what's the customer going to take at the end of the day. And if you want to move towards better resource management, conservation, energy management, the customer has to be receiving a signal that matches the supply side.

(Source: Transcript November 19, 2003, p. 56, ln. 7)

69. Ms. Tabone observed that Fortis was in the process of acquiring Acquila in British Columbia and that company has a demand/energy rate.

(Source: Transcript, Nov. 19/03, p. 54, ln. 14)

70. On the issue of whether a demand/energy rate should be introduced regardless of whether or not Hydro has undertaken a marginal cost study, Mr. Chymko stated:

Yes, again, we believe that in 2004 strides should be taken to put in place a conservative, what we call a conservative demand energy rate, until we can get through and we would recommend an integrated resource plan process and than a marginal study.

(Source: Transcript, Nov. 19/03, p. 58, ln. 16)

71. In reference to the timing issue and a marginal cost study, Mr. Chymko stated:

The first step would be put in an initial demand energy rate. We would try and be conservative. The second step would be looking at an integrated resource plan. And the third step would be following through with a marginal study. And then the fourth step is then coming back and tweaking the demand energy rate.

(Source: Transcript Nov. 19/03, p. 59, ln. 1)

72. In reference to lost opportunity since 1989 by the failure to implement the demand energy rate, Mr. Chymko and Ms. Tabone testified:

Again, we haven't studied that but we would have to assume that perhaps they haven't been receiving the price signal in regard to making the best economic decisions. And again, we hear the growth that's coming about, for instance, in regard to electric heat.

(Source: Transcript Nov. 19/03, p. 62-63, ln. 23)

And, also, you know, in the work we've done on demand side management, demand side planning, we often see discussion of a lost opportunity when there are new homes built, new businesses put in. Once you decide on a fuel choice or the amount of weatherization in the home, the type of lighting in the commercial business, you've made the capital investment. You're not going to go whip it out a year later. It's always easier to make those changes when a new facility or new home is being built.

(Source: Transcript Nov. 19/03, p. 63, ln. 5)

73. Mr. Chymko offered that the volatility issue raised by Newfoundland Power as an objection to introduction of the demand energy rate is not unique to this jurisdiction but similar issues are faced by other utilities and other jurisdictions which have the demand energy rate.

(Source: Transcript, Nov. 19/03, p. 68, ln. 6)

74. In reference to Mr. Brockman's objection to the introduction of the demand energy rate and a statement that it was not needed for Newfoundland Power since it is the only customer in its class, Mr. Chymko stated:

We believe the demand energy rate is required to ensure that there is equity or fairness between the Newfoundland Power DISCO and Newfoundland Hydro DISCO, the remaining customers.

(Source: Transcript, Nov. 19/03, p. 70, ln. 25)

75. Ms. Tabone also offered this criticism of Newfoundland Power's position:

... this idea of, you know, they want energy efficiency, ... on the energy side, is ignoring the marginal cost of demands.

(Source: Transcript, Nov. 19/03, p. 73, ln. 1)

76. In reference to Newfoundland Power's suggestion that any storage modification would increase the likelihood of spillage and result in less than optimal use of generation resources, Mr. Chymko indicated that that issue is dealt with in other jurisdictions by way of a performance penalty.

(Source: November 19, 2003, transcript, p. 75, ln. 23)

77. In reference to the proposal by Newfoundland Power that both utilities combine to do a joint marginal cost study, Mr. Chymko stated that there would be a concern around a joint effort regarding the sharing of proprietary information.

(Source: Transcript November 19, 2003, p. 48, ln. 1)

78. Mr. Brockman, in his evidence, admitted that to involve Newfoundland Hydro and Newfoundland Power in one marginal cost study would require allowing Newfoundland Power access to proprietary information pertaining to Hydro.

(Source: Transcript Nov. 18/03, p. 88-89)

### **Demand/Energy (Osler / P. Bowman)**

79. Both Mr. Osler and Mr. P. Bowman supported the introduction of a demand/energy rate. Mr. Osler stated:

The general perspective of our evidence is that it provides a price signal and a price signal generally from an economics perspective is something that helps move towards efficiency.

