<u>In The Matter Of</u> a General Rate Application (the "Application") and as subsequently revised on December 6, 2006 (the "Revised 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 SUBMISSIONS
OF THE
CONSUMER ADVOCATE

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INTRODUCTION

1. The Consumer Advocate supports Hydro's request that it made on January 22, 2007 at the opening of the hearing (p. 18) for the Board to approve, as final, the interim rates that the Board has approved on the basis of the negotiated settlement agreements that have been filed with the Board.

2. It should be noted however, that since the appearance of the parties before the Board on this GRA hearing, the Consumer Advocate has been contacted on behalf of the Western School District in relation to the proposed elimination of the Burgeo school rate class. In the Rates Evidence of Mr. Glenn Mitchell dated August 3, 2006 at page 7 it stated:

> **"The Burgeo School rate class, which previously received a preferential rate, is no longer active since the school premises have a new owner. There is no longer a requirement for a rate schedule for the Burgeo School."**

3. As explained to the Consumer Advocate on behalf of the Western School District, while the former physical school building has a new owner, a new school now owned by the Western School District was built to take the previous school's place. The Consumer Advocate understands that construction of the new school commenced in May of 2002.

4. During Hydro's last GRA the Board received a statutory direction from Government pursuant to S. 5.1 of the EPCA wherein the Lieutenant Governor in Council directed the Board <u>inter</u> <u>alia</u> to:

"(vii) continue to charge the preferential electricity rates historically charged to provincial government facilities, including schools, health facilities and government agencies, in rural diesel serviced communities and the Burgeo school and library."

5. Given that the statutory direction was given in August, 2003, well after the construction of the new school commenced, it is logical to assume that Government intended for the preferential rate to apply to the new facility. Hence, from a jurisdictional point of view it would appear that the preferential rate for the Burgeo school and library should not be eliminated absent a further direction authorizing the same. The Consumer Advocate should like to point out that this issue has been discussed with Hydro and that Hydro will be making its submissions on the matter to the Board.

6. Beyond that issue this submission will address:
   I. Distribution Reliability Policy and Plan
   II. Additional Tracking of Performance Relating to Customer Service
   III. Benchmarking Key Performance Indicators Against an External Peer Group
   IV. Automatic Adjustment Mechanism for Rate of Return on Rate Base
   V. Integrated Resource Plan
   VI. Conservation

7. The Consumer Advocate would also like to take this opportunity to thank the Board, Board Staff and Counsel, Board -Appointed Facilitator, and all the parties to the negotiated agreements for their roles in making this GRA proceeding an efficient and constructive process.

I. DISTRIBUTION POLICY AND PLAN

8. The Board of Commissioners of Public Utilities (hereinafter, the "Board") has the general supervision of all public utilities in the Province of Newfoundland and Labrador pursuant to s. 16 of the Public Utilities Act R.S.N.L. 1990 c. p-47.

9. Pursuant to s. 4 of the Electrical Power Control Act, 1994 S.N.L. c. E-5.1 (the "EPCA"), the Board in carrying out its duties and exercising its powers under the EPCA or the Public Utilities Act "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."

10. The power policy of the province provides, in part, in section 3 of the EPCA that:

> **"(b) all sources and facilities for the production, transmission and distribution of power in this 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 the province having equitable access to an adequate supply of power,**
> **(iii) that would result in power being delivered to customers in the province at the lowest possible cost consistent with reliable service," (emphasis added)**

11. The importance to consumers of receiving reliable power at the lowest possible cost cannot be gainsayed. It is a right grounded in the power policy of the province.

12. In its written pre-filed evidence Hydro clearly and appropriately states the importance of this right to consumers and the corresponding responsibility it places upon Hydro:

- **"The prudent management of costs, without compromising safety and <u>appropriate levels of reliability</u>, is standard operational practice. Customers require a reliable supply of energy but are also clear they want electricity rates to remain at reasonable levels." [Corporate Overview - p. 12, lines 13-16] (emphasis added)**

- **"Hydro, as the primary generator of electricity for the Province, has a responsibility to provide power at least cost." [Corporate Overview - p. 16, lines 21-22]**

- **"The Company's approach to date has been to study the alternatives and take a sound course of action supported by evidence and best practice. The overriding principle in these decisions is to ensure <u>that the customer benefits from the decision from both a cost and reliability perspective</u>. Hydro anticipates increased investment will be required both operating and capital, into the future. It will continue to apply the same level of analysis to any investment decision and is currently expanding capital justification principles to major operating projects." [Regulated Activities Evidence - p. 15, lines 7-14] (emphasis added)**

13. Hydro's President and CEO, Mr. Ed Martin, made several important observations in his testimony in relation to cost and reliability. The following extracts are from Mr. Martin's evidence before the Board on January 22, 2007:

- **". . . I believe cost should be driven by what it takes to maintain the reliability criteria we set. <u>So the first thing we have to do is set some reliability criteria, and when we set reliability criteria, that gives us a frame in terms of what to base our thinking on. And then following that, we put together a comprehensive maintenance plan.</u>**

And once we have that comprehensive maintenance plan and philosophy in place that's going to drive maintaining existing assets or in some cases it's going to tell us we have to replace them. That is what's going to drive your op costs and your capital costs. So that's the flow, the way I see it." [page 57, line 25 to page 58, line 14]

