

July 30, 2013

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

**ATTENTION: Ms. Cheryl Blundon**  
**Director of Corporate Services & Board Secretary**

Dear Ms. Blundon:

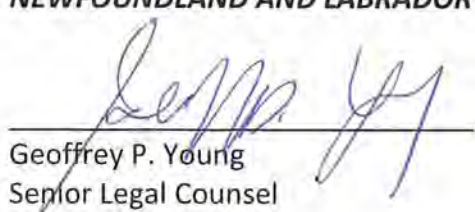
**Re: An Application by Newfoundland and Labrador Hydro pursuant to Sections 70 (1) and 76 of the Act for approval of the Rate Stabilization Plan rules and components of the rates to be charged to Industrial Customers.**

Please find enclosed the original and eight copies of the above-noted Application, plus supporting affidavit and evidence.

Should you have any questions, please contact the undersigned.

Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**

  
\_\_\_\_\_  
Geoffrey P. Young  
Senior Legal Counsel

GPY/jc

cc: Gerard Hayes – Newfoundland Power  
Coxworthy – Stewart McKelvey Stirling Scales

Thomas Johnson – Consumer Advocate Paul  
Dean Porter – Poole Althouse

**IN THE MATTER OF** the *Electrical Power Control Act*, RSNL 1994, Chapter E-5.1 (the *EPCA*) and the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the *Act*), and regulations thereunder;

**IN THE MATTER OF** an Application by Newfoundland and Labrador Hydro for the approval, pursuant to Sections 70 (1) and 76 of the *Act*, of the Rate Stabilization Plan rules and components of the rates to be charged to Industrial Customers.

**TO:** The Board of Commissioners of Public Utilities (the Board)

**THE APPLICATION OF NEWFOUNDLAND AND LABRADOR HYDRO (Hydro) STATES THAT:**

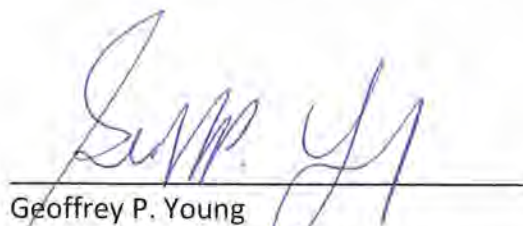
1. Hydro is a corporation continued and existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the *Act* and is subject to the provisions of the *Electrical Power Control Act, 1994*.
2. Order No. P.U. 40(2003) sets out the manner by which the Rate Stabilization Plan (RSP) is calculated and applied to the rates charged by Hydro to its Island Industrial Customers.
3. Order No. P.U. 8(2007) confirmed on a final basis the rates for Hydro's Island Industrial Customers to be effective January 1, 2007.
4. Orders No. P.U. 34(2007), No. P.U. 37(2008) No. P.U. 6(2009) continued, on an interim basis, Island Industrial Customers' rates.

5. The Board, in Orders No. P.U. 39(2010) and No. P.U. 1(2011) approved, on an interim basis, the rules and regulations governing the RSP.
6. Order No. P.U. 6(2012) approved, on an interim basis, the rates and rules to apply to Vale Newfoundland and Labrador Limited.
7. Order No. P.U. 9(2013) approved, on an interim basis, the rates and rules to apply to Praxair Canada Inc.
8. Order in Council (OC) OC2013-089 issued by the Lieutenant Governor in Council on April 4, 2013, together with the amending OC2013-207 dated July 16, 2013, direct the Board as to the disposition of certain matters with respect to the RSP and Industrial Customer rates. Details are included in the evidence filed with this application.
9. Hydro is therefore applying for the following rate changes, also set out in Schedule A to this Application, for Industrial Customer effective September 1, 2013:
  - (a) Eliminating the RSP Rate for all Industrial Customers except Teck Resources; and
  - (b) Setting the Teck Resources RSP Surplus adjustment rate to 1.111 cents per kWh.
10. Hydro is also proposing that effective September 1, 2013, the RSP rules related to the allocation of the load variation be modified such that the year-to-date net load

variation for both Newfoundland Power and the Industrial Customers be allocated among the customer groups based upon energy ratios. The RSP rules related to this proposal are contained in Section B, part 2 of the RSP rules attached to this Application as Schedule B.

11. Hydro is also making application that the Island Industrial Customer interim rates, from January 1, 2008 to August 31, 2013 be made final.
12. Based upon the direction received from the Government in the aforementioned OCs, Hydro is applying for approval of a new RSP section related to the disposition of the load variation, including financing, which has accumulated since January 1, 2007. The "RSP Surplus" section of the RSP rules attached to this Application as Schedule B contains Hydro's proposed means to implement that direction, which rules are further explained in the evidence submitted with this Application.

**DATED AT** St. John's in the Province of Newfoundland and Labrador this 30<sup>th</sup> day of July 2013.



Geoffrey P. Young  
Counsel for the Applicant  
Newfoundland and Labrador Hydro,  
500 Columbus Drive, P.O. Box 12400  
St. John's, Newfoundland, A1B 4K7  
Telephone: (709) 737-1277  
Facsimile: (709) 737-1782

**IN THE MATTER OF** the *Electrical Power Control Act*, RSNL 1994, Chapter E-5.1 (the *EPCA*) and the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the *Act*), and regulations thereunder;

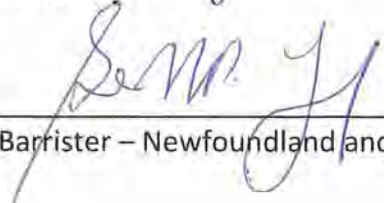
**IN THE MATTER OF** an Application  
by Newfoundland and Labrador Hydro for the  
approval, pursuant to Sections 70 (1) and 76 of  
the Act, of the Rate Stabilization Plan rules and  
components of the rates to be charged to  
Industrial Customers.

**AFFIDAVIT**

I, Robert J. Henderson, Professional Engineer, of St. John's in the Province of Newfoundland and Labrador, make oath and say as follows:

1. I am Vice-President, Newfoundland and Labrador Hydro, the Applicant named in the attached Application.
2. I have read and understand the foregoing Application.
3. I have personal knowledge of the facts contained therein, except where otherwise indicated, and they are true to the best of my knowledge, information and belief.

**SWORN** at St. John's in the )  
Province of Newfoundland and )  
Labrador )  
this 30th day of July 2013, )  
before me: )

  
Barrister – Newfoundland and Labrador

  
Robert J. Henderson

**NEWFOUNDLAND AND LABRADOR HYDRO****INDUSTRIAL - FIRM****Availability:**

Any person purchasing power, other than a retailer, supplied from the Interconnected Island bulk transmission grid at voltages of 66 kV or greater on the primary side of any transformation equipment directly supplying the person and who has entered into a contract with Hydro for the purchase of firm power and energy.