(Source: Transcript, Nov. 13/03, p. 138, ln. 22)

80. Mr. P. Bowman testified that large wholesale customers such as Newfoundland Power would have both demand and energy charges, stating that would be the norm. Mr. P. Bowman made reference to two notable exceptions, both with specific circumstances, in the Yukon and Northwest Territories, which are dealing with isolated diesel systems.

(Source: Transcript, Nov. 13/03, p. 138, ln. 11)

81. On the need to carry out a marginal cost study before implementing a demand energy rate, Mr.P. Bowman testified as follows:

I don't see the link between the two, in terms of the items we just talked about in regards to the demand energy rate. The marginal cost study doesn't change the fact that most other wholesale or retail utilities seem to face this type of rate structure. It doesn't change the fact that there will be some form of price signals. Someone may argue whether they're exactly the right ones, but right now, there's no rate related price signal regards to peak loads, so it's hard to know what's there, in terms of DSM that could be easily accomplished. So I don't necessarily see the link.

(Source: Transcript Nov. 13/03, p. 146, ln. 8)

#### ... I don't think it's a reason to delay implementing a demand energy rate.

(Source: Transcript Nov. 13/03, p. 146, ln. 25)

82. Mr. P. Bowman testified in reference to demand side management, the demand energy rate and the right price signal:

I want to be cautious about – demand side management is not normally thought of as something that utilities jump up and down about and get real excited about. It's usually something that's more thrust upon them, in terms of their normal way of thinking about it. Because in general, there is not a lot of profit motivated, if I want to be that simple, types of incentives to get involved with demand side management. Moving to a demand energy rate would send a better price signal so that people sitting in this room in a Newfoundland Power GRA, I presume it's this room, can sit there and know that curbing their peaks will reduce the overall cost that customers have to pay immediately on the bills. That type of incentive becomes clearer in the pricing sent to Newfoundland Power. I am not convinced that it's going to, you know, cause a big incentive for Newfoundland Power to run out and start a big demand side management program on their initiative, in and of itself, if that's what you're asking.

(Source: Transcript Nov. 13/03, p. 164, ln. 8)

83. Mr. Osler and Mr. P. Bowman testified as to the expansion necessary in the system to accommodate Newfoundland Power's expansion into electric space heating. Mr. Osler testified:

Use of electricity to provide space heat in a home, for example, is what I'm thinking of, and it is generally perceived that if you take oil or diesel and you

transform it into electricity and then use it to heat a home, it's not viewed as efficient from the point of view of energy use.

(Source: Transcript Nov. 13/03, p. 132, ln. 15)

It would also expand the costs because as you're running the oil facility to do that, you are contributing to the extra cost of the whole system, which all customers will be tending to be addressing through, whether its RSDs or fuel adjustment rates or whatever, and you're having more of an adjustment to do because you have more of that type of use than what might otherwise be the case if somebody changed it.

(Source: Transcript Nov. 13/03, p. 134, ln. 9)

84. Mr. P. Bowman also testified as to electric heat and peak:

I'd want to underline the point that we're talking about electric heat a lot in regards to the peak. It's not only a concern in regards to the peak. There's a - to go to the Yukon example, there are systems up there that are diesel systems that are not capacity constrained. There's more than enough diesel plant there to supply the peak, but there's still a prohibition on electric heating in those communities because supplying that energy via burning it in a diesel engine and then supplying it down the wires to the people's houses with all the associate losses is a very inefficient use of the power, and the prices don't necessarily reflect that.

(Source: Transcript Nov. 13/03, p. 135, ln. 8)

85. Mr. P. Bowman also testified:

... So to the extent that the system is having to grow and build new plant and make investments in Island Ponds (sic) or whatever other options are available, Holyrood, the next Holyrood unit, and that's being brought about as a result of electric heat growth, everybody's rates are going up. So I don't know whether the downside quite correlates in the short term but over the long term to the extent that the load on the system doesn't grow, the relative percentage of good low cost hydro that's been here a long time makes up a bigger portion of what's serving the loads today and the average price is lower.