- **". . . and I believe that at hearings such as this we should be focused, you know, primarily from an operating cost perspective, on reliability criteria and a long term maintenance philosophy and plan. And I think that would be high value as we move forward to have experts, in terms of operating and engineers, operating people and engineers on both sides talking about those kinds of things and getting that aligned, then generally costs will flow from that. . . <u>But primarily the cost should be driven by how we land on what the proper reliability criteria are and what the proper maintenance philosophy is.</u>" [page 59, line 15 to page 60, line 6]**

- **"So if I could just talk about setting the reliability parameters just in my own mind and why we are going to have some interesting discussions around that. Primarily, it's an iterative process. . . Several factors I think have to be considered. And this is not an exhaustive list, this is just some of my own thoughts and have to be developed further. This will fall to Mr. Haynes though in terms of applying this, I mean, he's the one accountable for it. So I'm just giving some principles the benefit of some of the thinking that we've had. But we got to consider things like are we an isolated system or not. . . Other jurisdictions are critical. What are they doing on cost basis, what's their safety record, what's their environmental record, what's their weather like in comparison. We also then have to look at, okay, and we've done some of this in our groups, you take that data and you feed it into your operating people and your engineers and you say, <u>can you give us an idea of how much we can improve and maintain without a significant cost increase. That's not a final thing, but you need to know that, you need to know when the trip points are. . . We have to run those kinds of things and bring that piece of data back in and make sure we understand that</u>. We have to understand their maintenance philosophy. <u>We have to know what the minimal standard for</u>**

<u>reliability that has to be achieved</u>. I mean there's a certain minimum level that we just can't go under. <u>What are customer expectations. We have to understand what they are</u>. And then I believe what happens then is that we run those numbers and we sit down internally and obviously it's going to be with some other folks from the Board and the Consumer Advocate, other Intervenors and I think by virtue of reviewing that data on an iterative once, twice, three times, you're going to start to land on a set of parameters and likely it's going to be in a band that we are comfortable in agreeing to, but it's going to take, I think, a few times to go through that. So basically, you know, set some standards, cycle them around, get some cold eyes imput on that, cycle again and generally, as I said you start to land in around the parameters. And you'll never - - I think it's going to be difficult to get to a single point. I think you're going to come up with a band that we're probably saying, yeah, if we're in that band, that's a reasonable place to be. <u>Now once you have that, once you have those reliability parameters, then you get down to maintenance planning. That's going to drive your maintenance planning as well as in addition to parameters you're also going to have your manufacturer specs, you're going to also overlay some more thinking are we different because we do not have back up systems. We have to go to our operating folks in the field and our engineers who have been in this business for a long time and know this business inside out. And armed with that, they have to come up with a comprehensive long-term maintenance plan</u>." [page 60, line 22 to page 64, line 16] (emphasis added)

14. At pages 79-80, Mr. Martin emphasized the high importance of setting the reliability parameters:

"I think, you know, we have to put the time into the actual understanding of the reliability criteria and the maintenance philosophy. Once we get that right, as I said earlier, you know, the cost impact will fall out. . . but generally the cost will become an outcome and <u>I think our highest value of work is to spend upon setting that basis</u>." (emphasis added)

15. At page 80, Mr. Martin addressed the issue of determining the value customers place on enhanced reliability:

> **"Q. . . . let us assume for the moment that there would be extra costs - in one scenario let us assume that there'd be extra costs for enhancing the reliability, take that as a given.**
>
> **A. Okay.**
>
> **Q. How does Hydro go about determining whether customers really value what you're aiming to do, so that for them it's worth the candle.**
>
> **A. Well that would have been taken into account in respect to setting them. As I mentioned, one of the parameters was customer expectations and it's one of many, but that's the type of information that has to be incorporated in, in the setting of the parameters. And you raised some excellent points, I think what we're getting at, now this is not a simple process but you know, you can get there. But I believe that we need to incorporate that in a setting of standards. . . and we're going to have to overlay some reasonable thinking on that as well."**

16. Hydro states that its distribution reliability performance is below par:

- "We feel that the gap that we have between some of our reliability measures and where the industry is in general is substantial, and we have been trying to close the gap" [January 23, 2007 transcript, page 82, lines 10 to 12]
- "We are looking to fix our poor performance, and by virtue of that, to improve our overall reliability" [January 23, 2007 Transcript, page 82, lines 10 to 12]

- "Through this review it was identified that significant improvement is desirable and should be targeted" [CA 56 NLH, page 1 of 3, lines 17 to 18]

17. In response to its poor performance, Hydro has proposed a target improvement in distribution SAIDI and SAIFI of 20% over the average of the previous five year historical performance (Exhibit JRH-1, page 22). Hydro acknowledges that its 20% improvement target will have a cost over simply aiming to maintain current levels of reliability. As Mr. Haynes states:

- "I suspect that there may be some increase in cost" [January 23, 2007 Transcript, page 81, lines 14 to 16]
- In response to a question concerning why some areas don't get the same reliability as others, "It's not that these areas couldn't have the same level of reliability, but the cost would be significant" [January 23, 2007 Transcript, page 102, lines 1 to 80]

18. In fact, as stated in the NEB report entitled *A Compendium of Electric Reliability Frameworks Across Canada* (Information #3, page 5), "investments in reliability yield benefits, but, after some point, the benefits are less than the costs. This issue is recognized in the legislation and regulations in a number of provinces, which require that investments not be undertaken for reliability in the absence of other considerations such as efficiency and the prudence of incurred costs".

19. To put it in very simple terms, improving reliability has a cost – if it did not, Hydro would target a much higher level of reliability improvement than 20% given the importance consumers place on reliability.