**Rate:****Demand Charge:**

The rate for Firm Power, as defined and set out in the Industrial Service Agreements, shall be \$6.68 per month per kilowatt of billing demand.

**Firm Energy Charge:**

Base Rate\* ..... @ 3.676 ¢ per kWh

RSP Adjustment ..... @ 0.00 ¢ per kWh\*\*

**\*\* Exception:**

**Teck Resources RSP Surplus Adjustment** ..... @ (1.111) ¢ per kWh

Net Energy Rate ..... @ 3.676 ¢ per kWh\*\*\*

**\*\*\* Exception:**

**Teck Resources Limited Net Energy Rate** ..... @ 2.565 ¢ per kWh

**\*Subject to RSP Adjustment:**

RSP Adjustment refers to all applicable adjustments arising from the operation of Hydro's Rate Stabilization Plan, which levelizes variations in hydraulic production, fuel cost, load and rural rates.

**NEWFOUNDLAND AND LABRADOR HYDRO**

**INDUSTRIAL - WHEELING - INTERIM**

**Specifically Assigned Charges:**

The table below contains the additional specifically assigned charges for customer plant in service that is specifically assigned to the Customer.

	<b>Annual Amount</b>
Abitibi-Consolidated (Grand Falls)	\$ 1,244
Abitibi-Consolidated (Stephenville)	\$ 104,647
Corner Brook Pulp and Paper Limited	\$ 347,167
North Atlantic Refining Limited	\$ 150,976
Teck Resources Limited	\$ 186,169

**Adjustment for Losses:**

If the metering point is on the load side of the transformer, either owned by the customer or specifically assigned to the customer, an adjustment for losses as determined in consultation with the customer prior to January 31 of each year shall be applied.

**General:**

Details regarding the conditions of Service are outlined in the Industrial Service Agreements. **This rate schedule does not include the Harmonized Sales Tax (HST) which applies to electricity bills.**

RATE STABILIZATION PLAN

The Rate Stabilization Plan of Newfoundland and Labrador Hydro (Hydro) is established for Hydro's Utility customer, Newfoundland Power, and Island Industrial customers to smooth rate impacts for variations between actual results and Test Year Cost of Service estimates for:

- hydraulic production;
- No. 6 fuel cost used at Hydro's Holyrood generating station;
- customer load (Utility and Island Industrial); and
- rural rates.

The formulae used to calculate the Plan's activity are outlined below. Positive values denote amounts owing from customers to Hydro whereas negative values denote amounts owing from Hydro to customers.

**Section A: Hydraulic Production Variation****1. Activity:**

Actual monthly production is compared with the Test Year Cost of Service Study in accordance with the following formula:

$$\{(A - B) \div C\} \times D$$

Where:

A = Test Year Cost of Service Net Hydraulic Production (kWh)

B = Actual Net Hydraulic Production (kWh)

C = Test Year Cost of Service Holyrood Net Conversion Factor (kWh /bbl.)

D = Monthly Test Year Cost of Service No. 6 Fuel Cost (\$/Can /bbl.)

**2. Financing:**

Each month, financing charges, using Hydro's approved Test Year weighted average cost of capital, will be calculated on the balance.

**3. Hydraulic Variation Customer Assignment:**

Customer assignment of hydraulic variations will be performed annually as follows:

$$(E \times 25\%) + F$$

Where:

E = Hydraulic Variation Account Balance as of December 31, excluding financing charges

F = Financing charges accumulated to December 31

The total amount of the Hydraulic Customer Assignment shall be removed from the Hydraulic Variation Account.

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

Schedule B

**4. Customer Allocation:**

The annual customer assignment will be allocated among the Island Interconnected customer groups of (1) Newfoundland Power; (2) Island Industrial Firm; and (3) Rural Island Interconnected. The allocation will be based on percentages derived from 12 months-to-date kWh for: Utility Firm and Firmed-Up Secondary invoiced energy, Industrial Firm invoiced energy, and Rural Island Interconnected bulk transmission energy.

The portion of the hydraulic customer assignment which is initially allocated to Rural Island Interconnected will be re-allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion which the Rural Deficit was allocated in the approved Test Year Cost of Service Study.

The Newfoundland Power and Island Industrial customer allocations shall be included with the Newfoundland Power and Island Industrial RSP balances respectively as of December 31 each year. The Labrador Interconnected Hydraulic customer allocation shall be written off to Hydro's net income (loss).

**Section B: Fuel Cost Variation, Load Variation and Rural Rate Alteration**

**1. Activity**

**1.1 Fuel Cost Variations**

This is based on the consumption of No. 6 Fuel at the Holyrood Generating Station:

$$(G - D) \times H$$

Where:

D = Monthly Test Year Cost of Service No. 6 Fuel Cost (\$Can /bbl.)

G = Monthly Actual Average No. 6 Fuel Cost (\$Can /bbl.)

H = Monthly Actual Quantity of No. 6 Fuel consumed less No. 6 fuel consumed for non-firm sales (bbl.)

**1.2 Load Variations**

**Firm:** Firm load variation is comprised of fuel and revenue components. The load variation is determined by calculating the difference between actual monthly sales and the Test Year Cost of service Study sales, and the resulting variance in No. 6 fuel costs and sales revenues. It is calculated separately for Newfoundland Power firm sales and Industrial firm sales, in accordance with the following formula:

$$(I - J) \times \{(D \div C) - K\}$$

Where:

C = Test Year Cost of Service Holyrood Net Conversion Factor (kWh /bbl.)

D = Monthly Test Year Cost of Service No. 6 Fuel Cost (\$Can /bbl.)

I = Actual Sales, by customer class (kWh)

J = Test Year Cost of Service Sales, by customer class (kWh)

K = Firm energy rate, by customer class

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

**Schedule B**

**Secondary:** Secondary load variation is based on the revenue variation for Utility Firm-Up Secondary energy sales compared with the Test Year Cost of Service Study, in accordance with the following formula:

$$(J - I) \times L$$

Where:

I = Actual Sales (kWh)

J = Test Year Cost of Service Sales (kWh)

L = Secondary Energy Firming Up Charge

### **1.3 Rural Rate Alteration**

(a) Newfoundland Power Rate Change Impacts:

This component is calculated for Hydro's rural customers whose rates are directly or indirectly impacted by Newfoundland Power's rate changes, with the following formula:

$$(M - N) \times O$$

Where:

M = Cost of Service rate <sup>1</sup>

N = Existing rate

O = Actual Units (kWh, bills, billing demand)

(b) Rural Labrador Interconnected Automatic Rate Adjustments:

This component reflects the impact of the automatic rate adjustments for Hydro's rural customers on the Labrador Interconnected system, which arise from the phase-in of the application of the credit from secondary energy sales to CFB Goose Bay to the rural deficit.

