STEWART MCKELVEY

Suite 1100
Cabot Place
100 New Gower Street
St. John's, NL
Canada A1C 6K3

Correspondence:
P.O. Box 5038
St. John's, NL
Canada A1C 5V3

Telephone: 709.722.4270
Fax: 709.722.4565
st-johns@smss.com
www.smss.com

Paul L. Coxworthy
Direct Dial: 709.570.8830
pcoxworthy@smss.com

September 30, 2009

Via Electronic Mail and Courier

The Board of Commissioners of Public Utilities
Suite E210, Prince Charles Building
120 Torbay Road
P.O. Box 21040
St. John's NL A1A 5B2

Attention: Ms. G. Cheryl Blundon
Director of Corporate Services and Board Secretary

Dear Ms. Blundon:

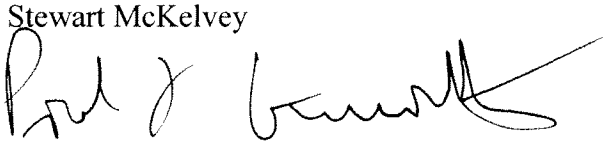
Re: Application by Newfoundland and Labrador Hydro concerning the Rate Stabilization Plan (RSP) components of the rates to be charged to Industrial Customers

Enclosed please find the original and eight (8) copies of the Pre-Filed Testimony of Patrick Bowman, of InterGroup Consultants Limited, filed on behalf of the Industrial Customers.

We trust you will find the above and enclosed to be in order.

Yours truly,

Stewart McKelvey



Paul L. Coxworthy

PLC/kmcd

Enclosure
cc. Mr. Geoffrey P. Young
Mr. Gerard Hayes
Mr. Joseph S. Hutchings Q.C.
Mr. Thomas J. Johnson

PRE-FILED TESTIMONY OF
P. BOWMAN

IN REGARD TO NEWFOUNDLAND & LABRADOR HYDRO APPLICATION CONCERNING THE RATE STABILIZATION PLAN COMPONENTS OF THE RATES TO BE CHARGED TO INDUSTRIAL CUSTOMERS (2009)

Submitted to:

The Board of Commissioners of Public Utilities
Of the Province of Newfoundland and Labrador

On behalf of:

Island Industrial Customers

Prepared by:

InterGroup Consultants, Ltd.
500-280 Smith Street
Winnipeg, MB R2C 1K2

September 30, 2009

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1.0 INTRODUCTION

This testimony has been prepared for the three continuing Island Industrial Customers and one potential Island Industrial Customer (collectively "IC") of Newfoundland and Labrador Hydro (Hydro or NLH) by InterGroup Consultants, Ltd. (InterGroup) by Mr. P. Bowman. It is evidence in connection with the Application (the "Application") by Hydro to the Board of Commissioners of Public Utilities (Board or PUB) dated June 30, 2009.

The Island IC group includes the three large industrial companies currently operating in Newfoundland and Labrador on Hydro's Island Interconnected System and one potential industrial customer on this system. These companies are as follows:

- Corner Brook Pulp and Paper Limited;
- North Atlantic Refining Limited;
- Teck Resources Limited (formerly Aur Resources Inc., herein "Teck"); and
- Vale Inco Newfoundland and Labrador Limited.[1]

Mr. Bowman's qualifications are set out in Attachment A. InterGroup was initially retained at the end of June 2001 to assist the IC in addressing the application leading to the 2001 Hydro General Rate Review ("GRA"), and subsequently assisted the Island IC in preparation for the 2003 Hydro General Rate Review and 2006 Hydro General Rate Review. Mr. Bowman submitted evidence on behalf of the IC in the 2003 and 2006 proceedings.

In preparing this testimony, the following information has been reviewed:

- The Hydro Application filed June 30, 2009; and
- Most of the first round responses to Requests for Information to Hydro from the Board, the Consumer Advocate (CA), and Newfoundland Power (NP) up to "Batch 5" filed by Hydro.

InterGroup has been asked to identify and evaluate issues relating to Hydro's filing, taking into account normal regulatory review procedures and principles appropriate for Canadian electric power utilities, and the unique circumstances surrounding Hydro's Rate Stabilization Plan ("RSP") as it has evolved and been applied since 2001.

[1] Vale Inco Newfoundland and Labrador Limited has joined with the other Industrial Customers as an Intervenor by reason of its intended industrial operations in the Province and its anticipated significant future power demands.

1.1 SUMMARY OF RECOMMENDATIONS

The current Industrial Customer RSP balances reflect amounts properly accruing to the industrial class under established rules. Amounts recorded in the IC RSP should be credited to the IC, as follows:

- **Overpayment of Historical RSP:** A substantial portion of the balance (estimated at $11.85 million including accrued interest to June 30, 2009)[2] arises due to continued and continuing payments by those IC exposed to the "historical RSP" rider (all IC excluding Teck) long after the underlying balance was fully discharged in approximately October 2007 and the rider was to have been discontinued (but was not). RSP Rates for IC should be adjusted as soon as possible to the level presently paid by Teck, which is the level last approved for RSP riders absent any historical RSP payment. All amounts paid by customers under this historical RSP provision since approximately October 2007 (when the underlying balance was discharged) should be refunded as soon as possible to the respective customers as a one-time reconciling credit.

- **Remaining IC RSP balance to 2009:** The remaining RSP balance to the end of 2009 (approximately $20.21 million)[3] reflects amounts properly assigned to the IC plan. The amounts in question (primarily related to load variation), are true and verifiable savings to Hydro's system. The savings only arise as a result of IC customers class load changes, not those of the other classes, consistent with established RSP principles. To the extent these balances exceed amounts that can be addressed through normal RSP approaches, previous RSP practice on at least two occasions provides an appropriate solution[4] – crystallize the balance at the end of 2009, and amortize as a form of new "historical RSP"-type credit rider to industrial customers over the coming 4-5 years. Based on Hydro's forecasts, this would yield a credit rider starting January 1, 2010 of approximately 1 cent/kW.h[5] or less to all IC usage. The industrial customer RSP starting January 1, 2010 would be net of this balance amount.