20. Although Hydro acknowledges its poor performance in distribution reliability and that fixing the problem has a cost, it has not developed a plan to address the problem, for example:

- The magnitude of the problem has not been quantified. Hydro has not established a standard or target level of distribution reliability performance against which current performance can be compared. The standard/target should incorporate the value consumers place on reliability improvements, and if appropriate, should distinguish between different regions or systems (i.e., rural interconnected and isolated). As Mr. Martin states "We have to know what the minimum standard for reliability that has to be achieved. I mean, there's a certain minimum level that we just can't go under. What are customer expectations? We have to understand what they are." [January 22, 2007 Transcript, page 63, lines 7].
- There is no <u>formal plan</u> for closing the gap and achieving the standard beyond targeting a 20% improvement over the previous 5-year average. Hydro has not developed a list of options for closing the gap, including their cost and timing, and has not developed these options into a detailed plan for achieving the standards/targets in a manner that provides the greatest value to consumers.
- There is no mechanism in place for tracking and comparing performance relative to the plan to ensure Hydro is meeting its targets on schedule and within budget.

21. Mr. Haynes states that the 20% improvement target is only a starting point, "It's a

place to start. It's not the end game from the point of view of being an absolute thing that we're going to embrace for the next five or ten years" (January 23, 2007 Transcript, page 107, lines 5 to 9). The Consumer Advocate's position is that given Hydro has identified a problem with distribution reliability and acknowledges that there is a cost associated with bringing reliability up to standard, and that improvements must be made over a period of years, a policy must be developed first, along with a plan consistent with the policy for addressing the problem. Hydro's approach that has not identified the magnitude of the required improvement, the cost of achieving the improvement, and does not include a monitoring and tracking mechanism for ensuring customers are getting the projected value from the plan can be improved upon.

22. The Consumer Advocate acknowledges that Hydro already has significant reporting requirements as implied by Ms. Butler in her cross-examination of Mr. Bowman (Jan 23, 2007 transcript, pages 163 through 166). The fact does remain, however, that despite these reporting requirements, onerous or not, Hydro reports "poor performance" in distribution reliability requiring "significant improvement". It is the Consumer Advocate's position that the effectiveness of current reporting requirements must be evaluated in light of the high importance consumers place on reliability and cost. As stated in the NEB report, approximately 75% of all customer outage incidents and 85-90% of all customer outage hours were due to distribution system problems (Information #3, page 4). The Consumer Advocate therefore proposes:

That at the Board's direction, Hydro develop a plan documenting its approach that will ensure acceptable distribution reliability performance going forward.

The plan should address the issues identified above including targets, a plan for meeting those targets and a tracking mechanism for monitoring performance relative to the plan. The plan should be contingent and consistent with a distribution reliability policy approved by the Board. The plan would be the initial filing under the new distribution reliability policy. Hydro should likewise review current Board reporting requirements and make recommendations for streamlining the process, and in particular, eliminating any reporting requirement that is duplicated by reporting requirements stemming from the new distribution reliability policy. We anticipate that the distribution reliability plan would form part of the annual Capital Budget submission.

23. Mr. Haynes' evidence leaves little assurance for consumers that, absent a Board direction, consumers will ever see a comprehensive distribution reliability plan from Hydro. The following exchange between the Consumer Advocate and Mr. Haynes illustrates:

"Q. But if I heard Mr. Martin correctly yesterday, he was very much describing a process whereby there would be input of customers' expectations, there'd be technical input from Hydro, there'd be comparisons of other similarly situated jurisdictions so that we're comparing apples to apples. Then there would be envisioned a band of reliability and then he explained how once you arrive at that level of reliability expectation, then costs fall out of that. I mean, this is something that he- - that he appeared to understand in terms of the process and I'm just wondering why, having it formalized, if the suggestion as Mr. Martin puts it, this going to be done, how formalizing it would cause such a difficulty?"

Mr. Haynes:

Q. The difficulty right now is that we are not there, the

difficulty from the point of view of - - doesn't mean that we won't be there in 25 or "X" number of years, I really can't predict that. I know that from an overall point of view there are many factors to consider. . . I'm not suggesting it's not (sic) wrong to do, I don't think we're ready to tackle it right now." [January 23, p. 65, lines 16 to 25 and p. 66, lines 1 to 25 and p. 67, lines 1 to 2]

24. Given consumers have a right to least cost power consistent with reliable service <u>now</u>, and given Mr. Martin's clear appreciation of the need for setting reliability parameters which will drive costs, this issue should be tackled as a priority.

25. Mr. Haynes' evidence rather circularly argues that we should defer the setting of acceptable reliability standards until such time as we are approaching acceptable reliability standards. Mr. Haynes states at page 112:

> **"A. Yes, and if were down approaching some, I guess, <u>what we collectively thought was an acceptable standard of service</u>, maybe that's a time to consider it. I don't think it's necessary at this point in time." [January 23, 2007, p. 112] (emphasis added)**

26. In closing upon this issue, the Consumer Advocate believes that it is entirely fitting and appropriate for intervenors to bring forward ideas and proposals aimed at improving the regulation of utilities in our province. The Consumer Advocate brings forward the distribution reliability policy initiative with this in mind and in doing so recognizes that there is an onus to show that such a proposal adds value.