Monthly adjustments will be subject to revision when a new Test Year Cost of Service is approved by the Public Utilities Board for Hydro. The amount of the automatic rate adjustment is (\$98,295.)

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<sup>1</sup>

- Hydro's schedule of rates for its rural customers not affected by the December 6<sup>th</sup>, 2006 Government directive.
- For customers affected by the December 6<sup>th</sup>, 2006 Government directive, the Cost of Service rate equals the phased-in 2007 Forecast Cost of Service Rates for diesel rate classes 1.2D, 2.1D and 2.2D.
- No Rural Rate Alteration will arise from the phase-in of 2007 Forecast Cost of Service rates for the customers affected by the December 6<sup>th</sup>, 2006 Government directive.

**RATE STABILIZATION PLAN (INTERIM) (Continued)****2. Monthly Customer Allocation: Load and Fuel Activity**

Each month, the year-to-date total for fuel price variation and the year-to-date total for Newfoundland Power and Industrial Customer load variations will be allocated among the Island Interconnected customer groups of (1) Newfoundland Power; (2) Island Industrial Firm; and (3) Rural Island Interconnected. The allocation will be based on percentages derived from 12 months-to-date kWh for: Utility Firm and Firmed-Up Secondary invoiced energy, Industrial Firm invoiced energy, and Rural Island Interconnected bulk transmission energy.

The year-to-date portion of the fuel price variation and the load variation which is initially allocated to Rural Island Interconnected will be re-allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion which the Rural Deficit was allocated in the approved Test Year Cost of Service Study.

The current month's activity for Newfoundland Power, Island Industrials and regulated Labrador Interconnected customers will be calculated by subtracting year-to-date activity for the prior month from year-to-date activity for the current month. The current month's activity allocated to regulated Labrador Interconnected customers will be removed from the Plan and written off to Hydro's net income (loss).

**3. Monthly Customer Allocation: Rural Rate Alteration Activity**

Each month, the rural rate alteration will be allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion which the Rural Deficit was allocated in the approved Test Year Cost of Service Study. The portion allocated to regulated Labrador Interconnected will be removed from the Plan and written off to Hydro's net income (loss).

**4. Plan Balances**

Separate plan balances for Newfoundland Power and for the Island Industrial customer class will be maintained. Financing charges on the plan balances will be calculated monthly using Hydro's approved Test Year weighted average cost of capital.

**Section C: Fuel Price Projection**

A fuel price projection will be calculated to anticipate forecast fuel price changes and to determine fuel riders for the rate adjustments. For industrial customers, this will occur in October each year, for inclusion with the RSP adjustment effective January 1. For Newfoundland Power, this will occur in April each year, for inclusion with the RSP adjustment effective July 1.

**1. Industrial Fuel Price Projection:**

In October each year, a fuel price projection for the following January to December shall be made to estimate a change from Test Year No. 6 Fuel Cost. Hydro's projection shall be based on the change from the average Test Year No. 6 fuel purchase price, in Canadian dollars per barrel, determined from the forecast oil prices provided by the PIRA Energy Group, and the current US exchange rate. The calculation for the projection is:

$$[(S - T) \times U] - V \times W$$

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

**Schedule B**

Where:

- S = the September month-end PIRA Energy Group average monthly forecast for No. 6 fuel prices at New York Harbour for the following January to December  
T = Hydro's average Test Year contract discount (US \$/bbl)  
U = the monthly average of the \$Cdn / \$US Bank of Canada Noon Exchange Rate for the month of September  
V = average Test Year Cost of Service purchase price for No. 6 Fuel (\$Can /bbl.)  
W = the number of barrels of No. 6 fuel forecast to be consumed at the Holyrood Generating Station for the Test Year.

The industrial customer allocation of the forecast fuel price change will be based on 12 months-to-date kWh as of the end of September and is the ratio of Industrial Firm invoiced energy to the total of: Utility Firm and Firmed-Up Secondary invoiced energy, Industrial Firm invoiced energy, and Rural Island Interconnected bulk transmission energy.

The amount of the forecast fuel price change, in Canadian dollars, and the details of an estimate of the fuel rider based on 12 months-to-date kWh sales to the end of September will be reported to industrial customers, Newfoundland Power, and the Public Utilities Board, by the 10<sup>th</sup> working day of October.

**2. Newfoundland Power Fuel Price Projection:**

In April each year, a fuel price projection for the following July to June shall be made to estimate a change from Test Year No. 6 Fuel Cost. Hydro's projection shall be based on the change from the average Test Year No. 6 fuel purchase price, in Canadian dollars per barrel, determined from the forecast oil prices provided by the PIRA Energy Group, and the current US exchange rate. The calculation for the projection is:

$$[(X - T) \times Y] - V \times W$$

Where:

- T = Hydro's average Test Year contract discount (US \$/bbl)  
V = average Test Year Cost of Service purchase price for No. 6 Fuel (\$Can /bbl.)  
W = the number of barrels of No. 6 fuel forecast to be consumed at the Holyrood Generating Station for the Test Year. For the 2007 Test Year, test year barrels are reduced by 589,208 based on the reduction in forecast Island Industrial customer load caused by the shutdown of one of the paper machines at Corner Brook Pulp and Paper and the shutdown of Abitibi Consolidated (Grand Falls).  
X = the average of the March month-end PIRA Energy Group average monthly forecast for No. 6 fuel prices at New York Harbour for the following July to December, and the most recent long-term PIRA Energy Group average annual forecast for No. 6 fuel prices at New York Harbour for the following January to June.  
Y = the monthly average of the \$Cdn / \$US Bank of Canada Noon Exchange Rate for the month of March.

**RATE STABILIZATION PLAN (INTERIM) (Continued)**

The Newfoundland Power customer allocation of the forecast fuel price change will be based on 12 months-to-date kWh as of the end of March and is the ratio of Newfoundland Power Firm and Firmed-Up Secondary invoiced energy to the total of: Utility Firm and Firmed-Up Secondary invoiced energy, Industrial Firm invoiced energy, and Rural Island Interconnected bulk transmission energy. For the 12 months-to-date (April 2008 - March 2009) Industrial Firm invoiced energy is reduced by 87,991,636 kWh to reflect the forecast reduction in Abitibi Consolidated (Grand Falls) load.

The amount of the forecast fuel price change, in Canadian dollars, and the details of the resulting fuel rider applied to the adjustment rate will be reported to Newfoundland Power, industrial customers, and the Public Utilities Board, by the 10<sup>th</sup> working day of April.