(Source: Transcript Nov. 13/03, p. 136, ln. 22)

### **Demand/Energy (D. Bowman)**

86. In reference to the implementation of a demand energy rate, Mr. Doug Bowman stated:

Yes, the demand energy rate, the wholesale rate discussion goes back many years, back at least to 1990, I think the Stone and Webster report showed it going back to 1989 even. The benefits of a demand energy rate have been well documented. Newfoundland Power itself was proposing a demand energy rate back in 1990. They gave a number of reasons for that. One was linked to demand side management efforts, but also, as Mr. Brockman stated, it's widely accepted practice, it's consistent with the principle of ensuring rates reflect cost and a signal cost separately and customer energy demand charges, you should be doing that where's its practical to do so. Now in that regard, Hydro has proposed a demand energy rate. All the experts have reviewed it. I think all of the witnesses are more or less in favour with it, in favour of the rate proposed with some minor modifications with the exception - that is with the exception of Newfoundland Power. Newfoundland Power has primarily the same objective it had during the last hearing that related to the revenue stability issue, but I believe they're strong it meets the primary criteria and that is it recovers the revenue requirement. It is fair in a sense that it reflects both the services provided by Hydro to Newfoundland Power, that is capacity and energy and it sends an efficient price signal in the sense that an attempt has been made to reflect the fact that demands are higher in winter and that its priced close to marginal energy costs on the And the overriding reason is that certainly Newfoundland energy charged. appears to be the outlier in not having a demand energy rate for a customer of this size, so there is strong regulatory precedents to have such a rate. ... I would urge the two parties to get together and resolve those issues, but in the event they are unable to resolve these issues, I would recommend that the Board direct implementation of that rate similar to the same rate proposed by the Stone and Webster report.

(Source: Transcript, Nov. 17/03, p. 45, ln. 18)

87. Mr. Doug Bowman stated in reference to designing a wholesale rate, that each expert would design a rate differently:

### I think it's fair to say that if you put – gave ten different rate designers the same mandate that you gave Stone and Webster you'd probably get ten different rates.

(Source: Transcript, Nov. 17/03, p. 113, ln. 8)

88. In reference to the sample only rate put forward by Stone and Webster, Mr. Doug Bowman stated:

... I think it will encourage more efficient use of resources over the current energy only rate.

(Source: Transcript, Nov. 17/03, p. 114, ln. 13)

89. In reference to the right of a utility to recover the revenue requirement with the implementation of a demand energy rate, Mr. Doug Bowman stated:

### The expectation is that it would recover the revenue requirement that is ultimately approved by this Board.

(Source: Transcript, Nov. 17/03, p. 115, ln.6)

90. In reference to the effect of a marginal cost study and whether that would assist the Board in implementing a demand energy rate, Mr. Doug Bowman stated that it was a fair assessment that the marginal cost study would only assist with what the rate structure itself might look like:

It might cause you to -- like I think the word somebody else used was "tweak" some of the numbers in the demand energy rate, but it does not affect whether or not you should implement the demand energy rate. You should implement a demand energy rate on the basis of fair costing principles and regulatory precedent.

(Source: Transcript, Nov. 17/03, p. 116, ln. 1)

91. In answer to a question of whether to go with the demand energy rate depending on having a marginal cost study and the results of such a study in advance of the demand energy rate, Mr. Doug Bowman stated:

### Not at all. Those recommendations are completely independent.

(Source: Transcript, Nov. 17/03, p. 116, ln. 16)

### **Burin Peninsula Transmission and GNP Generation Asset Assignment**

92. The assignments for the GNP and Burin Peninsula assets that have been adopted by Mr. Greneman in the cost of service study appear reasonable and justified. The assignments are based on tests that are commonly used in the industry, and that have been approved for use in this Province by the Board in past rate proceedings. There has been no evidence presented to suggest otherwise. The Consumer Advocate notes that it is only the Industrial Customer experts who take issue with the proposed assignment. All other cost of service and rate design experts

agree with the proposed assignments. On this basis, the Consumer Advocate recommends that the Board approve the assignment of these assets as proposed by the Applicant.

#### **Termination of Interruptible B Program**

93. Although the Consumer Advocate is empathetic to the Industrial Customer view that the Interruptible B program should continue, no evidence has been filed that would suggest that continuation of this program is beneficial to non-participating customers. As the marginal cost of capacity has not been identified, it is difficult to know the value of interruptible B load. The interruptible B program should be re-evaluated once the marginal cost of capacity is determined.