- **Balances forecast to accrue in 2010 and beyond:** For 2010, or until the next Hydro GRA, continue to operate the RSP under approved rules for the approved parameters (fuel price, hydraulic generation averages loads, etc.). IC RSP balances at the end of 2010 should be assessed to determine whether there is need for similar treatment to the 2009 year-end balance; that is, if balances exceed the level that can reasonably be addressed through normal RSP calculations, then further crystallize and amortize these balances over a stated future period. In the event Hydro sought to "rebalance" the RSP among customers for 2010, to address its revenue-requirement related issues of changing fuel volumes and inter-class

[2] Assuming the rates will remain in place through the end of calendar year, given the timing of the present proceeding, the refund would be forecast to total approximately $14.43 million.

[3] $34.64 million per PUB-NLH-11 page 2, less $14.43 million as the forecast refund for overpayments under the historical RSP rider.

[4] Past precedent for this approach arises from both the 2001 GRA and the 2003 GRA. In each case balances were crystallized and treated as noted.

[5] IC usage per CA-NLH-24 page 5 is forecast at 563.4 GW.h for 2010. This level is assumed to occur for the remaining 4-5 years, totaling 2253 GW.h (4 years) to 2817 GW.h (5 years) usage to apply the credit balance. Including interest at Hydro's normal RSP rate, this credit is on the order of 1 cent/kW.h, or potentially slightly less.

revenues, it is free to bring a GRA for 2010. Another alternative (not previously used by Hydro) is that Hydro could apply for a rate rebalancing review, such as by using approaches outlined in the draft Review of IC Rate Design Report (February 5, 2008).[6]

At its core, the issue Hydro is identifying for the Board in this proceeding is a revenue requirement issue – revenues have dropped due to lower IC loads, but so have costs for fuel to serve these loads by a differing amount. In any other regulated utility, this would lead to a need to address the utility's revenue requirement (via a GRA). In the case of Hydro, with its atypical "load variation" component of the RSP, the end result is no impact on Hydro's books, but risks (or rewards) being borne directly by individual customer classes. The specific amounts arise in this present case as benefits to the IC class, as part of the IC class bearing the risks jointly for variation in each others' loads. Just as positive balances (amounts owing to customers) are being shared by the IC at this time, under existing rules significant negative balances could also arise (and in fact did arise in the past, paid for by the IC group).[7] While the IC group argued against such risk-sharing provision in each recent Hydro GRA by advocating elimination of the load variation component of the RSP, elimination of the provision was opposed by Hydro and other parties, and as a result the IC group continues to carry these risks, positive or negative.

Focused discussion remains needed, at a future GRA, in regard to eliminating the load variation component of the RSP.

[6] In that report, it is noted that Hydro would under certain circumstances be able to do a "limited scope re-run of its Cost of Service. Hydro would adjust only loads and fuel expense; other variables would remain the same as at the most recently approved General Rate Application. The Cost of Service rebalancing would adjust rates for all customers, not only Industrials." Present fuel volumes (which are lower than the fuel volumes forecast at the last GRA) would be reviewed and permitted to be built into the rates for all classes in the upcoming year. [As an example, this type of proceeding was held in Yukon where in 1998 after the system's largest industrial customer (the Faro mine) ceased operations, Yukon Energy Corporation applied to the Yukon Utilities Board expeditiously on a limited scope basis. This included addressing limited-scope rate adjustment issues (fuel volumes, rate revenues) caused by the mine closure].

[7] For example, the closure of Albright and Wilson, and of Royal Oak mines led to ongoing charges to the IC RSP (under the rules in place at that time). The IC group disputed being charged these amounts as "load variations" rather than customer-related risks appropriately borne by the utility, but this was not accepted and the amounts were rolled in to the IC RSP historical balance that has only recently been discharged through 5 years of payments by the IC group.

2.0 INFORMATION ON ISLAND INDUSTRIAL CUSTOMERS

The Island IC group is comprised of large energy customers who operate with high load factors (i.e. they have relatively comparable levels of energy use throughout the day and throughout the year). The group represents all operating industrial customers on the Island Interconnected System, as well as one future industrial customer.

For each of the industrial customers, electricity costs make up a substantial portion of total operating costs. In 2007, this class was forecast to require 894.3 GW.h of firm electricity (about 14.3% of the firm energy delivered by Hydro to the Island Interconnected system)[8] at a proposed revenue requirement of $44.26 million.[9] Additional purchases of $0.49 million were forecast at non-firm rates. At the time this represented a roughly 32% decrease in energy from 2004 forecast levels[10] reflecting the closure of one of the industrial customers in service at that time – Abitibi-Stephenville. Energy requirements for this group have decreased further since 2007 with market-related cutbacks in operations at Corner Brook Pulp and Paper Limited and the closure of Abitibi Grand Falls. The 2009 forecast Island Industrial Customer load is forecast by Hydro to be less than one half that included in its 2007 Test Year Cost of Service study.

Industrial Customer concerns typically focus on the following issues:

- Long-term stability and predictability in electricity rates;
- Fair allocation of costs between the various customer classes to be served, including a fair interpretation of the legislative limitation on industrial customer rates from funding the rural subsidy;
- Flexibility to tailor electrical service options to suit their operation to achieve an appropriately firm supply at the lowest cost for the load being served (i.e. using a mix of self-generation, Hydro firm power, Hydro interruptible power, curtailable service, etc.);
- Protection for customers from risky or policy oriented ventures or supply options that are not consistent with the provincial power policy objectives of efficiency and equitable power supply at the lowest possible cost;
- Assurance that all general consumer rates are reasonable within the context of the above considerations and the appropriate long-term financial health of Hydro; and
- Continued reliability of power supply for Island Interconnected customers.