**Section D: Adjustment****1. Newfoundland Power**

As of March 31 each year, Newfoundland Power's adjustment rate for the 12-month period commencing the following July 1 is determined as the rate per kWh which is projected to collect:

Newfoundland Power March 31 Balance

less projected recovery / repayment of the balance for the following three months (if any), estimated using the energy sales (kWh) for April, May and June from the previous year

plus forecast financing charges to the end of the 12-month recovery period (i.e., June in the following calendar year),

divided by the 12-months-to-date firm plus firmed-up secondary kWh sales to the end of March.

A fuel rider shall be added to the above adjustment rate, based on the Newfoundland Power Fuel Price Projection amount (as per Section C.2 above) divided by 12-months-to-date kWh sales to the end of March.

When new Test Year base rates come into effect, if a fuel rider forecast (either March or September) is more current than the test year fuel forecast, a fuel rider will be implemented at the same time as the change in base rates reflecting the more current fuel forecast and the new test year values.

Otherwise, the fuel rider portion of the RSP Adjustment will be set to zero upon implementation of the new Test Year Cost of Service rates, until the time for the next fuel price projection.

**2. Island Industrial Customers**

As of December 31 each year, the adjustment rate for industrial customers for the 12-month period commencing January 1 is determined as the rate per kWh which is projected to collect:

Industrial December 31 Balance

plus forecast financing charges to the end of the following calendar year,

divided by 12-months-to-date kWh sales to the end of December.

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

Schedule B

A fuel rider shall be added to the above adjustment rate, based on the Industrial Fuel Price Projection (as per Section C.1 above) amount divided by 12-months-to-date kWh sales to the end of December.

When new Test Year base rates come into effect, if a fuel rider forecast (either March or September) is more current than the test year fuel forecast, a fuel rider will be implemented at the same time as the change in base rates reflecting the more current fuel forecast and the new test year values. Otherwise, the fuel rider portion of the RSP Adjustment will be set to zero upon implementation of the new Test Year Cost of Service rates, until the time for the next fuel price projection.

**Section E: Historical Plan Balances:**

**1. August 2002 Balance:**

Newfoundland Power and Island Industrial customer balances accumulated in the Plan as at August 2002 will be recovered over a 5-year collection period, with adjustment rates established each December 31, commencing December 31, 2002. Financing charges on the plan balances will be calculated monthly using Hydro's approved Test Year annual weighted average cost of capital.

**Newfoundland Power**

The adjustment rate for each year of the five-year adjustment period will be determined as follows:

$$A = (B - C + D) \div E \div F$$

Where:

- A = adjustment rate (\$ per kWh) for the 12-month period commencing the following July 1.
- B = Balance December 31
- C = projected recovery to the following June 30 (if any), estimated using the most recent energy sales (kWh) for the period January to June.
- D = projected financing charges to the following June 30
- E = number of years remaining in the adjustment period
- F = energy sales (kWh) (firm and firmed-up secondary) to Newfoundland Power for the most recent 12 months ended December 31

Recovery and financing will be applied to the balance each month. At the end of the five-year recovery period, any remaining balance will be added to the plan then in effect.

**Island Industrial Customers, excluding Teck Cominco Limited [Exempted pursuant to Order No. P.U.1 (2007)]**

The adjustment rate for each year of the five-year adjustment period will be determined as follows:

$$G = H \div I \div J$$

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

**Schedule B**

Where:

- G = adjustment rate (\$ per kWh) for the 12-month period commencing the following January 1.  
H = Balance December 31  
I = number of years remaining in the adjustment period  
J = firm energy sales (kWh) to Industrial Customers, excluding sales to Teck Cominco Limited, for the most recent 12 months ended December 31

Recovery and financing will be applied to the balance each month. At the end of the five-year recovery period, any remaining balance will be added to the plan then in effect.

**2. RSP Balance, December 31, 2003:**

Newfoundland Power and Island Industrial customer balances accumulated in the Plan as at December 31, 2003 will be consolidated with the outstanding August 2002 customer balances as of December 31, 2003, and will be included with the Newfoundland Power and Island Industrial customer balances respectively for rate-setting purposes as of December 31, 2003.

**Section E: RSP Surplus**

**1. August 31, 2013 Balance:**

The net load variation for Newfoundland Power and the Industrial Customers from January 1, 2007 to August 31, 2013, including financing (the RSP Surplus), will be removed from the respective customer class balance, and allocated based upon direction provided by Government in Orders in Council OC2013-089 and OC2013-207. The balances which remain after this amount is removed will form the adjusted August 31, 2013 current plan balances for each customer class.

The Newfoundland Power allocated amount of the RSP Surplus will be held until such time as its disposition occurs in accordance with an Order of the Board of Commissioners of Public Utilities through a refund plan in accordance with Order in Council OC2013-089. The Industrial Customer class allocated amount will be used, firstly, to reduce the Industrial Customer class adjusted August 31, 2013 RSP balance to zero. The remaining Industrial Customer class allocated amount will be segregated and used, commencing September 1, 2013, in accordance with the rules below. Financing on the RSP Surplus balances will be calculated monthly using Hydro's approved Test Year annual weighted average cost of capital.

**2. Island Industrial Customer RSP Surplus Balance:**

The RSP Surplus balance allocated to the Industrial Customer class will be used to fund a phase-in of new Industrial Customer base rates effective September 1, 2013 using monthly adjustments determined as follows:

**2.1 Island Industrial Customers excluding Teck Resources**

The monthly adjustment for each month from September 1, 2013 to August 31, 2015 will be determined for each billing component (demand, energy and specifically assigned charge) for each Industrial Customer, except Teck Resources, as follows:

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

Schedule B

$$A = (B - C) \times D$$

Where:

- A = Monthly RSP Adjustment  
B = Approved Island Industrial Customer base rate  
C = Phase-In Industrial Customer rate, calculated in accordance with the formula below  
D = Actual monthly Industrial Customer billing units

Phase-In Industrial Customer Rates – September 1, 2013 to August 31, 2014

The Phase-In Industrial Customer rates will be calculated for each of demand, energy, and each customer's specifically assigned charges. For Industrial Customers, except Teck Resources, the phase-in rates for the twelve months commencing September 1, 2013 will be the base rates approved in Hydro's 2007 Test Year. These rates are:

Demand Charge: \$6.68 per month per kilowatt of billing demand  
Firm Energy Charge: Base Rate 3.676 ¢ per kWh

Specifically Assigned Charges:	Annual Amount
Corner Brook Pulp and Paper Limited	\$ 347,167
North Atlantic Refining Limited	<u>\$ 150,976</u>
	\$ 498,143

The RSP adjustment rate, which is applicable to energy sales, will be set to zero effective September 1, 2013. Subsequent to this date normal RSP adjustments will continue to apply.