### **Appropriate Treatment of NP Thermal Generation**

94. The Consumer Advocate recommends that the Board continue with the current treatment of NP thermal generation in the cost of service study. However, the Consumer Advocate is in agreement with views put forward by the Industrial Customer experts (pages 35 through 39 of Pre-filed Evidence of Bowman/Osler) and Board experts (pages 29 through 35 of Pre-filed Evidence of EES Consulting). Some of the NP generation facilities serve more than one function, including both generation capacity for the entire system, and distribution capacity for localized areas. The costs of the generation should be split between these two functions in proportion to value. As noted by the Board's experts, NP generation should be treated more at an arms length agreement between Newfoundland Power and Hydro through the use of an NP Generation Tariff, making the cost and value of NP generation more transparent, and setting the framework for centralized generation dispatch in the future.

(Source: Pre-filed Evidence EES Consulting, p. 35, ln. 28)

95. On this basis, the Consumer Advocate recommends that the Board direct Hydro to commission an independent study of the treatment of NP generation. The study should assess and evaluate the value of NP generation to the system, and make recommendations on how the generation should be accounted for both operationally, and financially in the cost of service study and rate design. The study should be filed with the Board prior to text Hydro rate proceeding.

### Marginal Cost and Rate Design Study

- 96. The Consumer Advocate recommends that the Board direct Hydro to undertake a marginal cost study, and evaluate, and make recommendations on how its rates can be re-designed to better incorporate marginal cost principles and promote market efficiency. The report should make specific recommendations regarding the introduction of rate options for customers, and include a time-bound plan for implementation.
- 97. There are many reasons for such study:
  - NP-141 NLH indicates that Hydro has not undertaken a marginal cost study in over 10 years.
  - Hydro proposes to continue with rates that do little to incorporate marginal cost principles, and has no plans to provide customers with rate options that might provide them a level of control over their bills.

(Source: IC-186 NLH).

- Rate designs that incorporate marginal cost principles promote efficient consumption decisions by consumers, consistent with conservation, demand management and global climate change initiatives.
- As noted by Newfoundland Power in its June 1997 report entitled *A Study of Innovative Approaches to Rate Design Based on Marginal Costs and Time-of-Use Design Principles*, time-of-day rates are common utility practice. According to a survey of 92 utilities conducted by Virginia Power in 1993, two-thirds of the utilities make time-ofday rates available to their residential customers (page 9). The report goes on to say that the implementation of marginal cost based rates on a voluntary basis creates customer choices while improving the economic efficiency of the power system (page 22).

• Industrial Customers have specifically requested Hydro to consider implementation of innovative rate options.

(Source: CA-156 IC)

- All experts to this proceeding have stated that such a study is useful.
- Such a study is not a prerequisite to the introduction of a demand/energy rate.
- 98. It is important to note that Newfoundland Power carried out a similar marginal cost and rate design study in 1997 as a result of a recommendation made by the Consumer Advocate. However, in spite of the benefits to consumers identified in the study report, and a positive review of the NP report by the Board's consultant, Newfoundland Power has yet to offer marginal cost-based rate options to its retail customers. In order to avoid a similar waste of consumers money like that which resulted from the NP study (\$150,000 for the NP study, plus the amount the Board spent on its own consultant's review of the NP study), safeguards must be established. In this regard, the Consumer Advocate recommends that stakeholders including the Consumer Advocate, the Industrial Customers and Newfoundland Power, by Board Order following this proceeding, be given the opportunity to review and comment on Hydro's terms of reference before work on the study commences and on the report once is has been completed. This should help to ensure that consumers receive benefits proportional to money spent on the study.

### A Separate Department for Service to Isolated Systems

- 99. The Consumer Advocate recommends that the next time the Board employs its financial consultant to undertake a review of Hydro's financial structure, it include in the terms of reference an audit of the rural deficit, and in particular, the component of the rural deficit related to supply of the Isolated Systems.
- 100. Although Hydro believes the current management structure as it relates to the rural deficit is working well, the rural deficit remains excessively high, in spite of cost reduction initiatives.

The average subsidy in 2004 is forecast to be \$4700 for each Isolated Rural Customer and \$800 for each Island Interconnected Customer. This places a huge burden on other customers in the Province who are paying for this subsidy through higher electricity rates.