Industrial customer concerns reflect the size of their capital investments in Newfoundland and Labrador, the long-term perspective essential to such investments and the major stake that these investments

[8] RDG-1 from the 2006 Hydro GRA.
[9] RDG-1 from the 2006 Hydro GRA
[10] Per J.R. Haynes Schedule III from the 2006 Hydro GRA.

typically have in continued large-scale power purchases from Hydro. In addition, the industrial customer concerns reflect competitive pressures associated with selling industrial products to external markets.

3.0 OVERVIEW OF HYDRO'S APPLICATION

3.1 SUMMARY OF THE APPLICATION

Hydro's RSP application contains two aspects:

1) **IC RSP Rates:** The application requests that the Board finalize the existing IC RSP rates (with the exception of the RSP rate to Teck) at the level last approved, which took effect January 1, 2007 (no industrial RSP adjustment was established as at January 1, 2008, nor at January 1, 2009). The application requests that the rate for Teck increase 1.215 cents/kW.h (a 38% increase) to the same level presently paid by the remaining IC.

2) **IC RSP Balance:** Hydro's application suggests that "the Board may wish to consider suspension of the existing load variation allocation rules and holding in abeyance current and future load variation amounts until such time as Hydro can develop a proposal to address the current anomalies in the RSP". Interrogatories since that time indicate Hydro seeks to have IC RSP balances accrued to date re-allocated so as to credit the vast majority of this balance to Newfoundland Power.

Hydro's application also includes a re-filing of a 2006 Review of the RSP (prepared by Hydro), which had previously been filed in Hydro's last GRA, and was not able to be agreed upon by customers in the ensuing GRA negotiated settlement process. The negotiated settlement document in that GRA did note customers and Hydro planned to undertake a series of discussions to address long-standing issues with the RSP, but no settlement or agreement has been reached in those discussions to date.

On RSP rates, it is noted that the last RSP approval contained two components:

- An ongoing RSP amount totalling negative 2.00 cents/kW.h (a refund to all IC customers); and
- A time-limited "historical RSP" amortization totalling 1.215 cents/kW.h (a charge to customers), which should now be expired (the historical balance was eliminated by approximately mid-October, 2007).

All customers other than Teck (then a new industrial customer) paid both components, for a net refund of 0.785 cents/kW.h, while Teck received the full 2.00 cents/kW.h refund as they were determined to not be responsible for the historical RSP balances crystallized prior to January 1, 2007, as shown in the following table.

Table 1
RSP Rates established January 1, 2007

Ongoing RSP	(2.000) cents/kW.h	(all customers)
Historical RSP Amortization	1.215 cents/kW.h	(all customers other than Teck)
Net RSP rate	(0.785) cents/kW.h	(all customers other than Teck)

The industrial customers in question have continued to pay these same rates through the present time.

Curiously, although the historical balance is now expired, Hydro's proposal is to consolidate the IC rate, and include Teck in that rate, at the (0.785) cents/kW.h level approved inclusive of the historical balance. Hydro's rationale for moving Teck to this new level (from their current (2.00) cents/kW.h level) is that the "Historical Plan component is no longer part of the RSP adjustment due to the completion of its five-year collection period". In short, since the historical balance is now expired, Hydro's proposal is to no longer retain Teck at a distinct level from all of the other IC, but rather to impose the equivalent of a historical RSP rider on all IC accounts including Teck. It is difficult to understand Hydro's rationale for this treatment of the Historical RSP.

3.2 IMPACT OF APPLICATION ON RATES

Hydro's application as proposed will have no effect on rates charged today with the exception of Teck, who will see an increase of 1.215 cents/kW.h[11] upon implementation. In effect, the application serves to now impose on Teck the 1.215 cents/kW.h "historical RSP" rider that all other IC have been paying since January 1, 2007. This rider remains imposed notwithstanding that the historical IC RSP was fully paid off as at year-end, 2007 (and indeed the rider in place over collected on the historical amounts to be collected by $1.4 million to December 31, 2007).[12] Had Hydro retired this rider at the time the historical balance was fully collected, in about mid-October 2007, rather than continuing it to this day (even with no other changes to the IC RSP), over the period to June 30, 2009, over 50% of the balances at issue today would not have arisen.[13] These amounts are not related to Teck who has been receiving the 2.00 cents/kW.h refund rider throughout, but rather the remaining customers on the system during this period.

The more notable impact, under the approach put forward by Hydro, is on accrued RSP balances, which directly affect future IC rates. The current balance in the RSP, similar to many other times in the past with regard to IC RSP balances, represents a future liability or asset that IC customers have an established, approved and well-founded expectation of being fulfilled. In each previous event where the RSP balance was beyond the bounds of what could reasonably be addressed by normal RSP rate setting

[11] This is cited by Hydro as a 38% increase in the Teck rates.

[12] Per IC-NLH-4, December 2007 RSP report page 13.

[13] The difference between the 0.785 cents/kW.h refunded to most IC customers (other than Teck) over the period since mid-October 2007 when the historical plan was paid off, compared to the 2.00 cents/kW.h rider that would have been in place had the historical RSP rider been removed once the balance was collected, plus interest, would result in the plan balance as at June 30, 2009 being $11.846 million lower than the balance shown in PUB-NLH-9 of $23.505 million.

methods, the balances were "crystallized" and rolled in to longer-term amortized amounts via a moderated rider on customer bills. In those two previous cases, the amounts were excessive balances in the RSP owing from customers, amortized over 5 years (2001 GRA, as at August 31, 2002) or 4 years (2003 GRA, as at December 31, 2003).

4.0 BACKGROUND

The RSP has been the subject of repeated Board reviews since 2001. The evidence and arguments of the IC in those earlier proceedings is summarized in Appendix A to this submission.

4.1 2001 GRA

The RSP was extensively examined during the 2001 Rate Review proceeding, particularly the very large RSP balances which then existed and needed to be addressed.

