

At the hearing into Newfoundland and Labrador Hydro's (Hydro) 2009 Application for Approval of the Rate Stabilization Plan (RSP) components of the rates to be charged to Industrial Customers (IC), Expert Evidence on behalf of Hydro will be provided by Robert Greneman, Associate Director in the Markets, Regulation and Finance group of Shaw Consultants International based in Cambridge, MA. Mr. Greneman will offer evidence in the following areas:

- Hydro's proposals for changes to the RSP; and
- Comments on the September 2009 submissions of the parties interested in this matter.

A witness profile for Robert Greneman follows.

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- From 1973 through 1978 Mr. Greneman was employed by Alan J. Schultz, Consulting Engineer (later Casazza, Schultz & Associates), a firm that specialized in economic studies and rate work for electric, gas and water utilities. In 1978, he joined Stone & Webster Consultants, where, as a consultant he has assisted utility companies in rate and regulatory matters. From 1983 to 1986, he was employed by the Brooklyn Union Gas Company in the Rate and Regulatory Department where he was responsible for conducting the Company's cost of service studies, rate design and the review of gas purchase contracts. In 1986, he rejoined Stone & Webster Consultants (now Shaw Consultants International) as an executive consultant in the Rate and Regulatory Services Department.

- Mr. Greneman has prepared cost of service and rate design studies for an extensive number of clients including:

Canada:

Centra Gas British Columbia (Terasen Gas), Centra Gas Manitoba, Inc., Gaz Metropolitan, Inc. (Montreal), Halifax Regional Municipality, ICG Utilities (Toronto) and Winnipeg Hydro

U.S. and Other:

Alpena Power Company (MI), Artesian Water Company (PA), Barbados Light & Power Company, Ltd., Blackstone Valley Electric Company, Brockton Edison Company, Brooklyn Union Gas Company, Central Illinois Light Company, Chesapeake Utilities Corporation, China Light & Power Company, Ltd. (Hong Kong), Citizens Utilities Company, City of Westfield, MA, Colorado Electric Company, Commonwealth Edison Company, Consolidated Edison Company of New York, Consumers Energy Corp., Dayton Power & Light Company, Delmarva Power & Light Company, Delta Natural Gas Company, Edison Sault Electric Company, El Paso Electric Company, Energy North Co., Energy Services of Pensacola, Equitable Gas Company, Fall River Electric Light Company, Federal Energy Regulatory Commission, Florida Public Utilities Company, Gas del Estado (Buenos Aires), Green Mountain Power Company, Guyana Electricity Corporation, Holyoke Department of Gas & Electric (MA), Jamaica Water Supply Company (NY), Lake Superior District Power Company, Louisville Gas & Electric Company, Midland Electric Co-op., Montana-Dakota Utilities Co., Midland Electric Power Cooperative (IA), New Jersey Board of Public Utilities, Newport Electric Corporation, Newton Artesian Water Co. (PA), Northern Indiana Public Service Co., Oklahoma Natural Gas Co., Philadelphia Gas Works, Riverbay Corp. (NY), Roseville Electric (CA), South Jersey Gas Company, Southern Indiana Gas and Electric Company, Southwest Louisiana Electric Membership Corporation, Suffolk County Water Authority (NY), Tampa Electric

Company, Valley Gas Company (RI), Vermont Public Service Board, and Washington Natural Gas Company

- Mr. Greneman has provided expert testimony before the Delaware Public Service Commission, the Indiana Utility Regulatory Commission, the Iowa Utilities Board, the Commonwealth of Kentucky Public Service Commission, the Louisiana Public Service Commission, the Michigan Public Service Commission, the Newfoundland and Labrador Board of Commissioners of Public Utilities, the Nova Scotia Utility and Review Board and the Federal Energy Regulatory Commission.
- Mr. Greneman is also a licensed professional engineer in the states of New York and New Jersey.
- Mr. Greneman appeared before the Newfoundland and Labrador Board of Commissioners of Public Utilities (the Board) during Hydro's 2003 and 2006 General Rate Applications.

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1 **1.0 Background**

2 Hydro's RSP was first established in 1986 for the purpose of better smoothing rate impacts
3 to customers than the fuel adjustment clause that was in place at that time. The RSP was
4 comprised of three basic components that reconciled actual results with cost of service
5 estimates. The three RSP components recognized variances with respect to test year
6 estimates in:

- 7 (i) Hydraulic production;
8 (ii) No. 6 fuel oil used at Hydro's Holyrood generating station; and
9 (iii) Customer load.

10
11 The RSP functioned reasonably well until the late 1990s, but then as a result of large
12 balances owed by customers and price signal concerns, became an issue in Hydro's 2001
13 General Rate Application (GRA). After extensive discussions, the Board recommended¹
14 changes to include:

- 15 • Historical and current plan write-off periods; and
16 • Simplified calculations to determine the allocation of activity between
17 Newfoundland Power (NP) and the IC.