27. But the onus of showing "added value" should not be confused with an onus to show that the present regime is broken or deficient. If that were the onus, proposals for improvement would rarely succeed. In fact, the thrust of the Consumer

Advocate's submission is <u>not</u> that the current reliability reporting requirements and the level of scrutiny of capital budget applications is deficient. In fact, it would be reasonable to expect such requirements to continue to play an important role in a formal distribution reliability policy. Nor is it the submission of the Consumer Advocate that Hydro is blindly pursuing reliability improvements or that Hydro is spending too little or too much on reliability improvements. Rather, the questions to be asked include:

- Can our present regime be improved?
- Whether it is reasonable for Hydro to establish a standard or target level of acceptable distribution reliability performance against which performance can be compared?
- Whether the setting of reliability parameters is 'high value' as Mr. Martin indicated in his evidence?
- Whether it would be of value for Hydro to report annually to the Board identifying its current year's objectives, planned actions and projects that serve to maintain reliability at an acceptable level?
- Whether it would be of value for Hydro to provide a yearly Performance Report that assesses the results/effectiveness of the previous year's objectives, planned actions and projects?
- Whether such a regime would enhance the stakeholders' ability to objectively determine whether Hydro is providing reliable service at least cost?
- Whether such a policy would better enable the Board and stakeholders to view Hydro's capital budget proposals and operating budgets in a larger, better defined context?
- Whether such a policy would be consistent with the Board's duties to

implement the power policy of the Province?

- Whether such a policy would be consistent with the goal of providing power at the lowest possible cost consistent with reliable service?

28. The Consumer Advocate respectfully submits that these questions should be answered affirmatively.

II. <u>ADDITIONAL TRACKING OF PERFORMANCE RELATING TO CUSTOMER SERVICE</u>

29. Hydro states that it does not track such things as number of customer complaints per 1000 customers, percent of customer calls answered within 30 seconds, percent of customer outage calls answered and percent of new customer services installed and energized by the date promised to the customer (CA 2 NLH, lines 10 to 16). Hydro (Mr. Henderson) does not deny that tracking performance relating to the timely response to customer concerns is worth doing, but indicates that it has not been a big area of concentration and they have not put the effort there at this point [January 23, 2007 Transcript, page 19, lines 6 to 15].

30. It is the Consumer Advocate's position that tracking such information is consistent with Hydro's commitment to operational excellence in providing least cost, reliable power to the consumers of the Province as stated by Mr. Martin (Corporate Overview Evidence, page 12, lines 2-3). The survey documented in the McKinsey Report found that such services are of importance to consumers (Information #2), as did Hydro's own Customer Satisfaction Tracking Study (attached to CA-1, page 25, Figure 18: 2005 Cap Ratings).

31. Mr. Bowman notes that in the state of Vermont, all distribution companies are required to establish performance standards and performance monitoring and reporting on electricity service. Even very small distribution companies such as Barton Village[1] file reports with the Vermont Public Service Board documenting performance relating to call answering, billing and metering, percent of bills not rendered within seven days of monthly billing cycle, bills found inaccurate, percent of bills estimated (Hydro tracks this statistic - CA 4 NLH), average number of days to completion of a line extension, percent of customer-requested work completed on or before the promised delivery date, average delay days for missed appointments, customer satisfaction index, worker safety including lost time incidents and lost time severity, and reliability including SAIFI, CAIDI (SAIDI divided by SAIFI)[2] and worse performing areas [January 23, 2007 Transcript, page 204, lines 3 to 25 and page 205, lines 1 to 7].

32. Owing to the importance of such tracking to both consumers and Hydro in terms of its commitment to operational excellence, the Consumer Advocate proposes the following:

The Board direct Hydro to identify performance areas that are of importance to consumers and begin tracking and reporting its performance in these areas immediately. This reporting should be combined with the

[1]Barton Village is a municipal utility in Vermont serving 2100 customers in 2006 (http://publicservice.vermont.gov/electric/electric-utilities.html). This compares to Hydro's customer base of 35,000 (January 23, 2007 Transcript, page 49, lines 16 to 17).

[2]SAIDI and CAIDI performance are compared to baseline, not to exceed, measurements of f1.8 and 2.5, respectively.

reporting requirements specified in the new distribution reliability policy, so in fact, the policy might more accurately be called a Distribution Reliability and Service Quality Performance, Monitoring and Reporting Policy.

III. BENCHMARKING KEY PERFORMANCE INDICATORS AGAINST AN EXTERNAL PEER GROUP

33. Hydro acknowledges the importance of reporting performance in key areas relative to a peer group of similar utilities [January 23, 2007 Transcript, page 116, lines 12 to 17]. Hydro also acknowledges the importance of trending these data over time [January 23, 2007 Transcript, page 117, lines 21 to 25, and page 118, lines 1 to 12]. Mr. Haynes states that Hydro is committed to reporting its performance relative to a peer group using CEA data for reliability-related KPIs, and will review data sources and compile an appropriate peer group, and report its performance relative to this peer group for the remaining KPIs listed in Exhibit JRH-1. He goes on to say that compilation of this information may not be done in time for the next KPI Report which is due in the Spring, but it will certainly be done in time for the next review which is 2007 [January 23 Transcript, page 120, lines 1 to 17].

34. Owing to the importance of external benchmarking and the value of trending this information over time, the Consumer Advocate proposes the following:

The Board direct Hydro to initiate reporting of key performance indicators in Exhibit JRH-1 with performance externally benchmarked to a comparable peer group beginning with 2006 data. Reliability-related performance should be reported for the peer group in the next KPI report since this information is readily available. Hydro should report remaining non reliability-related performance data no later than the KPI Report on

2007 performance. In order to enhance the ability to trend performance, data for years dating back at least to 2003 should be compiled and reported consistent with Hydro's commitment at the 2003 GRA. (Appendix H of the Decision and Order of the Board No. P.U. 14 2004). We note that Hydro already has historical data for the reliability-related KPIs (January 18, 2007 Revision to CA 30 NLH).