Phase-In Industrial Customer Rates – September 1, 2014 to August 31, 2015

The Phase-In Industrial Customer rates for the twelve months commencing September 1, 2014 for each of demand, energy, and each customer's specifically assigned charges will be calculated as follows:

$$E = F \times (1 + G)$$

Where:

- E = Phase-In Industrial Customer rate  
F = Phase-In Industrial Customer rate in effect as of August 31 of the preceding year  
G = Equal annual percentage required over the three-year phase-in period to achieve the total change between:

- Hydro's revenue from these customers calculated using the 2007 Test Year rates, including the RSP adjustment in effect August 31, 2013, and
- the revenue for those customers calculated using those rates approved by the Board based on Hydro's 2013 Test Year, excluding any RSP adjustment,

using the 2013 Test Year billing units.

**RATE STABILIZATION PLAN (INTERIM) (Continued)****Phase-In Industrial Customer Rates – September 1, 2015**

Effective September 1, 2015, the Phase-In Industrial Customer rates will be the most recent Board approved Test Year rates.

The monthly adjustments and financing will be applied to the balance each month. At the end of the phase-in period, any remaining balance will be added to the Industrial Customer plan then in effect.

**2.2 Teck Resources**

The monthly adjustment for each month commencing September 1, 2013 until approval of 2013 Test Year base rates will be a rate per kWh, applied to actual monthly energy sales, calculated as follows:

$$H = (I + (J \times K))/K$$

Where:

H = Adjustment rate per kWh

I = Amount required to achieve one-third of the estimated change between:

- Hydro's revenue from this customer calculated using the 2007 Test Year rates including the RSP adjustment in effect on August 31, 2013, and
- the revenue from this customer calculated using those rates approved by the Board based on Hydro's 2013 Test Year excluding any RSP adjustment,

using the 2013 Test Year billing units.

J = RSP adjustment rate per kWh in effect on August 31, 2013

K = Teck Resources 2013 Test Year kWhs

**Note:** Once new base rates are approved based upon Hydro's 2013 Test Year, Hydro will apply for the disposition of any difference between the adjustment amounts calculated and the adjustment which would have been calculated using the 2013 approved Test Year rates. The difference will be refunded to, or collected from, Teck Resources, in a manner to be approved by the Board.

Upon the approval of 2013 Test Year rates and until August 31, 2015, Teck Resources Phase-In Industrial Customer monthly adjustment will be calculated in a manner similar to those specified above for the other Industrial Customers, as follows:

$$L = (M - N) \times O$$

Where:

L = Monthly RSP Adjustment

M = Approved Island Industrial Customer base rate

N = Phase-In Teck Resources Industrial Customer rate, calculated in accordance with the formula below

O = Actual monthly Teck Resources billing units.

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

Schedule B

Phase-In Teck Resources Industrial Customer Rates – September 1, 2013 to August 31, 2014

The phase-in rates for the twelve months commencing September 1, 2013 will be the base rates approved in Hydro's 2007 Test Year plus the monthly rate per kWh adjustment as outlined above.

Demand Charge: \$6.68 per month per kilowatt of billing demand

Firm Energy Charge:

Base Rate:	3.676 ¢ per kWh
RSP Surplus Adjustment:	(1.111) ¢ per kWh
Net Energy Rate	2.565 ¢ per kWh

Specifically Assigned Charges:

Teck Resources Annual Amount: \$186,169

Phase-In Teck Resources Industrial Customer Rates – September 1, 2014 to August 1, 2015

Upon the approval of 2013 Test Year rates, Teck Resources Phase-In Industrial Customer rates for each of demand, energy, and specifically assigned charges will be calculated in the same manner as specified above for the other Industrial Customers except that the September 1, 2014 to August 31, 2015 rates will be calculated based upon the 2007 Test Year rates, with the energy charge reduced by the rate per kWh in effect as of September 1, 2013, as outlined above.

The calculation is:

$$P = Q \times (1 + R)$$

Where:

P = Phase-In Teck Resources rate

Q = Phase-In Teck Resources rate in effect as of August 31 of the preceding year

R = Equal annual percentage required over the three-year phase-in period to achieve the total change between:

- Hydro's revenue for this customer calculated using the 2007 Test Year rates including the RSP adjustment in effect on August 31, 2013, and
- the revenue for this customer calculated using those rates approved by the Board based on Hydro's 2013 Test Year, but excluding any RSP adjustment

using the 2013 Test Year billing units.

**NEWFOUNDLAND AND LABRADOR HYDRO**  
**RATE STABILIZATION PLAN (INTERIM) (Continued)**

**Schedule B**

**Phase-In Teck Resources Industrial Customer Rates – September 1, 2015**

Effective September 1, 2015, Teck Resources will be charged the most recent Board approved Test Year rates consistent with the other Industrial Customers.

The monthly adjustments and financing will be applied to the balance each month. At the end of the phase-in period, any remaining balance will be added to the Industrial Customer plan then in effect.

# **RATE STABILIZATION PLAN EVIDENCE**

## **NEWFOUNDLAND AND LABRADOR HYDRO**

July 2013



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**1.0 INTRODUCTION**

This Application deals with the impacts to the Rate Stabilization Plan (RSP) and rates to Industrial Customers resulting from Order in Council (OC) OC2013-089 dated April 4, 2013, as amended by OC2013-207 dated July 16, 2013, issued by the Lieutenant Governor in Council, which, in summary, direct the Board of Commissioners of Public Utilities (Board) as follows:

- Effective September 1, 2013 Island Industrial Customer (IC) rates will no longer be frozen;
- New IC rates will be phased in over a period of three years commencing September 1, 2013;
- Effective September 1, 2013 all Island Industrial customers, with the exception of Teck Resources (Teck), will be subject to the same standard industrial rate, equivalent to the existing base rate but excluding the Rate Stabilization Plan (RSP) adjustment currently in place;
- Teck's rate increase will be phased in, to a reasonable degree, in three equal annual percentage increases;
- Funding of \$49 million will be drawn from the January 1, 2007 to August 31, 2013 accumulated load variation component of the RSP (RSP Surplus) and will be credited to the IC RSP on August 31, 2013 for the IC rate phase-in;
- The remaining balance of the RSP Surplus will be transferred to Newfoundland Power's RSP;
- The shortfall in Newfoundland and Labrador Hydro's (Hydro) revenues from the IC due to the IC rate phase in period will be funded from the IC RSP;
- Effective January 1, 2014, the IC rates will be subject to Rate Stabilization Plan rate changes in accordance with the Board approved methodology; and
- During Hydro's General Rate Application (GRA) process, Hydro will file with the Board an RSP Surplus refund plan which shall be in the form of direct payments or

1 rebates to rate payers (other than the ICs) and not in the form of an electricity rate  
2 adjustment.