- 101. In the case of the Isolated Systems, the subsidy is particularly large. A department with sole responsibility for serving the Isolated Systems would make that component of the rural deficit transparent, and provide direct management incentives to minimize the deficit while maintaining adequate levels of service. Under the current structure, there does not appear to be direct management incentives to reduce the deficit. The rural deficit reduction is not included in the list of key management performance indicators shown in NP-88 NLH. In addition, the current structure is not particularly transparent in that it is difficult for the Board to re-create the actual amount of the deficit. Creation of a separate department to supply the Isolated Systems could address both of these issues.
- 102. The Isolated Systems are fully-integrated systems, including generation (typically diesel) and distribution, meaning that the skill-sets necessary to supply these systems are quite different. Owing to the small size and remote nature of the systems, there is generally a need for staff with broader skills. In fact, Hydro recognizes this with the Diesel System Representative category of employees, who are assigned only to work in diesel systems and generally live in the communities they service.

(Source: CA-114 NLH)

103. An audit of Hydro's management of the rural deficit would provide consumers with greater confidence that all efforts are being made to minimize the deficit while providing adequate service to these customers. It would make the deficit more transparent, and help to alleviate concerns related to the huge subsidies now being received by these customers.

### Hydraulic Data Stream / Hydraulic Production Projections / RSP Calculations

104. In Consent #1, Agreement of Cost of Service and Rate Deign Issues, the parties stated:

The appropriate hydraulic data stream for both hydraulic production projections and RSP calculations is long term. The parties agree that Hydro has properly filed its case using the thirty year record at this time. The Board may consider using the full historic hydraulic data flow record in Hydro's next GRA after Hydro addresses discrepancies identified in the Akers Island Study and parties have had an opportunity to comment thereon.

(Source: Consent # 1)

105. In reference to the Board's considerations for Hydro's next GRA, it should be noted that Susan H. Richter of SGE Akers testified that whatever information is available should be used. Ms. Richter testified on October 28, 2003:

The best estimate for the next few years is the long term means. You are more likely to be right the longer the average you use, the more likely you are to be right. So you're taking more of a risk at being wrong. The other thing is you have more volatility. You know, a thirty year mean will float more than a long term mean. So you risk volatility but more – the essential point is that you are more likely to be right if you use the long term.

(Source: Transcript Oct. 28/03, pp. 14, ln. 23)

106. Pursuant to the terms of the Mediation Agreement, the Board is free to direct Hydro to use the full historic hydraulic data flow record in Hydro's next GRA and according to Ms. Richter that would be appropriate.

### **Conservation**

107. Hydro has come before the Board with the Hydrowise Program, which Hydro maintains will encourage people to conserve. However, Hydrowise has been initiated without (1) developing objectives to reduce the amount of electricity consumed by any particular person; (2) without developing objectives to reduce the amount of electricity produced by Holyrood or in the system generally.

(Source: Transcript Dec. 2/03, p. 35-36 (Banfield evidence))

108. Hydrowise therefore stands in marked contrast to the program initiated by the Iron Ore Company of Canada. Mr. David Porter, Vice President of Human Resources with the Iron Ore Company of Canada (hereinafter referred to as the "I.O.C.") testified:

Just a little bit about an energy conservation effort that we've got going at I.O.C. ... We've gone through an exercise of identifying high value opportunities for energy conservation. We've set and prioritized those actions and we've now developed a business case for achieving those targets and we're working through operations and engineering process. ... We have specific areas for electricity reduction and consumption, for reducing peak power loads and for smoothing our annual demand file. This didn't come without a cost which is somewhat the nature of the business we're in. We did an extensive audit at the cost of about \$150,000 earlier this year and committed thousands of hours of staff time. ... The energy conservation ideas are originally estimated to be able to save us about nineteen megawatts and we are scheduling to implement those ideas over about a five year plan. We also have additional conservation ideas that we're generating and working on every day.