35. Finally, Mr. Bowman was asked by Ms. Butler during cross-examination if he would agree to assist Hydro with identification of a peer group and sources of information relating to the external benchmarking undertaking (January 23, 2007 Transcript, pages 118 and 189). Mr. Bowman agrees to provide assistance to Hydro in this regard on behalf of the Consumer Advocate, and also offers to assist with development and review of the *Distribution Reliability and Service Quality Performance, Monitoring and Reporting Policy* referred to above if the Board should direct Hydro to proceed with the recommendations in this Final Argument.

IV. AUTOMATIC ADJUSTMENT MECHANISM FOR RETURN ON RATE BASE

36. In Order No. P.U. 14 (2004), the Board directed Hydro to submit a report containing a proposal for an automatic adjustment mechanism for return on rate base with analysis as to the impacts for consideration at its next general rate application.

37. The Consumer Advocate notes that the Board in No. P.U. 14 (2004) was not satisfied that there was sufficient evidence before it at that hearing to implement an automatic adjustment mechanism ("AAM") for Hydro.

38. Exhibit MGB-1 is Hydro's proposal for an automatic adjustment mechanism for Hydro's rate of return on rate base.

39. The evidence of Mark Bradbury given at the hearing is quite clear that Hydro's starting point (and end point) for its proposed mechanism was the Newfoundland Power formula for rate of return on rate base as established and later modified by the Board. [January 25, 2007 Transcript - p. 71, lines 15 to 18]

40. The evidence of Mr. Bradbury is that Hydro did not conduct an exhaustive analysis or review of similar mechanisms in other jurisdictions. Mr. Bradbury states that as part of its perusal, Hydro was unable to find a mechanism that was similar to the one that is in place for Newfoundland Power Inc. [January 27, 2007 Transcript - p. 71, lines 8 to 14]

41. The proposed mechanism for adjusting Hydro's return on rate base only differs from Newfoundland Power Inc.'s mechanism in one substantive area - the trigger point.

42. Hydro proposes that when its actual return on regulated equity exceeds the rate of return (as determined by the Annual Adjustment Formula for the Allowed Rate of Return on Equity) by 100 basis points or more, this will <u>trigger</u> an obligation on Hydro to file a report, as part of its annual return, that explains the variations in all of the cost of capital components. Hydro chose a 100 basis point trigger instead of the 50 basis point trigger in Newfoundland Power's return on rate base mechanism. At p. 8 of MGB-1, Hydro explains that the threshold trigger of 100 basis points reflects the range of actual rate of return on equity <u>implied</u> by the 30 basis point (+/- 15 basis points) range of the allowed return on rate base set by the Board in Order No. P.U. 40 (2004) for purposes of calculating excess earnings. In Table 4 of MGB-1,

Hydro calculated that given its assumptions at the time of filing of its GRA, its proposed formula would have permitted Hydro to over-earn on its regulated equity by $2.2 million without triggering the requirement for it to file a report with the Board as aforesaid. At page 9 of MGB-1, it states:

> **"The fact that Hydro's narrower allowed return on rate base range than NP's (30 basis points versus 36 basis points) leads to a higher implied range of return on equity (+/- 100 basis points versus +/- 41 basis points) is largely due to Hydro's smaller proportion of common equity in the capital structure as compared to NP (14% versus 45%)."**

43. Beyond this lone modification which was made in light of the differences in the range of actual rate of return on equity implied by each of the utilities' range of allowed return on rate base, Hydro proposes no further substantive modification to the Newfoundland Power automatic adjustment mechanism for rate of return on rate base.

44. At this juncture, it is worth re-visiting what the Board said at p. 87 of its Decision and Order in P.U. 14 (2004) in the course of explaining why it was not prepared to implement an AAM in that hearing for Hydro:

> **"The Board notes that the existing formula to adjust the rate of return on rate base for NP was accepted and implemented by the Board following a full cost of capital hearing at which specific evidence was reviewed. The resulting formula adopted by the Board in Order No. P.U. 16 (1998-99) reflects the complex relationship between rate of return on rate base and the cost of the various components of the capital structure of NP. <u>In the Board's opinion such a mechanism to automatically adjust NLH's rate of return on rate base would be similarly complex and would have to be designed to reflect the costs specific to NLH."</u> (emphasis added)**

45. Hydro's proposed formula and analysis pays insufficient attention to this admonition - which is not surprising given Hydro's early determination that the Newfoundland Power formula was to be the template.