3 On April 4, 2013, the Lieutenant Governor in Council also issued OC2013-090 (as amended  
4 on July 16, 2013 by OC2013-208) and OC2013-091. These OCs are directives to Hydro to  
5 make any necessary applications and provide any required information to the Board in  
6 order to bring into effect, through approved Board Orders, the items discussed above.  
7 Copies of the OCs are attached as Appendix A.

8 Hydro's RSP and IC Rates evidence complies with the direction it received from the  
9 Government. Hydro's evidence outlines the following:

- 10 • Background
- 11 • Allocation of the RSP Surplus amount;
- 12 • Proposed IC phase-in of 2013 Test Year rates; and
- 13 • Proposed changes to the Load Variation component of the RSP.

## 2.0 BACKGROUND

The RSP is a rate smoothing mechanism which was introduced in 1986 to limit volatility of customer rate impacts related to the cost of fuel used at Holyrood. NP and IC rates are adjusted for variations between actual results and test year Cost of Service estimates relating to fuel.

The RSP is comprised of the following main components:<sup>1</sup>

Hydraulic Variation:	The hydraulic variation provision of the RSP smooths customer rate impacts and stabilizes Hydro's financial results for varying levels of hydraulic production.
Fuel Price Variation	The fuel price variation provision of the RSP smooths customer rate impacts and stabilizes Hydro's financial results for changes in the cost per barrel of No. 6 fuel consumed at Holyrood.
Customer Load Variation	The customer load variation provision of the RSP smooths customer rate impacts and stabilizes Hydro's financial results for differences in customer energy revenues and the cost per barrel of No. 6 fuel consumed at Holyrood.

Over the years, a number of changes have been made to the rules and regulations surrounding the RSP. Among the more significant were changes made during Hydro's 2003 GRA, wherein the participating parties of the Consumer Advocate (CA), NP, and the IC agreed upon modifications to the plan operation.<sup>2</sup> These modifications included:

- A change in the customer recovery/repayment related to hydraulic variations;
- Commencement of an annual fuel rider;

<sup>1</sup> The RSP also has a relatively small provision related to rural rate changes.

<sup>2</sup> Approved by Board Order No P.U. 40(2003).

- 1       • A change in the customer assignment for the fuel component of customer load
- 2       variation;
- 3       • Forecast of financing charges, combined with a one-year recovery/repayment period
- 4       for the current plan; and
- 5       • Changes to the historical plan and the write-off periods.

6       On June 30, 2006, Hydro filed a report with the Board entitled Review of the Operation of  
7       the RSP<sup>3</sup> (2006 RSP Report). This report was filed with the Board in response to Order No.  
8       P.U. 14 (2004).<sup>4</sup> The 2006 RSP Report included a review of each of the RSP Components  
9       including the background, an analysis of each of the component's performance in  
10      comparison with design objectives, and any conclusions or recommendations. In its review  
11      of the Customer Load Variation,<sup>5</sup> Hydro found that this component of the RSP should be  
12      revised, stating in its conclusions "Hydro intends to propose a change to the customer  
13      allocation for the load variation provision of the RSP such that both the revenue and the  
14      fuel components of the load variation for both NP and IC are allocated on customer energy  
15      ratios."

16      For further information on the history of the RSP, please refer to Appendix C, a Grant  
17      Thornton report to the Board entitled "Historical Review of the Rate Stabilization Plan of  
18      Newfoundland and Labrador Hydro January 1<sup>st</sup> 1986 – December 31<sup>st</sup> 2009".

19      The 2004 RSP rules related to the allocation of the load variation remain in place, albeit on  
20      an interim basis.<sup>6</sup> These rules assign the load variation to the customer class for which the  
21      load variation occurred.

22      Over the 2011 to 2013 period, Government issued OCs related to electricity rate matters  
23      before the Board. On April 19, 2011 an OC was issued to the Board to "defer all matters  
24      currently before the Board pertaining to Industrial Customers rates and rate adjustments

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<sup>3</sup> A copy of this report is included with this filing as Appendix B.

<sup>4</sup> Order No. P.U. 14 (2004) page 166, item 11, I, ordered that Hydro file on or before June 30, 2006 a report on the operation of the Rate Stabilization Plan for the period January 1, 2004 to December 31, 2005.

<sup>5</sup> 2006 RSP Report, pgs. 13-16.

<sup>6</sup> Approved by Board Order No. P.U. 39(2010).

1 and to consider those matters in the context of the General Rate Application process." As  
2 stated in the Introduction, direction has now been received regarding the allocation of the  
3 RSP Surplus and implementing a phase-in of new IC rates over the 2013 to 2015 period. As  
4 well, Hydro has now filed its GRA.<sup>7</sup>

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<sup>7</sup> Hydro's General Rate Application was filed in July, 2013.

### 3.0 ALLOCATION OF THE RSP SURPLUS AMOUNT

Since 2007, there has been a material reduction in IC load, primarily due to a reduction in the pulp and paper industry in the Province. As a result of this and other RSP variances, significant balances have accumulated in the RSP. It is forecast that by August 31, 2013, the total owing to customers will reach \$240.1 million. Of this, approximately \$160 million<sup>8</sup> relates to the load variation since 2007, referred to as the RSP surplus. Government has directed the allocation of this amount between NP and the IC customer class. Table 1 shows the customer class balances after they are reduced for the effects of the load variation since January 2007.

**Table 1**

<b>Rate Stabilization Plan Balances 2007 to Forecast August 31, 2013 (Negative Balances are Owing to Customers) (\$millions)</b>							
	2007	2008	2009	2010	2011	2012	Aug 31 2013
Hydraulic Variation	(14.8)	(30.9)	(32.2)	(40.4)	(32.7)	(38.4)	(47.0)
Utility	(15.0)	(10.5)	(53.0)	(56.1)	(55.8)	(62.3)	(72.2)
Industrial Customers	(2.4)	5.6	8.7	13.9	20.4	31.6	39.0
2007-2013 RSP Surplus	(6.1)	(17.3)	(45.5)	(76.6)	(102.2)	(134.7)	(159.9)
Total	(38.3)	(53.1)	(122.0)	(159.2)	(170.3)	(203.8)	(240.1)

### 3.1 Industrial Customers

Of the \$160 million RSP Surplus, the Government has directed that \$49 million is to be allocated to the IC class on August 31, 2013. This results in a credit in the IC class RSP, estimated to result in a net balance of \$10 million at August 31, 2013. Hydro is proposing that this amount be segregated into a separate plan balance, called the IC class RSP Surplus, and used to phase-in the rate increases for the IC as a result of Hydro's current GRA filing. Details on Hydro's proposal for the phase-in are contained in Section 4. Table 2 shows the resulting RSP balances after the RSP Surplus accounts are created.

<sup>8</sup> Appendix D contains a schedule showing how this amount was calculated.