(Source: Transcript Nov. 26/03, p. 61, ln. 1)

- 109. I.O.C. has appointed a new manager of energy in 2003. I.O.C. is taking advantage of what is offered under the Kyoto Protocol, the Conservation Plan for Canada.
- 110. Unfortunately, in this Province neither utility is showing any leadership in reference to adopting programs available through the Conservation Plan for Canada. Indeed, this is an area in which the Public Utilities Board could fill that void and provide some direction.
- 111. Hydrowise appears to have been devised in anticipation of this hearing. In terms of conservation it is noteworthy that more effort seems to be made by Newfoundland and Labrador Hydro to provide information to the traveling public about the road conditions through "The Highways Report" as sponsored by Hydro on a local radio station. But roads are not a part of Hydro's mandate. Electricity and conservation are. The fact that Hydro would embark upon a public relations exercise to advise travelers of the road conditions, while ignoring the conservation messages which should be given to the public through that same medium, gives some indication of the priority in which Hydro places conservation from a policy perspective.

112. In reference to Hydrowise, Hydro, like Newfoundland Power, has resorted to inserts and print advertisements. Hydro obviously have not considered the admonition provided by Barbara Mullally-Pauly, who testified before this Board at Newfoundland and Labrador Hydro's previous rate hearing and who has worked in the office of Energy Efficiency and Natural Resources Canada since 1976. On October 26, 2001, Ms Mullally-Pauly testified:

And one thing I'd like to say right now is that if publications worked, if printing material worked ... I could swear from the amount of paper we've produced and the amount of information that we, and the public utilities, and the provincial governments, and the oil suppliers, and everybody else has produced in the last 25 years, we could have insulated every single home in Canada to such an extent that none of our programs would be necessary today. But the truth is just producing information doesn't work.

(Source: Transcript Oct. 26/2001, p. 13, ln. 99)

- 113. Hydro should be directed by the Board to embark upon a conservation program with specific targets and objectives. Consumers have indicated an interest in conservation objectives and I the Climate Control Plan for Canada.
- 114. Mr. Terry Locke of the Great Humber joint councils testified as to interest in the Climate Control Plan for Canada, "... anything that we can either get down to the savings for our residents and the people we represent is something that we would definitely promote for the region."

(Source: Transcript Nov. 25/03, p. 40, ln. 19)

115. Mr. Michael Lacey, a concerned citizen testified in Corner Brook that he had electric baseboard heating and that he would take advantage of the Climate Control Plan for Canada and recommend it to others.

(Source: Transcript Nov. 25/03, p. 128, ln. 7)

116. Mr. Lacey also indicated that he would take advantage of time of use rates:

I think a lot of the consumers ... are educated and they do know that there's ways to improve their electricity rates. Most people don't have the money to put upfront, extra insulation or extra I guess means or buy new R2000 homes but if

### there is any way for a break in any increase .... In the rates of electricity I am sure everyone would go for it if they were educated on it.

(Source: Transcript Nov. 25/03, p. 129, ln. 8)

117. In the Corner Brook hearings, Mr. Isaiah Hand addressed issues of conservation and consumer education in an effort to keep rates stable.

(Source: Transcript Nov. 25/03, p. 137-144)

118. In Stephenville, Cator Best, Deputy Mayor of Kippens, indicated that he would certainly be interested in time of use rates.

(Source: Transcript Nov. 24/03, p. 52, ln. 6)

119. Michael J. Tobin, Chair of the Economic Development Committee for the Town of Stephenville, and Councillor in Stephenville, agreed that the Public Utilities Board should take a more activist role in promoting conservation and showing greater efficiencies brought to the dual systems of Newfoundland Power and Newfoundland & Labrador Hydro.

(Source: Transcript Nov. 24/03, p. 45, ln. 5)

### **Billing Format**

120. Both utilities should be required to have a common format for their statements of account for the kilowatts required to energize various appliances. Such a format should provide information to consumers concerning energy usage. Barbara Mullally-Pauly stated:

Definitely, we find that when people get direct feedback and understand how much they are spending its very effective.

(Source: Transcript Oct. 26/2001, p. 28, ln. 29)

### Meter Reading

121. Newfoundland and Labrador Hydro should be commended on their efforts to read meters on a monthly basis. The reading of meters on a monthly basis and providing information to

consumers on consumption is an important practice and an invaluable tool to assist consumers in conservation. The reading of meters and reporting to consumers in reference to electricity consumption on a monthly basis is the foundation to good conservation practices.