46. The fact is that Hydro's embedded cost of debt basically determines 92% of Hydro's overall return on rate base, whereas the return on equity determines less than eight percent of the return on rate base (see MGB #5). As Dr. Cannon explained:

> **"Because of these two differences, the embedded cost of debt, as has already been put in evidence, the embedded cost of debt basically determines 92 percent of the overall return on rate base for Hydro, whereas the return on equity determines only somewhat less than eight percent of the required return on rate base. For Newfoundland Power, this split is more like 50/50, instead of 92 to eight. So it seems to me to sort of undermine the purpose and the credibility of Hydro's proposed automatic adjustment mechanism to, on the one hand, fix, at the constant rate for four years, fix at a constant rate for the life of the automatic adjustment mechanism, the cost rate on that component that makes up 92 percent of the return on rate base, but to allow year-by-year adjustments through the adjusting the return on equity for that component that accounts for only eight percent of the total return on rate base, and these proportions are dramatically different than those that are true for or experienced by Newfoundland Power, and therefore, I think that whether or not having a constant embedded cost of debt is appropriate for Newfoundland Power, that's an issue to be discussed some other time. Whether or not it's appropriate for them, it's not appropriate for Newfoundland Hydro to basically say, you know, we got an automatic adjustment mechanism, but guess what, we're not going to adjust 92 percent of it, by definition. We're going to keep 92 percent of it absolutely the same, even if we view that there will be some changes in the future, even if we both agree that the embedded cost of debt is likely to trend downward after the test year. We're going to ignore that. We are going to keep that 92 percent absolutely constant and only adjust that smaller eight percent portion." [Reference: January 25, 2007 Transcript, p. 106, line 7 to p. 107, line 22]**

47. Dr. Cannon recommended in his report that Hydro estimate, during the current hearing, its likely embedded average cost of debt for each of the years 2008, 2009 and 2010, based on the relevant interest rate forecasts for these years provided by its two lead underwriters and that these values, as either approved or amended by the Board in light of the testimony it hears from all interested parties, be pre-set and used in the AAM.

48. In keeping with Dr. Cannon's recommendation, in CA 218 NLH, the Consumer Advocate requested Hydro to provide Hydro's most recent forecast of its embedded costs of debt (ECDs) for 2007, 2008, 2009 and 2010. On January 12, 2007 Hydro provided its projection for the embedded cost of debt for 2007 - 2010 based on assumptions contained in Hydro's Regulated Activities Financial Projection 2007 - 2011 dated October, 2006 and as subsequently adjusted for changes noted in Hydro's December 6, 2006 revised GRA filing. Based on input received from its financial advisors, Hydro's projection for its embedded cost of debt for 2007 - 2010 is:

2007	**-**	**8.27%**
2008	**-**	**8.23%**
2009	**-**	**8.20%**
2010	**-**	**8.21%**

49. Dr. Cannon examined Hydro's evidence and found these projections to be reasonable.

50. The AAM proposed by Hydro would keep the embedded cost of debt in the

weighted average cost of capital ("WACC") calculation held constant for each year after the test year. Hydro's proposed AAM fails to reflect the WACC that the company is likely to experience in years beyond the test year. In fact, in Hydro's proposal, stakeholders would give absolutely no scrutiny to the appropriateness of the test year embedded cost of debt rate for subsequent years - until possibly <u>after</u> the fact - if the trigger was met. In response to the Board's counsel, Dr. Cannon stated:

> **". . . And the actual numbers, as everybody has emphasized, could deviate from the four embedded cost of debt numbers that I'm recommending on either side, could be higher, could be lower. But in my view by building in instead of a constant or fixed embedded cost of debt for those four years, if we built in the 826, 823, the 820 and the 821, my belief is that the chance that those numbers prove to be wrong, there's an equal chance that those numbers will be too high and an equal chance that they'll be too low, rather than building a bias toward having Hydro over earn its allowed return on equity. So Hydro's a unique situation, Hydro, so much of the return on rate base is determined by that one number, to sort of pretend that that one number is going to be the same for four years is a little bit like burying our heads in the sand. I guess there's some comfort in saying well, we'll just - - the one number we know or that we think we've got the best handle on is the test year number and we'll not think about the numbers after that, but if you're going to design a formula that's going to be in place for four years, I'd want to think about what those four numbers are going to be, if they amount to 92 percent or more of the required return on rate base." [Reference: January 25, 2007 Transcript, p. 156, line 18 to p. 157, line 24]**

51. To illustrate the point, on the facts adduced in this hearing it is clear that Hydro has a $200 million dollar debenture (AA Series) which will be re-financed in 2008 when it matures. It currently has a 5.50% coupon interest rate. It currently costs Hydro $11 million annually. Hydro's projection is that this will be re-financed at 4.48%

when it matures. If that happens the annual cost will be $8.96 million annually. Hydro's proposed formula would ignore this fact. Indeed, Hydro's proposed formula would pretend that the test year embedded cost of debt would remain the same even if the AA Series debenture was currently at 7.50% or, for that matter, 3%. The principle behind Dr. Cannon's recommendation cuts both ways. As Dr. Cannon stated in response to Vice-Chair Whalen:

> **"Q. . . . In terms of the principle, if the embedded cost of debt numbers that we're looking at today, forecast out to 2010 or so, were 8.26, 8.69, 8.75, 9.21, would you still be putting this proposal to this Board?**
>
> **A. I certainly would, because if we really believe that in rolling over the company's debt it was going to have to be rolled over at a higher interest rate and their revenue requirements for those years didn't reflect it, then I'm sure the company would be put in a bind, having to cut back on other necessary expenditures, maybe you know, short circuit on safety concerns or cut back on some needed capital spending that would be in nobody's interest. . ." [Reference: January 25, 2007 Transcript, p. 160-161]**