18
19 The RSP became an issue again in Hydro's 2003 GRA due to continuing high balances owing
20 from customers and the consequent distortion in price signals. A consensus was reached,
21 and approved by the Board², that included:

- 22 • A change in the customer recovery related to hydraulic variations;
23 • Commencement of an annual fuel rider;
24 • A change in the customer assignment for the fuel component of customer load
25 variation;
26 • Forecast of financing charges, combined with a one-year adjustment period for the
27 current plan; and
28 • Changes to the historical plan and write-off periods.

¹ Board Order No. P.U.7(2002-2003)

² Board Order No. P.U.40(2003)

1 In response to the Board's direction in Order No. P.U. 14 (2004), Hydro submitted a report
2 to the Board in 2006 regarding the operation of the RSP in 2004 and 2005, which described
3 recommended revisions to the RSP.

4
5 At Hydro's 2006 GRA, agreement on RSP issues, including the RSP recommendations
6 contained in the 2006 report, was not achieved by the parties during the proceeding, but
7 instead, were carried forward to an RSP working group. The working group participants:
8 Hydro, Newfoundland Power, the Industrial Customers and the Consumer Advocate (CA)
9 held discussions in 2008 and 2009 and while a consensus was not reached regarding RSP
10 changes, there was agreement by the working group, including the IC, regarding the
11 objectives of the RSP. These objectives, which were agreed upon, were reported to the
12 Board in the report titled "Review of the Rate Stabilization Plan" filed in May 2007³. They
13 are:

- 14 1. *To provide for acceptable levels of rate and revenue stability for customers and*
15 *Hydro;*
- 16 2. *To provide for regulatory efficiency by allowing changes in rates to recover changes*
17 *in prudently incurred fuel costs without requiring a general rate proceeding;*
- 18 3. *To provide for timely changes in rates and avoid material changes in the price signal*
19 *that would promote inappropriate consumption decisions by customers;*
- 20 4. *To provide for fair apportionment of costs among the customers impacted by the*
21 *RSP;*
- 22 5. *To mitigate material intergenerational equity concerns;*
- 23 6. *To provide for ease of understanding; and*
- 24 7. *To provide for ease and efficiency of administration.*

25
26 *No provisions in the RSP should provide an incentive to Hydro or its customers to operate in*
27 *a manner that is inconsistent with the least cost power policy of the province and generally*
28 *accepted sound utility practice.*

³ Page 7 of the report attached to the response to NP-NLH-2.

2.0 Hydro's proposal for Changes to the RSP

Hydro, in the current 2009 application, proposes to:

1. Make the current rates for the Industrial Customers final, except for the rate charged to Teck Cominco (Teck); and
2. Set the RSP rate to Teck the same as the other Industrial Customers.

Hydro notes that a significant balance has accumulated in the RSP as a result of the decline in the Industrial rate class load and refers to its 2006 RSP report in which it was indicated that it intended to propose a change in the load variation component of the RSP. In response to Request for Information PUB-NLH-15, and other responses, Hydro recommended that the Board consider allocating the load variation component of the RSP among the customer groups⁴ based upon energy ratios. This is a reiteration of Hydro's conclusion in its 2006 RSP report. Such a revision to the RSP rules would align with the objectives of the RSP review that are enumerated above, that were undertaken, but not concluded, after Hydro's 2006 GRA. The allocation of the load variation in such a manner is consistent with those objectives. The benefits of Hydro's proposal in terms of the RSP objectives that the parties have agreed upon include:

1. *To provide for acceptable levels of rate and revenue stability for customers and Hydro;* - The shutdown of business of two Industrial Customers, and a significant load reduction for another, have resulted in accumulation of a load variation totaling approximately \$24 million annually. Actual firm revenue (before RSP impacts) for this class in 2009 was also \$24 million. When a new IC is added to the rate class, the same magnitude of amounts owing from, rather than to, the Industrial Customers could occur. Assignment of the IC load variation to only the IC rate class promotes unacceptable levels of rate volatility for customers. Hydro's revenue is not impacted by the assignment of the load variation.

⁴ It should be noted that while the evidence of the parties and records of discussion focus on NP and the IC, fuel-related costs on the Island Interconnected System are allocated among three customer groups: NP, IC, and Rural Customers. Rural Customer costs are then re-allocated between NP and the Labrador Interconnected System based on approved Test Year ratios. All comments contained herein assume the same allocation and re-allocation.