### **Blue Line Innovations Inc. Presentation**

- 122. The presentation of the Tuff brothers of Blue Line Innovations Inc., was particularly effective. Consumers would be well served if they had the option to monitor their kilowatt usage as advocated by Blue Line. Unfortunately, Blue Line will not have access to meters unless the utilities and the Public Utilities Board support this initiative. While Newfoundland Power has announced their intention to introduce the technology in 100 homes, Hydro has announced no similar plans.
- 123. The Blue Line initiative is one the Board should remain apprised of and support. This is a useful conservation device which will promote the wise and efficient use of electricity by consumers. The end result will be that electricity is provided to the consumers of the Province "at the lowest possible cost". [*Electrical Power Control Act*, 1994, s. 3(b)(iii)] Indeed, any reduction in consumer demand for electricity could only assist in bringing down costs generally.

### **Legislation**

124. In P.U. 19 (2003) the Board chose to adopt the position that the Stated Case limited the Board's jurisdiction to regulate a public utility's return is limited to regulation of its return on rate base. The Board concluded:

The Board finds that it has no jurisdiction under the Act to require payment by NP into a reserve account or otherwise deprive NP of any amount which is within the allowed return on rate base as fixed and determined by the Board pursuant to Section 80(1) of the Act.

(Source: Order No. P.U. 19 (2003) p. 26)

125. Because of the inability of the Board to regulate on rate of return on equity, the consumers of the province are left exposed. The Board's triggering mechanism for early review where a utility over-earns on equity is stated as follows:

The Board will establish a mechanism tied to the observed rate of return on regulated common equity which may trigger an early review of the Formula and cost of capital. Where the actual rate of return on regulated equity in any intervening year exceeds the cost of equity determined by the Formula by more than 50 basis points, then NP will be required to file a report with the Board in its annual return settling out the circumstances and facts contributing to the difference.

(Source: P.U. 19 (2003))

- 126. With respect, we see here no triggering mechanism at all. The mechanism filing a report with an annual return is toothless and therefore unacceptable. The consumers of the province can pay to the utility more than what was ever intended. A remedy is required here.
- 127. The Board has within its legislative competence the right to recommend legislation that will "in its judgment" protect the interest of the public and the public utility by transmitting such bills to the Attorney General.

(Source: *Public Utilities Act*, 1990, c. P-47, s. 83)

- 128. Given the problems associated with the Act, why hasn't the Board met with the Attorney General and requested the appropriate amendments? Only amended legislation which authorizes the Board to provide a rate of return on equity, as opposed to rate base, will protect the consumers of the Province. The time for the Board to act is now, and not after utilities have again over-earned on equity.
- 129. Following this hearing, consumers will be in an unenviable position a Board without legislative jurisdiction to claw back any over-earning on a utilities' Rate of Return on Equity. Without any further delay, the Board is urged to request the amendment required to protect the consumers of the province. This is a circumstance which cannot be delayed. It requires urgent and immediate attention. Without such legislative support the use of the Automatic Adjustment Formula should be curtailed.

#### Automatic Adjustment Formula

130. The Board decided on an Automatic Adjustment Formula in P.U. 16 (1998-1999). In coming to its decision the Board stated:

The Board is of the view that there is merit to a formula, in light of the cost burden of a full cost of capital hearing and the potential savings to consumers which could be realized. The Board also believes that the adoption of an automatic adjustment mechanism will create greater predictability, which will thereby reduce the risk of regulatory uncertainty. In the opinion of the Board a mechanism to facilitate an annual review at modest cost will be of benefit to the ratepayer and to the company.

(Source: P.U. 16 (1998-1999), p. 102-103)

131. In coming to this conclusion, the Board stated:

In exercising its discretion to convene a hearing, the Board will ensure that the interests of consumers are protected. The Board has a responsibility under the *Electrical Power Control Act*, 1994, to implement the power policy of the province which requires that the power sources and facilities are managed and operated in a manner "that will result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service". (Emphasis added)

[Electrical Power Control Act, 1994, Sec. 3(b)(iii)]

132. The Board conclusion in Order No. P.U. 19 (2003) that in the Board's view the use of the formula has contributed to stable rates for consumers and lower regulatory costs since 1998 is debatable. The Automatic Adjustment Formula was in place for the years 2000, 2001 and 2002. In the year 2000 the utility earned over \$3,200,000 more than its forecast return on regulated common equity. In 2001 the utility earned \$4,800,000 more than the return on regulated common equity. And in 2002 earned more than \$3,500,000 on regulated common equity. Simply put, the formula has not worked because the utility has been over-compensated in each of the formula years. Consumers therefore, are concerned with the ability of the Board to monitor the Automatic Adjustment Formula as intended.