The Board in 2001 was faced with arguments from the IC group that their plan, as it then stood, included amounts charged to the IC group that were inconsistent with stated purpose and intent of the plan, and of normal utility regulation. In particular, the IC balance included costs reallocated to the IC plan from the NP plan that had nothing to do with changes in Hydro's costs, and the IC plan included ongoing amounts being charged related to the much earlier closure of two previous industrial customers.[14] The IC argued that these amounts should be excluded from the IC plan. The Board did not so order.

At the 2001 hearing, the IC group argued that the load variation provision should be dropped from the RSP. The rationale was based on inappropriate risk sharing between and among customer classes related to variations in Hydro's load forecast. The evidence of Mr. Osler, on behalf of the IC, summarized that the provision inappropriately concentrates risks on the IC of each others' load changes, and of NP's load changes (as the provision then operated).

In Order P.U.7 (2002-2003) from that proceeding, the Board in effect concluded two key matters:

1) The RSP plan required review and amendment; and
2) The outstanding historical RSP balance as of August 2002 needed to be addressed using a special approach. In this case the Board ordered that the total balances be recovered over a five year period, by crystallizing the very large balances owing from customers to Hydro at that time.

The Board did not elect to reallocate past balances between customer groups.

At a principle level, the 2001 GRA provided three points of particular relevance to the current situation:

1) The potential to defer and amortize balances where they could not be dealt with using short-term typical RSP riders;
2) A rejection of reallocating past accrued balances between various customer classes; and

[14] Albright and Wilson and Royal Oak Mines.

3) Acceptance of the concept that load changes (or complete closure of operations) of one industrial customer can lead to ongoing adverse charges to the RSP that will have to be paid by other industrial customers (so long as a load variation provision exists).

4.2 2003 GRA

At the 2003 GRA, the RSP review as ordered by the Board was completed, and Hydro worked with intervenors to materially re-design most aspects of the RSP. The redesigned RSP included the most substantial changes to the RSP since it was first created, and was the subject of a consent filing among all of the hearing participants.[15] The present load variation provision arises from that proceeding. Prior to 2003, the effect of the load variation provision was that each customer class was at risk from load changes in all classes (for IC, load changes in other individual IC members, plus NP load changes). Intervenors in that proceeding objected to this risk distribution, and in the case of IC, recommended a second time that the load variation provision be eliminated.

The elimination of the load variation provision was not agreed to by negotiation participants. Instead, the provision was altered to remove the concept of inter-class (IC versus NP) sharing of risks for each others' load changes. The redesigned plan retains the concept that the IC members as individuals are at risk for load variation (including complete closure of operations) in the other IC members – both positive and negative, but no longer at risk for such load variations by NP, and vice versa.

The proceeding also established a second precedent for dealing with excessive accrued balances – in that case the balances then existing were crystallized and amortized over a period to approximately the end of 2007.

4.3 2006 GRA

Following the re-design in 2003, the 2006 GRA was the first proceeding in recent times not dominated by the need to address major RSP issues and balances. In the filing, Hydro provided a new report on the operation of the RSP dated June 30, 2006 (which has been resubmitted to the Board as part of the current filing), including recommendations for revision to various components including the load variation component.

As part of the 2006 negotiated settlement, Hydro's new RSP report was reviewed and not accepted by parties to the settlement. Instead, various proposals to refine the RSP (including continued proposals by the IC to eliminate the load variation provision and its attendant risks on customers) were carried forward to a new RSP working group, intended to produce a report for review at a workshop by October 31, 2007, with any re-design to the RSP implemented by January 1, 2008. To date, the working group has not achieved the items noted to be completed by October 31, 2007.

[15] Consent #2, 2003 Hydro General Rate Review.

5.0 RECOMMENDATIONS

As submitted, Hydro's recommendations do not address the issues faced by the utility and its ratepayers today, and do not reflect fair and principled treatment of ratepayers. Notable among the issues raised by Hydro's proposals:

- **Rate Consolidation (Teck rate):** Hydro's proposal to simply move the Teck RSP rate to the level presently paid by the remainder of the IC group fails to reflect that it is the Teck rate that is the last properly reviewed and structured RSP rate, not the converse. The rates paid by the non-Teck IC today (and since October 2007) include a rider to pay for past "historical RSP" balances that have long ago been fully collected. In this situation, the appropriate rate to apply to the entire IC class is the Teck rate, until such time as 2010 RSP rates are set.
- **Addressing the Differing (Discriminatory) Rates Charged Since October 2007:** The failure of Hydro to consolidate the Teck RSP rate and the rate charged to the remaining IC, over the period since October 2007, has resulted in almost 2 years of differing rates being charged on Hydro's system for the same service. The only rationale for this situation (which in all respects meets the classic definition of inappropriate rate discrimination) was no longer relevant after October 2007 when the historical balances were paid off. Consequently, adjustment to the bills paid by the non-Teck IC over this period is required in order to rectify the ongoing inaction to address this serious lapse in application of established regulatory principles. Hydro's application proposes no such adjustment.
- **No Balance Transfers:** Hydro's suggestion to "suspend" the operation of the RSP load variation provision, and its implied preference for reallocating past and ongoing residual IC RSP balances to NP has no basis in the RSP principles as agreed to by the customer groups and approved by the Board. Such a proposal would also need to be assessed in regard to classic legal and fairness issues relating to retroactive ratemaking. The load changes arising from IC reductions or closures have not (a) caused any adverse rate-related effects on NP (in fact have in all likelihood driven rate related benefits to NP during this period of high fuel prices)[16] and (b) do not relate to any ongoing risk borne by NP. In contrast, load related risks are borne on an ongoing basis by the entire IC for load changes at any individual IC, and have been so borne since the RSP was created. The present situation is a reflection of the fact that such risk is shouldered bi-directionally – just as the IC have been at risk (and have paid in past) for load changes that increased costs to the IC RSP, they are in line for any benefits that arise from circumstances that lead to credits to the IC RSP.