52. It is important to remember that what Hydro has brought forward for the Board's consideration is an automatic adjustment mechanism <u>for return on rate base</u>. The suggestion was made by Newfoundland Power's counsel in cross-examination of Dr. Cannon that "if theoretically one is going to start adjusting debt costs by trying to forecast out next year and the year after, one could apply that same principle, that same approach to forecasting other expenses. . ." such as fuel, salaries and depreciation costs. The spectre raised was that if "we went down that road" in GRAs we would be engaged in trying to forecast out any number of years into the future. The short answer to this *in terrorem* argument is that no one is suggesting that "we go down that road". Moreover, if Hydro is seeking to devise a formula to

adjust its return on rate base, is it not reasonable to ponder why they wish to adjust just less than 8% of it? Indeed, it was the Board's own independent financial consultants, Grant Thornton, who suggested in Newfoundland Power's 2003 GRA hearing that the Board consider the option of adjusting the AAF annually for changes in the forecast embedded cost of debt. (See NLH 26 CA) In NLH 26 CA, Grant Thornton's April 4, 2003 Supplementary Report is quoted from:

> **". . . We identified the changes in forecast versus actual embedded cost of debt as a second area, which deserved further consideration by the Board.**
>
> **The cost of debt is one component in the Company's overall cost of capital. Based on the current definition and application of the AAF the forecast cost of debt used in the AAF remains constant from year to year. However, experience has shown that, year to year, the actual embedded cost of debt varies from forecast. When the actual cost of debt is lower than the forecast cost, the Company has the opportunity to earn a higher return on equity while staying within the limits of the overall cost of capital or rate of return on rate base. . .**
>
> **One change to the AAF that would compensate for interest affects as described would involve modifying the Formula so it is adjusted annually for changes in the embedded cost of debt. This change may be appropriate if significant variations in the embedded cost of debt were anticipated in future years."**

53. Dr. Cannon was cognizant of the Board's observation in the Newfoundland Power 2003 GRA decision that "it would be contrary to the purpose of having an automatic adjustment mechanism if, once a formula has been established, the Board were to use variances from forecasts of requirements as they change." Therefore, Dr. Cannon suggests that these forecast values for the embedded cost of debt be pre-determined in this hearing - without the need for annual hearings or reviews into

the issue. This would be in contrast to what happens in Ontario. As Dr. Cannon explained, in Ontario "there is no issue with respect to whether the embedded cost of debt will be a fixed number or a number that changes each year. It's a number that changes each year." (January 25, 2007 Transcript, p. 133, lines 9-12) And at page 113, Dr. Cannon states, "In Ontario, I believe it (embedded cost of debt) does change each year, because new information is brought to the Board, not in a hearing process, but as part of the updating of the return on equity. . . The general information that's brought to bear on that (return on equity) is also used, I believe, in updating the debt cost as well."

54. So while it may be the case that other jurisdictions do not adjust the embedded cost of debt for subsequent non-test years **at the initial setting of the revenue requirement during the GRA**, that is not the same thing as saying that all other jurisdictions live with fixed ECDs during the lives of their AAFs. What is in evidence from Dr. Cannon is that Ontario has not needed to pre-forecast these ECD values because the OEB has used updated ECD values provided by the utilities to make annual changes to revenue requirement.

55. While the Consumer Advocate sees value in having automatic adjustment mechanisms in place, they should not be biased against either the ratepayer or the utility. The Consumer Advocate takes no objection to a trigger point which, if exceeded, requires the utility after the fact to detail the variations in all components of the cost of capital and to explain the circumstances or facts leading to such variations. It is then left to the Board to determine the most appropriate course of action which might involve calling for a hearing on cost of capital. However, these *ex post facto* processes take time and resources. The Consumer Advocate urges the

Board to reject Hydro's proposal and adopt the solution proposed by Dr. Cannon. The Consumer Advocate does not claim that Dr. Cannon's proposal is perfect but it is, with respect, superior to Hydro's approach which is tantamount to assuming without any analysis or probing that the ECD for the test year is appropriate to the years beyond the test year, and <u>limiting</u> ourselves to after-the-fact and potentially costly remedies in the event that the assumption turns out to be off-base. With Dr. Cannon's proposal we at least make an attempt to get it right with the best information available at, and tested during, the GRA hearing.

56. Both Dr. Cannon and Mark Bradbury of Hydro are in agreement that the adoption of Dr. Cannon's recommendations would not:

A) in any way disincent Hydro from seeking out the lowest possible costs of financing [January 25, 2007 Transcript, p. 42, lines 8 - 21; p. 97, line 15 to p. 98, lie 14]; or

B) in any way pose an administrative hardship upon Hydro [January 25, 2007 Transcript, p. 42, line 24 to p. 43, line 7; p. 96, line 19 to p. 97, line 14].

57. In light of this, the Board can adopt Dr. Cannon's proposal in the knowledge that the proposal would not restrict the ability of Hydro's management to lower costs, including debt costs, between cost of capital hearings.

58. Finally, there is no legal or regulatory impediment to the modification of the AAM as proposed by the Consumer Advocate. As noted, the Board's financial consultants previously suggested that the Board consider making year by year adjustments to the cost of the debt of Newfoundland Power. We submit that Grant Thornton made

this suggestion with full knowledge of the regulatory regime in place in this province.

59. Moreover, as the Board stated in Order P.U. 19 (2003) in the context of its discussion of Newfoundland Power's embedded cost of debt, "the real issue for the Board is how the benefit of these lower costs is passed on to consumers". [Order P.U. 19 (2003) p. 68]

60. The Stated Case decision of the Newfoundland and Labrador Court of Appeal makes it clear [see para. 21] that the Board is generally charged with balancing the interests of ratepayers and investors in the utility. The public utility is entitled to earn annually a just and reasonable return on the rate base in addition to those expenses that the Board may allow as reasonable and prudent. Ratepayers are entitled to power at the lowest possible cost consistent with reliable service.