- 1 2. *To provide for regulatory efficiency by allowing changes in rates to recover changes*
2 *in prudently incurred fuel costs without requiring a general rate proceeding; - No*
3 *impacts.*
- 4 3. *To provide for timely changes in rates and avoid material changes in the price signal*
5 *that would promote inappropriate consumption decisions by customers; - The price*
6 *signal provided to the IC rate class by implementing substantial rate decreases due*
7 *to load when increases in the price of fuel are occurring is inappropriate and*
8 *counter-intuitive.*
- 9 4. *To provide for fair apportionment of costs among the customers impacted by the*
10 *RSP; - Fairness between classes, NP and IC, would be achieved by using customer*
11 *energy allocation ratios to share windfall fuel savings resulting in the customers*
12 *receiving load variation impacts in the same proportion as energy costs are shared in*
13 *a test year cost of service.*
- 14 5. *To mitigate material intergenerational equity concerns; - In the current case, should*
15 *the Board determine the appropriate treatment of the load variation is to remain as*
16 *is, the significant balance owing to the IC could impact the rates of the next*
17 *Industrial Customer to enter the system, and the load variation potentially created*
18 *by that customer may impact future industrial customers which may subsequently*
19 *enter the system.*
- 20 6. *To provide for ease of understanding; - The 12-month energy rolling average used to*
21 *share fuel costs or savings is consistent with Hydro's cost of service with which all*
22 *parties are familiar; and*
- 23 7. *To provide for ease and efficiency of administration; - No Impacts.*

24

25 In response to PUB-NLH-24 in this proceeding, Hydro indicated that although it has not

26 developed any specific proposals, in light of the change in markets and fuel prices the

27 RSP may need to be substantially modified or replaced and that the Board may consider

28 ordering development of policies and procedures that reflect:

- NP being invoiced monthly by Hydro for costs incurred related to fuel and, in turn, NP dealing directly with their customers on matters of retail price signal and customer billing and payment options;
- Hydro dealing directly with its IC and giving consideration to such matters as price signal, and payment options, as well as having RSP amounts become accounts receivable or accounts payable from/to each IC each month rather than Industrial class RSP balances which are not tied directly to each customer; and
- Hydro developing a proposal regarding hydraulic stabilization.

These further modifications are desirable in that they fulfill other RSP objectives that were agreed upon by the working group, as detailed below.

- By invoicing NP monthly for fuel costs, it provides a timely price signal and minimizes the possibility of large reserve balances that could act to provide an inappropriate price signal.
- For the IC, as for NP, the elimination of significant RSP reserve balances will minimize the possibility of attendant distortion in the price signal to the class and place the recovery of over or under balances with specific customers. This is particularly applicable to the current situation, in which the IC class has a credit balance greater than their annual aggregate cost of service, resulting in a potentially perverse price signal.
- The elimination of large RSP reserve balances will also act to reduce or eliminate intergenerational equity concerns.

This brief history of the RSP illustrates that over the approximate 23 year period that the RSP has been in existence, it needed to go through periodic revisions in order to deal with a number of unforeseen changes in market and customer circumstances, particularly with the recent closures in the pulp and paper mills. I am in agreement with the proposal that Hydro has outlined in response to PUB-NLH-24, in which it would invoice NP monthly for fuel and deal directly with each of its Industrial Customers.

3.0 Comments on the September 2009 Submissions of the Parties interested in this matter

In addition to the above proposal, Hydro has requested that I comment upon several items included in the September submissions of the parties interested in the current matter.

3.1 Rate Consolidation - Teck Resources Inc. (Teck)

The pre-filed evidence of P. Bowman, page 11, discusses rate consolidation, and suggests that rates should have been set to those currently charged to Teck, based upon how those rates were initially calculated.

“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.”

Hydro agrees with Mr. P. Bowman that the last RSP adjustment that received final approval from the Board was on January 1, 2007⁵. At that time, the RSP adjustment applicable to calendar year 2007 was comprised of two components:

Table 1: Industrial Customer RSP Rates

Plan Component	Mills/kWh
Historical RSP	12.15
Current RSP (Teck Resource rate)	(20.00)
Fuel Rider	0.00
Total	(7.85)

⁵ Pre-filed Evidence, page 6, lines 5-7.

1 As shown in the above table, the Teck Resource rate was 12.15 mills/ kWh lower than the
2 RSP adjustment applicable to the other IC due to the fact that, as a new customer, they
3 were not responsible for paying down the historic plan balance. The historical RSP was
4 terminated on December 31, 2007, and in accordance with Section E of the RSP rules, the
5 December 31, 2007 balance in the historical plan was added to the current plan then in
6 effect.

7
8 In December 2007, due to significant variations in forecast fuel prices and IC load, Hydro
9 filed an application with the Board requesting that the 2007 IC rates remain, on an interim
10 basis, in place effective January 1, 2008.