[16] While there is no sharing of load variation in the RSP, the customer classes jointly share the risk for fuel price changes. This means for each barrel of fuel required, if the price is higher than GRA levels both the NP RSP and the IC RSP bear a portion of that cost. Given the IC load has been lower than GRA forecast levels for a sustained period of time, less barrels overall were required on the system than would otherwise be the case. Since this occurred during a period where fuel prices were at times very high (well above GRA prices) NP will have benefitted via the fuel variation provision of the RSP from the IC load reductions.

- **Crystallize and Amortize Balances:** Front and center in Hydro's rationale for its proposals is the assertion that in effect, absent its proposal being accepted, the sensational outcome of free power to industrials for a year would be inevitable (Schedule B of the Application). This is patently false. Well established principles in this jurisdiction provide that excessive accrued balances (previously arising from amounts owed by customer to Hydro) can be crystallized and amortized over a defined period to provide for rate stability. As noted previously, the historical RSP rider that has been in effect to discharge past IC RSP balances has been in excess of 1.2 cents. In the case of the current balances (net of the needed refunds for overcollection under the historical RSP), a similar approach to amortization over 5 years would be of a similar or lesser value – in the range of 1 cent/kW.h or less for balances as forecast to the end of 2009.[17]

- **Retain 2010 Flexibility:** Hydro's proposal includes the suspension of the operation of the RSP into the future, presumably to include 2010 until such time as some form of RSP re-design can be agreed to by the parties or ordered by the Board. Absent such re-design, PUB-NLH-16 indicates $13.4 million would be forecast to be credited to the IC RSP account in 2010 from normal operation of the RSP. This balance would be accured by December 31, 2010. Three potential outcomes could occur:
  - First, absent any GRA being filed by that time, the balance could be addressed by typical RSP approaches (amortized over the following year – 2011). Depending on fuel price forecasts at that time going forward, such an approach may be fully within reasonable rate change bounds.
  - Second, Hydro notes that it is possible 2011 could be a test year, and consequently new GRA rates would be in the process of being implemented at this time. Accrued IC RSP balances may provide more flexibility to implement new GRA rates so as to yield better rate stability at that time.
  - Third, in the event neither of the above is true, and the IC RSP balance at that time is sufficiently large in relation to go-forward costs (whether for GRA or RSP fuel price forecasts), a similar approach could be used as proposed here for December 31, 2009 balances. In this case an amortized 4-5 year rider would approximate a further 0.5-0.6 cents/kW.h. Combined with the 2009 crystallized amounts, this would provide an amortized refund rider of less than 2 cents/kW.h which remains practical; i.e., it is less than the level of RSP credit approved in 2007 and still being applied today to Teck.

- **At the Next GRA - Eliminate Load Variation Provision:** The current situation, while providing some quantitative benefit to the remaining IC customers, does not reflect proper utility regulation and risk sharing. It is entirely conceivable that the issue at hand today could be the opposite of current conditions. For example, had a major new load connected or major expansion occur at one of the industrial customer operations, under existing RSP rules that load variation cost would be borne by the industrial customers as a group for any

[17] For example, PUB-NLH-11 indicates that the forecast IC RSP balance at year-end 2009 is approximately $34.6 million. This balance includes approximately $14 million related to over collection of the historical RSP amounts that were fully amortized in 2007, for a net balance of approximately $20 million. If this balance were crystallized and amortized over 4 to 5 years (including interest), on an ongoing annual load of 563.4 GW.h per CA-NLH-24 page 5, the net refund rider would approximately 0.88 cents/kW.h (5 years) or 1.07 cents/kW.h (4 years).

periods prior to Hydro's next GRA (and, due to the IC bearing the cost of the new load, there would be minimal to no pressure on Hydro to move expeditiously to a next GRA in this situation). This continued form of intra-class risk sharing into the future is not advised, and is properly addressed by eliminating the load variation provision of the RSP at Hydro's next full GRA rate review.

APPENDIX A – PREVIOUS IC INTERVENTIONS IN RSP ISSUES

The RSP is established for two Hydro customer classes (Utility and Industrial) in order to smooth rate impacts for certain variations between actual results and Test Year Cost of Service estimates for the following:

- Hydraulic production;
- No. 6 fuel cost used at Hydro's Holyrood generating station;
- Customer load (Newfoundland Power and Island Industrial); and
- Rural rates.

Rate stabilization mechanisms (i.e., as applied in other similar jurisdictions with non-interconnected grids that generate electricity with a mix of hydro and petroleum, such as Yukon or the NWT) are designed to provide a measure of protection for both ratepayers and the utility from variations in uncontrollable variables such as water availability or fuel prices. Typically, the utility and the regulator set rates based on their best estimate of the costs to provide service over the test year, while the rate stabilization mechanism adjusts for differences that occur in utility revenues or costs due solely to noted uncontrollable variables. The RSP implemented by NLH in 1985 was similarly proposed as a means of providing greater rate stability to customers by consolidating both the hydraulic and the fuel adjustment charge accounts into a single plan.[18]

This RSP proposal was accepted by the Board at that time (subject to conditions)[19] and has continued to be subject to review by the Board and intervenors in subsequent rate reviews including those held in 2001, 2003 and 2006. In the 2001 and 2003 GRA hearings, there was considerable debate surrounding the means used to "crystallize" and defer large balances in the RSP (ultimately over $150 million owed from customers at one point).

- In 2001, the RSP was divided into two components: and "old RSP", comprising the balance as at August 31, 2002 to be collected by a rider from NP and IC on a straight line basis over five years, and the "new RSP" comprising activity from September 1, 2002 onwards.

[18] It was noted at that time that the positive balance in the water equalization provision would be refunded to NP and the Island IC over a period of three years.

[19] Order No P.U. 7 (2003) notes NLH clarified the operating characteristics and mechanics in a letter to the Board following the 1985 decision.