(Source: P.U. 19 (2003), p. 65)

The Board will continue its practice of undertaking annual reviews of company expenses and other financial and operating information of interest to the Board. Factors such as growth and sales volume will be monitored and a hearing will be convened by the Board on its own motion to consider revision in the company's revenue required if there is reason to believe that the adjustment mechanism has led or would lead to a level of earnings above what the Board believes to be just and reasonable.

(Source: P.U. 36 (1998-1999), p. 101)

- 134. Not only did the Board fail to keep this commitment but it was discovered in a subsequent hearing that the Board's Financial Consultants were not completing annual reviews on a timely basis. Why would consumers support an automatic adjustment formula for Newfoundland and Labrador Hydro when the formula clearly has favoured the utility monetarily in the case of Newfoundland Power?
- 135. It should come as no surprise that Newfoundland Power proposed that the formula be used for a further three year period for 2004, 2006 and 2007. What is surprising is that the Board approved the use of the formula for a three year period without having the legislative jurisdiction to provide a remedy if that utility over-earns on its equity.

(Source: Order No. P.U. 19 (2003))

- 136. Until the Board obtains from the legislature the statutory changes to allow regulation on equity, the continuation of the use of an Automatic Adjustment Formula by the Board is injurious to the interests of consumers generally and therefore unsustainable.
- 137. The consumers of the Province would only agree to the continuation of the formulae, both for Newfoundland Power and Newfoundland and Labrador Hydro if legislation is amended. If legislation is not amended to allow the Board to move from rate base regulation to regulation based on equity, the Board should rescind use of any formula immediately.

#### Lifeline Block

- 138. The Consumer Advocate supports a change in the lifeline block consistent with the three tier proposal.
- 139. On December 11, 2003, the Board requested Hydro to write those who presented during the public hearings in Happy Valley-Goose Bay and to Mayors of the affected communities, to provide particulars of the proposed lifeline block changes. Hydro did so on December 19, 2003. The pamphlet "Questions and Answers on the Lifeline Block Proposal" provides an informative description of seasonal electricity usage for those currently on the lifeline block.
- 140. The hearings in Goose Bay revealed a variation of opinion without the implementation of the proposed new rate structure.
- 141. In an effort to resolve the concerns of those most affected, it may be best if the proposal was put into effect on a one year trial basis. If residents are satisfied following that one year trial, the proposal can be adopted into the future. Lacking such support, a new lifeline can be developed which is consistent with the report "A Review of the Adequacy of the Lifeline Block on Diesel Electric Systems" (CA-13 NLH).

### Proposed Labrador Interconnected System

- 142. The consumers of Labrador West do not believe that their proposed rates reflect the actual cost of service for the residents of Labrador West. Uniform rates for the Labrador Interconnected System will realize more than \$4,000,000 in additional costs over time for consumers in Labrador West. The consumers of Labrador West have made a convincing argument that their own electrical system serving Labrador West is separate from the system serving Labrador East.
- 143. Complicating the matter is that the proposed integration at this time could have an adverse effect on this year's collective bargaining process because there are benefits under the current

collective agreements for employees of I.O.C. and Wabush Mines to compensate employees for some electricity rates.

- 144. The consumers of Happy Valley-Goose Bay support an integrated rate. That was not the position of all of the intervenors from Labrador who presented in Happy Valley-Goose Bay.
- 145. The mandate of the Consumer Advocate is to represent all of the consumers of the Province. In this particular case there are competing interests. The consumers of Happy Valley-Goose Bay support one position, the consumers of Labrador West the other.
- 146. The Consumer Advocate submits that the Board should carefully examine all of the evidence so that the Board's decision ensures that there is no undue subsidization between ratepayers in Labrador West and Labrador East.

### **Conclusion**

147. These are the written submissions of the Consumer Advocate. Oral submissions will be made on the 16<sup>th</sup> of January, 2004.

DATED AT St. John's, Newfoundland and Labrador, this 12<sup>th</sup> day of January, A.D., 2004.

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