**Table 2**

<b>Rate Stabilization Plan Balances</b> <b>2007 to Forecast August 31, 2013</b> <b>(Negative Balances are Owing to Customers)</b> <b>(\$millions)</b>							
	2007	2008	2009	2010	2011	2012	Aug 31 2013
Hydraulic Variation	(14.8)	(30.9)	(32.2)	(40.4)	(32.7)	(38.4)	(47.0)
Utility Current Plan	(15.0)	(10.5)	(53.0)	(56.1)	(55.8)	(62.3)	(72.2)
Utility RSP Surplus							(110.9)
Industrial Customers Current Plan	(2.4)	5.6	8.7	13.9	20.4	31.6	0.0
Industrial Customers RSP Surplus							(10.0)
2007-2013 RSP Surplus	(6.1)	(17.3)	(45.5)	(76.6)	(102.2)	(134.7)	0.0
Total	(38.3)	(53.1)	(122.0)	(159.2)	(170.3)	(203.8)	(240.1)

### 1    **3.2    Newfoundland Power**

2    Hydro is also proposing that the remaining RSP Surplus amount, presently forecast to be  
3    \$111 million, will be segregated into a separate plan balance, and called the NP RSP Surplus,  
4    effective August 31, 2013. During its GRA process Hydro, after consultation with NP and the  
5    Consumer Advocate, will file with the Board an NP RSP Surplus refund plan<sup>9</sup> which will  
6    recommend a methodology to be used in refunding this amount. The disposition of the NP  
7    RSP Surplus will be addressed by a separate application during Hydro's GRA process.

<sup>9</sup> OC2013-091 dated April 4, 2013. Refer to Appendix A.

## 4.0 PROPOSED IC PHASE-IN OF 2013 TEST YEAR RATES

As directed by Government,<sup>10</sup> effective September 1, 2013 new IC rates will be phased in over a three year period. Commencing on that date, all Island Industrial Customers, with the exception of Teck, will be subject to the same standard industrial rate, equivalent to the existing base rate but excluding the RSP adjustment currently in place. Teck's rate increase will be phased in, to a reasonable degree, in three equal annual percentage increases such that at the end of the phase-in period, Teck will be subject to the standard industrial rate. In addition to these phase-in rates, effective January 1, 2014, IC rates will once again be subject to normal RSP rate changes in accordance with the RSP rules approved by the Board.

### 4.1 September 1, 2013 IC Rates

Hydro is requesting that the Board approve the following rate changes effective September 1, 2013:

- For IC excluding Teck, Hydro is proposing to set the RSP adjustment rate to zero, in accordance with the direction received from the Government.
- For Teck, Hydro is proposing to implement a RSP Surplus adjustment rate. This rate has been determined by:
  - Calculating the increase in Hydro's revenue from Teck, using existing rates including the RSP, and Hydro's 2013 proposed Test Year<sup>11</sup> rates excluding any RSP adjustment, using the 2013 Test Year billing units.
  - Applying the equal annual percentage required to evenly phase in, over three years, the total increase that would be implemented if Hydro's new Test Year base rates were approved, compared to the revenue at existing rates, to determine the amount which would be charged to Teck.
  - Dividing the amount of RSP adjustment required to achieve this one-third increase by Teck's 2013 Test Year forecast energy sales to derive a rate per kW

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<sup>10</sup> OC2013-089 and OC2013-090 dated April 4, 2013. Refer to Appendix A.

<sup>11</sup> Hydro's General Rate Application was filed July, 2013.

1 RSP Surplus adjustment. Based on Hydro's 2013 Test Year as filed with its GRA,  
2 Hydro is proposing an RSP Surplus adjustment rate of 11.11 mills/kWh, as  
3 calculated in Appendix E.

- 4 • Hydro is also proposing to adjust the percentage increase for Teck upon the Board's  
5 approval of new base rates, and file an application with the Board at that time  
6 related to any over or under recovery. Hydro's proposed RSP rules to effect this  
7 phase-in rate and recovery are contained in Section F of the RSP rules attached as  
8 Schedule B to this Application.
- 9 • Hydro is requesting the Board's approval of the Industrial Customer rates as  
10 contained in Schedule A to its Application.

#### 11 **4.2 IC Rates upon approval of new base rates to September 1, 2014**

12 Upon approval by the Board of new base rates to be charged to this rate class, the RSP  
13 Surplus will be used, as explained in Section 4.5, so that the IC will, in effect, be paying the  
14 rates determined under Section 4.1 above (Phase-In rates). The difference between Hydro's  
15 revenue at these rates and the new rates approved by the Board as a result of the GRA will  
16 be the RSP adjustment applied to the RSP Surplus on a monthly basis, as explained in  
17 Section 4.5.

#### 18 **4.3 September 1, 2014 IC Rates**

19 The second year of the IC phase-in of Hydro's new Test Year rates will begin September 1,  
20 2014. Hydro is proposing to apply to the September 1, 2013 to August 31, 2014 Phase-In  
21 rates, including specifically assigned charges, the equal annual percentage required over the  
22 three year phase in period the increase that would occur if Hydro's new Test Year base rates  
23 are implemented, when compared with Hydro's revenue at the rates, including the RSP  
24 adjustment, in effect August 31, 2013.<sup>12</sup> There will be a separate calculation for Teck, as the  
25 August 31, 2014 Phase-In rates for Teck, as discussed above, will be different from those in  
26 effect for the other IC.

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<sup>12</sup> Using 2013 Test Year billing units.

1 Appendix F shows the calculation of these Phase-In rates for the IC other than Teck based  
2 upon Hydro's proposed 2013 Test Year rates. Hydro is requesting that the RSP rules related  
3 to the calculation of these Phase-In rates be approved by the Board.

#### 4 **4.4 September 1, 2015 IC Rates**

5 Based upon the direction provided by the Government, Hydro is proposing that effective  
6 September 1, 2015, all IC will be charged the base rates approved by the Board.  
7 Additionally, the RSP rates in effect at that time will apply.

#### 8 **4.5 IC RSP Surplus**

9 The IC RSP surplus will be used to phase in these proposed rates. The difference between  
10 Hydro's revenue at these Phase-In rates and the base rates approved by the Board will be  
11 the monthly adjustment applied to the IC RSP Surplus. It is proposed that the August 31,  
12 2015 balance in the RSP Surplus will be applied to the IC RSP plan in effect at that time, and  
13 will be included in the regular RSP adjustment calculations, to be applied on January 1,  
14 2016.

#### 15 **4.6 Summary**

16 The IC RSP Surplus balance is to be used for the phase- in of the IC rate increase based upon  
17 the 2013 Test Year. Table 3 shows the forecast rates for each customer based upon Hydro's  
18 GRA filing.<sup>13</sup>

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<sup>13</sup> Hydro's General Rate Application was filed July, 2013.