- In 2003, the "old RSP" and then "new RSP" balances were combined into the "historical RSP" balance to be amortized by approximately the end of 2007.
- It was noted in 2006, compared to each of the 2001 and 2003 GRAs, the balance in the "ongoing" components of the RSP were well within reasonable ranges and operating successfully as intended in the 2003 RSP Negotiated Settlement.[20]

The RSP continues to provide for adjustments to smooth variations between forecasted test year costs used to set rates and actual costs attributable to differences in the price of No 6. fuel, hydraulic production and load forecast, and essentially addresses the following three primary variables:

- **Hydraulic Production Variation:** The RSP protects Hydro from variations in the amount of energy produced by hydraulic plants, which is intended to be a proxy for the uncontrollable variation in water flow availability. The RSP also protects Hydro from variations in plant availability not related to water flows.
- **Fuel Cost Variation:** The RSP protects Hydro from variations in the price of fuel purchased to operate Holyrood generating station from the GRA approved price.
- **Load Variation:** The RSP compensates Hydro for any variation in net income (change in revenues less change in fuel costs) due to changes in loads from the GRA forecast levels.

To the extent that the RSP simply re-allocates fuel cost variances, it would be assumed to act only to smooth out specified cost impacts and would not be expected to create unfair allocations to customer classes. However, concerns were raised related to various operational aspects of the RSP, with particular focus on the load variation provision.

Extensive reviews in 2001[21] and in 2003, noted concerns regarding the material impact the operation of the RSP has on revenues collected by Hydro and the charges imposed on customers, In particular, the IC group provided comments on this matter in 2003:

[20] In particular, the use of a prospective fuel rider helped to ensure that large deferred fuel price balances did not accrue as a burden to future customers. In contrast, despite escalations in No. 6 fuel prices over that period, the RSP balances for IC and NP remained in a relatively modest credit position forecast to December 2006 (approximately $20 million combined in the "current" plans, of which about $7 million relates to positive hydraulic variances over 2006 alone). This was considered a significant improvement over past RSP approaches; as a result, 2006 was considered the first recent Hydro GRA where RSP discussions were not dominated by a need to consider deferring to future periods recovery of fuel costs related to service provided in the past.

[21] In Order P.U.7 (2002-2003) the Board noted concerns raised by intervenors, agreed that the existing RSP and its operation were difficult to understand and commissioned a study of the RSP that was to include a review of the plan since its implementation together with operational issues raised by intervenors and noted that based on the results of the study it would determine its next course of action.

- The **Load Variation** component of the RSP is inappropriate in regards to normal prospective rate-setting practice[22] and in effect deviates materially from generally accepted practice by assigning this risk specifically to the customers of NLH directly. In 2001 and in 2003[23] IC submitted testimony that the load component of the RSP for all customers should be eliminated. It was noted in evidence filed in 2001, that the load variation component provides substantial protection to Hydro from errors in its load forecast and changes in all factors influencing energy sales, including weather, economy, changing consumer fuel mix requirements, etc. The load variation component at that time required Hydro to carry forward the 1992 forecasts for comparison to loads in each year up to 2001, resulting in the RSP being adjusted based on the degree to which each customer class varied from a sales forecast as much as a decade old.[24]
- The **Hydraulic Production Variation** component is a long term stabilization mechanism that should focus on staying within a sensible operating range over the long term (and not as noted in 2003 be collected and/or refunded on a two–year cycle).
- The **Fuel Cost Variation** component is a short term deferral that should be addressed expeditiously to ensure timely price signals and minimum inequities.
- The **Interest Rate** charged/paid by Hydro should reflect the short-term nature of the RSP asset / liability to Hydro.

[22] Pre-filed Supplementary Testimony of C.F. Osler provided (September 12, 2001) notes that the RSP operates to protect Hydro from errors or misjudgments in its load forecast, markedly changing the risk profile of the utility, including reducing the normal incentives for a utility to correctly forecast its load for the test year and bear the risk for changes in that load. In addition to assigning ongoing load forecast variance impacts to rate classes (the industrial customers collectively), the RSP also serves to create a "shared" class risk that has no basis in normal utility rate setting. Further, the load variation provision was noted to be an anomaly among Canadian utilities in that it did not apply normal utility practice regarding the assignment of load risk. In 2003, pre-filed testimony provided by Messrs Osler and Bowman noted that a review of Canadian electrical utilities (particularly focused on integrated Crown utilities) indicated that in almost all cases (7 out of 8 Crown utilities) all risks with respect to load reside with the utility.

[23] In 2003 Pre-filed testimony provided by Messers Osler and Bowman recommended that the load portion of the new RSP should be terminated with the then existing balance rolled into the overall fuel cost stabilization fund in order to assist in mitigating the impact of the substantial existing balance in that account.

[24] At that time it was noted that it led to the IC class sales being compared to a forecast that included Albright and Wilson Americas and Royal Oak Mines as customers of Hydro (even after these entities had ceased to be customers). Pre-filed testimony provide by Mr. C.F. Osler noted no basis for operating the RSP using Albright and Wilson and Royal Oak loads when the customers had closed. It was noted that the net effect of including these customers is to collect from the remaining industrial customers all lost revenue from the two now closed operations (approximately $500,000 per year) so that Hydro is "kept whole" from revenue impacts due to their closure. At that time it was noted that there was no apparent basis for assigning such costs specifically to the remaining Industrial Customers (as distinct from assigning these cost to either the shareholder or all customers of the system).

Concerns noted in pre-filed testimony provided by Messrs C.F. Osler and P. Bowman in 2003, specific to the load variation provisions of the RSP, were as follows:[25]

1. **It removes Hydro's risks with respect to its load forecast** – It was noted that this provision was inconsistent with normal utility practice in a jurisdiction where rates are set on a prospective basis since the provision ensures that any variation in Hydro's net income related to variations in load is charged back to customers, completely insulating Hydro from any variation due to load development. Further, it was noted that as implemented, the provision takes the total amounts derived from insulating Hydro from load risk and specifically assigns these amounts to individual customer groups.