61. The Stated Case makes it clear [see para. 36] that 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.

62. Interestingly, no one takes any issue with the Board's right and authority in this case to approve an automatic adjustment of rate base formula which would annually adjust less than 8% of the rate base, in recognition of the changes that may occur in Hydro's cost of equity beyond the test year. Can it be reasonably said that the Board should consider itself limited to *ex post facto* processes for the other 92% of Hydro's rate base? It is doubted that either the Court of Appeal or regulatory

principle would compel such a result.

63. The Consumer Advocate would suggest that the AAM <u>as modified</u> by Dr. Cannon's recommendation have a period of operation as proposed by Hydro in MGB-1, at page 10.

64. Should the Board reject Dr. Cannon's proposal, the Consumer Advocate would alternatively submit that the Board should re-visit Hydro's embedded debt costs on an annual basis. While this alternative proposal does to some degree offend the idea behind establishing a formula, it would be superior to having no formula at all in place, particularly in light of the extent to which Hydro's return on rate base is dominated by its embedded cost of debt. Again, following a suitable period of operation the Board and the stakeholders would have an opportunity to evaluate and adjudge its effectiveness and the extent of the burden it places on Hydro and the Board. Such a proposal would seemingly cause no injustice to either Hydro or its ratepayers.

V. INTEGRATED RESOURCE PLAN

65. As referenced in the opening statements of the Consumer Advocate and Industrial Customers on January 22, 2007, the Consumer Advocate does not wish to defer the initiation of the Integrated Resource Plan (IRP) indefinitely. Though there is no necessary or legal impediment to proceeding with the IRP in advance of the Province's Energy Plan's release, the expectation of the timely release of the Energy Plan, which may have implications for the IRP, does provide a practical reason to delay the IRP for a modest period of time. It is requested that the Board make an

Order that any party shall have leave to bring an application to the Board seeking directions on the IRP process at any time after 60 days following the public release of the Energy Plan in the event that it is released on or before the 30th of June, 2007. It is further requested that the Board make an Order that any party shall have leave to apply to the Board for directions should the Energy Plan not be released by June 30th, 2007 or should it become apparent that it will not be released by that date.

VI. CONSERVATION

66. The Consumer Advocate acknowledges that Hydro, both in its Application and through its executives, has expressed an intention to substantially increase its activities to encourage consumers to take action to conserve energy. The Consumer Advocate welcomes this commitment as evidenced by the following statements made in Hydro's filing:

- **"According to the 2005 Canadian Electricity Association Public Attitudes Research, 69% of consumers believe that utilities should be providing information about the efficient use of electricity and 65% believe that utilities should be delivering energy efficiency programs. This data supports Hydro's view that more effort is required in the area of energy efficiency and as the Province's prime generator of power, Hydro should work with Newfoundland Power and other partners to deliver information and energy efficiency efforts to consumers." [Corporate Overview - p. 15-16]**

- **"To assist consumers in the Province, Hydro will substantially increase its activities to encourage consumers to take action to conserve energy." [Regulated Activities - p. 18]**

- **"To support the initiative, Hydro will have an employee whose sole focus is energy conservation. The Energy Conservation Program**

Manager will develop programs, in consultation with partners, to bring about changes in energy conservation." [Regulated Activities - p. 18]

67. Mr. Jim Haynes testified (January 23, 2007 Transcript, p. 140-141) that Hydro is in the process of issuing a request for proposals to determine the potential for energy conservation in the province and to examine what different types of programs we might implement in Newfoundland and Labrador that will yield positive results in terms of energy conservation, with the results expected in the first half of 2007. The Consumer Advocate very much looks forward to Hydro's plan of action together with its goals and objectives.

68. The evidence in this case demonstrates that Hydro can and should play a key role in educating customers about the relative cost of the electricity product versus other means of heating, inparticular. As CA 19 NLH demonstrates, for example, there was a fairly significant cost difference between heating a typical home with oil versus electricity at current and the then proposed rates. Based on the September 15, 2006 price of furnace oil as posted by the Petroleum Product Pricing Commission, a consumer on the Northeast Avalon would pay an annual cost of $1,711.00 for oil to heat a typical home but would pay $1,989.00 at the then current electricity rates (and $2,081.00 at the then proposed rates). A typical Hydro customer in St. Anthony at the then proposed rates would pay $2,081.00 for electricity and $1,868.00 for oil.

69. Information which compares the costs of the product such as the foregoing is simply not known to the vast majority of consumers, accordingly they cannot be expected to take such information into account in deciding upon the most cost-effective

means of heating their homes.

70. Moreover, given the clear concerns over the thermodynamic inefficiencies related to the substantial losses on steam generation systems of oil-fired electricity being used for space heating, it is not in the interests of our electrical system as a whole that this type of information be kept from consumers. In response to a question about getting this information to consumers, Mr. Martin stated [January 22, 2007 Transcript, p. 105-106]:

> **". . . Yes, I think with respect to our customers, Hydro would be the right one to, you know, actually put the data out there and go after our customers. We have the connections, we have the ability and I would say absolutely we should be the ones putting some of that data out there."**

71. In recognition of the fact that Hydro is in the process of examining what different types of programs it might implement in this province, the Consumer Advocate respectfully requests the Board to direct Hydro to bring forward a plan aimed at educating electricity consumers of the relative cost of electricity and oil for heating and water heating purposes by way of regular updates to consumers with their electricity bills and such other effective means as may be identified.

ALL OF WHICH IS RESPECTFULLY SUBMITTED this 9th day of February, 2007.

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