11
12 As of January 1, 2008, all RSP adjustments were applied to the only plan remaining - the
13 current plan. Since then, Teck's current plan RSP rate of (20.00) mills/kWh has been lower
14 than that of the other IC (7.85) mills/kWh. There is no historical plan balance for which any
15 RSP adjustment – for any Industrial Customer - was applied.

16
17 In 2008, the 2007 significant load reductions for the IC remained, and there were widely
18 fluctuating fuel prices. Hydro again applied to freeze current IC rates into 2009 on an
19 interim basis, except for the RSP rate of Teck, which Hydro applied to have made equal to
20 the rate charged the other IC. However, the Board approved, in Order No. P.U. 37(2008),
21 that the rates for all IC remain unchanged.

22
23 There has been no RSP component related to the Historical RSP since December 31, 2007.
24 Mr. Bowman is correct in his statement that the calculation of the 2007 RSP rates included
25 an amount related to the historical plan, but no such distinction existed since January 1,
26 2008, when the interim rates were established, by the Board, effectively merging previously
27 identified components into a single rate. At that time, continuing until today, the IC RSP
28 rate included the current plan only.

Hydro, in its current RSP application, again requested that the Teck rate, (the rate exempt from the Historical RSP balance), be increased to that of the other IC as the balance has been eliminated. In this regard, if Hydro's proposals for the treatment of the RSP balance and changes to the load variation component of the RSP are adopted, the RSP rate charged up to this point becomes moot.

3.2 Rate Discrimination - Teck versus Other IC

In his pre-filed testimony, Mr. P. Bowman characterized the difference in the RSP adjustment between the Teck rate and the rate to the other IC as being discriminatory during the nearly two year period from the end of 2007 to July 1, 2009⁶. My response to that assertion is that, as interim rates, they are not discriminatory per se. That is:

- Both the firm rate and the RSP adjustment were frozen without intent to discriminate against any particular individual customer or customer class;
- The 2007 RSP adjustment was continued by the Board to calendar years 2008 and 2009 based on Hydro's 2007 application that it may be prudent not to finalize rates in the context of the significant load change and the critical level of year-end hydraulic balances, which are not available until after the end of the calendar year; and
- As an interim rate, the RSP adjustment is subject to true-up.

3.3 No Balance Transfers

Mr. P. Bowman also discusses whether it is appropriate to re-allocate RSP balances. I agree that the load variation allocation rules currently assign the large load variation which has arisen as a result of the significant reduction in IC load. However, as Hydro stated in its 2006 RSP report, the allocation of the load variation in this manner is inconsistent with fuel cost causality principles as approved in Hydro's Cost of Service methodology. Assignment of all the fuel savings to the IC ignores the cost of service principle that generation is common,

⁶ Pre-filed testimony of P. Bowman, September 30, 2009, Section 5.0, page 11, lines 13-21. (The RSP plan to collect the historical balance ended in December 2009 but there was a balance owing to, rather than from, the customer group in October 2008.)

1 and is allocated among the customer groups based on energy consumption. Since fuel costs
2 are allocated in this manner, it is equitable and reasonable that fuel savings should be
3 allocated on the same basis. I do not consider this to be retroactive ratemaking. When the
4 current RSP rules went into effect on January 1, 2004, it was the intent of the parties that
5 the RSP would allocate costs equitably and without untended gain or loss to either the IC or
6 NP. At that time, the falloff in IC load and attendant effect on the classes was not foreseen.
7 Revising the RSP with the benefit of hindsight is simply to restore the outcome to the
8 original intent of the parties, which is to effect an equitable distribution of costs between
9 the classes in the absence of a GRA and without undue harm to either class. Also, during
10 Hydro's 2006 GRA, all parties agreed to consider changes to the RSP, and changing the load
11 variation allocation methodology is one of the matters upon which agreement was never
12 reached. As the RSP rates have been carried forward on an interim basis, since January 1,
13 2008, it is implicit that the rates – and the plan - were unsettled. In the interest of
14 implementing common goals, it is then a reasonable assumption for all parties, that changes
15 may be made to the RSP rules with an effective date of any point after the 2006 GRA
16 agreement to study the RSP.

17
18 As stated previously, the RSP has been subject to repeated reviews during Hydro's rate
19 applications since 2001. Each review has resulted in changes as the parties became aware
20 of issues caused by the existing methodologies.

21
22 Lastly, it should be noted that Mr. P. Bowman's opinion⁷ is that the load variation allocation
23 has not caused any adverse rate-related effects on NP. This position, however, does not
24 consider that the reduced IC load would allow a greater percentage of Hydro's hydraulic
25 generation to be available to NP and in this respect does result in an adverse outcome for
26 NP. It also does not consider that if the Historical RSP balance is treated on an assignment
27 basis, those costs will ultimately and inappropriately be borne by all of NP's ratepayers.

⁷ Pre-Filed Testimony of P. Bowman, September 30, 2009, page 11, lines 26-27.