2. **It results in inappropriate price signals and cost allocations to customers -** It was noted in Pre-filed Evidence in 2003 that rates paid by customers for incremental increases or decreases in consumption compared to the load forecast were counter-intuitive without any reasonable foundation. In essence, the provision provided an inappropriate price signal to NP (or the eventual retail customers) with respect to increasing consumption by providing for an effective rate well below the approved NP firm energy rate and below the average cost of Holyrood fuel to supply load (using GRA approved prices). By contrast, the approach in use prior to 2003 led to an inappropriate price signal was sent to IC customers with load reduction compared to forecast resulting in savings to IC group well below the normal IC approved rate. Since this was spread across the whole group, the individual customer reducing their load experiences cost savings well below this level.[26]

3. **It necessitates complicated IC versus NP accounting and collection** – For utilities that maintain either fuel price and/or hydraulic stabilization accounts (e.g., Yukon Energy or Northwest Territories Power Corporation), there is no accounting required to separate the charges to any particular group of customers. The amounts deferred in the various stabilization accounts are allowed to proceed until such time as a refund/collection is required (generally on a prompt basis for fuel price deferrals and very infrequently, if ever, for hydraulic stabilization accounts). At that time the adjustment is applied equally to all kWh sold without distinction between customer groups, as the charges relate to an energy-related cost. This is not possible in the Newfoundland Hydro system due to the presence of the customer class-specific load variation provision.

[25] These were discussed in detail at pages 61 to 64 of the pre-filed testimony of C.F. Osler and P Bowman filed September 2, 2003.
[26] See discussion in the Pre-filed Testimony of C.F. Osler and P. Bowman (filed September 2, 2003) pages 61-63.

ATTACHMENT A

InterGroup CONSULTANTS

PATRICK BOWMAN
PRINCIPAL AND CONSULTANT

EDUCATION:

University of Manitoba
MNRM (Natural Resource Management), 1998

Prescott College
BA (Human Development and Outdoor Education), 1994.

PROFESSIONAL HISTORY:

InterGroup Consultants Ltd. **Winnipeg, MB**

1998 – Present *Research Analyst/Consultant/Principal*

Regulatory economic analysis and socio-economic impact assessment experience, primarily in the energy field.

Utility Regulation

Conducted research and analysis for regulatory reviews of electrical and gas utilities in four Canadian provinces. Prepare evidence and review testimony for regulatory hearings. Assist in utility capital and operations planning to assess impact on rates and long-term rate stability.

- **For Yukon Energy Corporation (1998-present)**, analysis and support of regulatory proceedings and normal regulatory filings before the Yukon Utilities Board. Appear before YUB as expert on revenue requirement matters. Prepare analysis of major capital projects, financing mechanisms to reduce "rate shock" to ratepayers, as well as revenue requirements.

- **For Yukon Development Corporation (1998-present)**, prepare analysis and submission on energy matters to Government round table on competitiveness of Yukon economy. Coordinate development of options for government rate subsidy program. Assist with review of debt purchase, potential First Nations investment in utility projects, and corporate governance.

- **For Northwest Territories Power Corporation (2000-present)**, provide technical analysis and support regarding General Rate Application. Assist in preparation of evidence, filings before the Northwest Territories' Public Utilities

Board, and related issues. Appear before PUB as expert in cost of service and rate design matters, and on system planning (Required Firm Capacity) review.

- **For Manitoba Industrial Power Users Group (1998-present)**, prepare analysis and evidence for regulatory proceedings before Manitoba Public Utilities Board representing large industrial energy users. Appear before PUB as expert in cost of service and rate design matters in rate proceedings, as well as cost-of-service methodology hearing. Assist in regulatory analysis of the purchase of local gas distributor by Manitoba Hydro. Assist industrial power users with respect to assessing alternative rate structures and surplus energy rates.

- **For Industrial Customers of Newfoundland and Labrador Hydro (2001-present),** prepare analysis and evidence for Newfoundland Hydro GRA hearings before Newfoundland Board of Commissioners of Public Utilities representing large industrial energy users. Appear before PUB as expert in cost of service and rate design matters.

- **For NorthWest Company Limited (2004-present),** review rate and rider applications by Nunavut Power Corporation (Qulliq Energy), provide analysis and submission to rate reviews before the Utility Rates Review Council.

- **For Nexen Chemicals, Inc. (2000)**, review options for subscribing to curtailable service rates.

- **For Columbia Power Corporation/Columbia Basin Trust and Municipal Interveners (2000),** review evidence and prepare analysis on major transmission line project for Public Convenience and Necessity hearing before the British Columbia Utilities Commission.

- **For the City of Yellowknife (1999)**, prepare preliminary analysis of policy options and planning process for development of a municipal piped propane distribution system.

- **For the Government of the Northwest Territories (1999)**, prepare analysis of policy alternatives to facilitate supply of natural gas to local communities in the event of a Mackenzie Valley pipeline being constructed.

- **For INCO Manitoba Division (1998-present)**, prepare analysis of energy costs under various alternative industrial rate options. Provide recommendations on preferred energy rate options.

Socio-Economic Impact Assessment and Mitigation

Provide support in development of local investment opportunities or socio-economic impact mitigation programs for energy projects, including northern Manitoba, Yukon, and NWT. Socio-economic assessment work related to forestry planning in Manitoba and Saskatchewan. Support to two local communities in development of negotiation position for resolving outstanding compensation related to hydro projects in Northern BC. Also conducted assessment of socio-economic impacts of policy options for floodplain management, and strategic planning for resource management board.

- **For Northwest Territories Energy Corporation (2003-present)**, provide analysis and support to joint company/local community working groups in development of business case and communication plans related to potential new major hydro and transmission projects.

- **For Kwadacha First Nation and Tsay Keh Dene (2002-2004):** Support and analysis of potential compensation claims related to past and ongoing impacts from major northern BC hydroelectric development. Review assessment of options related to energy supply, including change in management contract for diesel facilities, potential interconnection to BC grid, or development of local hydro.

- **For Manitoba Hydro Mitigation Department (1999-2002)**, provide analysis and process support to implementation of mitigation programs related to past northern generation projects. Assist in preparation of materials for church-led inquiry into impacts of northern hydro developments.

- **For International Joint Commission (1998)**, analysis of current floodplain management policies in the Red River basin, and assessment of the suitability of other floodplain management policies.

- **For Nelson River Sturgeon Co-Management Board (1998 and 2005)**, an assessment of the performance of the Management Board over five years of operation and strategic planning for next five years.

Government of the Northwest Territories **Yellowknife, NT**

1996 - 1998 *Land Use Policy Analyst*

Conducted research into protected area legislation in Canada and potential for application in the NWT. Primary focus was on balancing multiple use issues, particularly mining and mineral exploration, with principles and goals of protection.

Natural Resources Institute **Winnipeg, MB**

1996 - 1998 *Researcher*

Conducted research on surface rights allocation and access for mining, with particular emphasis on implications of government actions undermining mineral rights tenures. Also undertook analysis of Manitoba's Registered Trapline System and implications for Aboriginal trappers; also, an economic assessment of the property rights system inherent in the provincial Registered Trapline System policy and its implications on efficiency in allocation of the furbearer resource.

PUBLICATIONS:

Government Withdrawals of Mining Interests in Great Plains Natural Resources Journal. University of South Dakota School of Law. Spring 1997.

Legal Framework for the Registered Trapline System in Aboriginal Trappers and Manitoba's Registered Trapline System: Assessing the Constraints and Opportunities. Natural Resources Institute. 1997

Land Use and Protected Areas Policy in Manitoba: An evaluation of multiple-use approaches. Natural Resources Institute. (Masters Thesis). 1998

Electrical Rates in Yukon. Submission by Yukon Development Corporation to Yukon "Government Leader's Economic Forum Series" on Tax Reform and Competitiveness. 1999.

Review of Red River Basin Floodplain Management Policies and Programs. Prepared for Red River Basin Task Force of the International Joint Commission. 1998.

Patrick Bowman Utility Regulation Experience

Utility	Proceeding	Work Performed	Before	Client	Year	Testimony
Yukon Energy Corporation	Final 1997 and Interim 1998 Rate Application	Analysis and Case Preparation	Yukon Utilities Board (YUB)	Yukon Energy	1998	No
Manitoba Hydro	Curtailable Service Program Application	Analysis, Preparation of Intervenor Evidence and Case Preparation	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	1998	No
Yukon Energy	Final 1998 Rates Application	Analysis and Case Preparation	YUB	Yukon Energy	1999	No
Westcoast Energy	Sale of Shares of Centra Gas Manitoba, Inc. to Manitoba Hydro	Analysis and Case Preparation	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	1999	No
Manitoba Hydro	Surplus Energy Program and Limited Use Billing Demand Program	Analysis and Case Preparation	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	2000	No
West Kootenay Power	Certificate of Public Convenience and Necessity - Kootenay 230 kV Transmission System Development	Analysis of Alternative Ownership Options and Impact on Revenue Requirement and Rates	British Columbia Utilities Commission (BCUC)	Columbia Power Corporation/Columbia Basin Trust	2000	No
Northwest Territories Power Corporation (NTPC)	Interim Refundable Rate Application	Analysis and Case Preparation	Northwest Territories Public Utilities Board (NWTPUB)	NTPC	2001	No
NTPC	2001/03 Phase I General Rate Application	Analysis and Case Preparation	NWTPUB	NTPC	2000-02	No - Negotiated Settlement
Newfoundland Hydro	2002 General Rate Application	Analysis, Preparation of Intervenor Evidence and Case Preparation	Board of Commissioners of Public Utilities of Newfoundland and Labrador	Newfoundland Industrial Customers	2001-02	No
NTPC	2001/02 Phase II General Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2002	Yes
Manitoba Hydro/Centra Gas	Integration Hearing	Analysis and Case Preparation	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	2002	No
Manitoba Hydro	2002 Status Update Application/GRA	Analysis, Preparation of Intervenor Evidence and Expert Testimony	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	2002	Yes
Yukon Energy	Application to Reduce Rider J	Analysis and Case Preparation	YUB	Yukon Energy	2002-03	No
Yukon Energy	Application to Revise Rider F Fuel Adjustment	Analysis and Case Preparation	YUB	Yukon Energy	2002-03	No
Newfoundland Hydro	2004 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	Board of Commissioners of Public Utilities of Newfoundland and Labrador	Newfoundland Industrial Customers	2003	Yes
Manitoba Hydro	2004 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	2004	Yes
NTPC	Required Firm Capacity/System Planning hearing	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2004	Yes
Nunavut Power (Qulliq)	2004 General Rate Application	Analysis, Preparation of Intervenor Submission	Nunavut Utility Rate Review Commission	NorthWest Company (commercial customer intervenor)	2004	No
Nunavut Power (Qulliq)	Capital Stabilization Fund Application	Analysis, Preparation of Intervenor Submission	Nunavut Utility Rate Review Commission	NorthWest Company (commercial customer intervenor)	2005	No
Yukon Energy	2005 Required Revenues and Related Matters Application	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2005	Yes
Manitoba Hydro	Cost of Service Methodology	Analysis, Preparation of Intervenor Evidence and Expert Testimony	Manitoba Public Utilities Board	Manitoba Industrial Power Users Group (MIPUG)	2006	Yes
Yukon Energy	2006-2025 Resource Plan Review	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2006	Yes
Newfoundland Hydro	2006 General Rate Application	Analysis, Preparation of Intervenor Evidence	Board of Commissioners of Public Utilities of Newfoundland and Labrador	Newfoundland Industrial Customers	2006	No - Negotiated Settlement