Table 3

Rate Component		CBPP	NARL	Teck	Vale	Praxair
<b>IC Existing Rates - August 31, 2013</b>						
Energy (¢/kWh)		3.676	3.676	3.676	3.676	3.676
RSP (¢/kWh)		(0.785)	(0.785)	(2.000)	(2.000)	(2.000)
Demand (\$/Kw/mo)		6.68	6.68	6.68	6.68	6.68
Specifically Assigned (\$)	Varies by Customer	347,167	150,976	186,169	0	0
<b>IC Phase-In Rates Effective September 1, 2013</b>						
Energy (¢/kWh)		3.676	3.676	2.565	3.676	3.676
RSP (¢/kWh)	To be determined <sup>14</sup>					
Demand (\$/Kw/mo)		6.68	6.68	6.68	6.68	6.68
Specifically Assigned (\$)	Varies by Customer	347,167	150,976	186,169	0	0
<b>IC Phase-In Rates Effective September 1, 2014</b>						
Energy (¢/kWh)		4.356	4.356	3.521	4.356	4.356
RSP (¢/kWh)	To be determined					
Demand (\$/Kw/mo)		7.92	7.92	7.92	7.92	7.92
Specifically Assigned (\$)	Varies by Customer	411,393	178,907	241,387	0	0
<b>IC Rates Effective September 1, 2015</b>						
Energy (¢/kWh)		4.782	4.782	4.782	4.782	4.782
RSP (¢/kWh)	To be determined					
Demand (\$/Kw/mo)		9.13	9.13	9.13	9.13	9.13
Specifically Assigned(\$)	Varies by Customer	944,954	101,748	215,009	533,724	0

- 1 Table 4 shows the individual IC rate impacts, excluding normal RSP adjustments which are
- 2 to become effective January 1, 2014. These are based on the rates outlined set out in Table
- 3 3 using 2013 billing determinants<sup>15</sup>,

<sup>14</sup> Based upon the application of the existing RSP rules.

<sup>15</sup> Billing determinants refers to 2013 Test Year IC billing demands (MW), energy (kWh) and specifically assigned charges.

**Table 4**

<b>Industrial Customer Rate Impacts with Phase-In</b>			
<b>Customer</b>	<b>Sept 1, 2013</b>	<b>Sept 1, 2014</b>	<b>Sept 1, 2015</b>
Corner Brook Pulp and Paper	14.7%	18.5%	20.1%
North Atlantic Refining	19.2%	18.5%	10.3%
Teck Resources	29.7%	29.7%	29.7%
Vale	63.6%	18.5%	36.9%
Praxair	25.4%	18.5%	13.3%
<b>Total</b>	<b>22.4%</b>	<b>20.0%</b>	<b>17.8%</b>

## 5.0 PROPOSED CHANGES TO THE LOAD VARIATION COMPONENT OF THE RSP

With the receipt of direction from Government, the balance of RSP Surplus is to be allocated between NP and IC customer classes effective August 31, 2013. Hydro is proposing that the RSP rules be revised effective September 1, 2013 to allocate the net load variation for both NP and IC on customer energy ratios, that is, in the same manner as the fuel price variation is allocated. The basis for this recommendation was provided by Hydro in its June 30, 2006 report<sup>16</sup>, as follows:

*One measure of fairness when it comes to evaluating the customer allocations performed in the RSP is the degree to which the RSP adjustment rate anticipates a re-setting of customer base rates using a Cost of Service study. If the change were to be incorporated into a new test year, the RSP adjustment rate should be representative of the change to base rates. Hydro has evaluated both the previous and the existing RSP allocation of customer load variation against the Cost of Service treatment. This evaluation showed that both the previous and existing methods produce widely different results which led Hydro to conclude that the customer allocation for the load variation should be revised so that it is more closely aligned with Cost of Service treatment.*

*Hydro intends to propose a change in the method of allocating the load variation component of the RSP such that both the revenue and the fuel components of the load variation will be allocated between NP and IC using customer energy allocation ratios. In effect, customers will be allocated with Hydro's bottom line impact in the same proportion as energy costs are shared in a test year Cost of Service.*

The proposed wording of the RSP rules on this matter is contained in Section E of the RSP rules attached as Schedule B to the Application.

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<sup>16</sup>Appendix B, page 14.

## 6.0 SUMMARY

Hydro is proposing to implement the direction received from the Government regarding use of the RSP Surplus and the phase-in of proposed rate increases to its IC. The specific proposals are:

- The January 1, 2007 to August 31, 2013 net load variation plus associated financing for each NP and the IC class, identified as the RSP Surplus, will be removed from the respective customer class balance at August 31, 2013;
- The amount of \$49 million will be transferred from the RSP Surplus to the IC RSP on August 31, 2013.
- The IC RSP Surplus will be used to make the August 31, 2013 balance of the IC RSP (after the load variation and financing are removed) zero.
- The amount remaining in the IC RSP Surplus after the current plan balance is made zero on August 31, 2013 will be used to phase-in the IC rate increase beginning September 1, 2013.
- Any remaining balance, positive or negative, in the IC RSP surplus on August 31, 2015 will be transferred to the regular IC RSP account and the IC rate phase in will be considered to have been completed at August 31, 2015.
- IC rates will change, effective September 1, 2013, to remove the existing RSP adjustment rate. A separate IC RSP Surplus adjustment rate will be applied to Teck in order to evenly phase-in Teck's rate increase over the period.
- Hydro will adjust the percentage increase for Teck upon the Board's approval of new base rates, and will file an application with the Board at that time related to any over or under recovery.
- Hydro will file, during its GRA proceeding, a plan for the disposition of the NP RSP Surplus.
- The direction provided by Government regarding funding the shortfall in Hydro's revenues when compared to revenue at the approved Island industrial Customer rates will become effective only upon Hydro receiving approval of new IC base rates.

- 1       • Effective January, 2014, the normal operation of the RSP will resume for the IC and
- 2       the IC rates determined under Sections C and D of the RSP rules will be
- 3       implemented.

**Order Number:**

OC2013-089

**Order Date:**

2013-04-04

**Department:**

Natural Resources

**Authority:**

Electrical Power Control Act, 1994

**Order Text:**

Under the authority of section 5.1 of the Electrical Power Control Act, 1994, the Lieutenant Governor in Council is pleased to direct the Board of Commissioners of Public Utilities that:

- 1) Effective July 1, 2013, Island industrial customer rates will no longer be frozen. Effective on this date rate increases for island industrial customers will be phased in over a three year period, with funding for this phase-in to be drawn from the January 1, 2007 to June 30, 2013 accumulated Load Variation (the Rate Stabilization Plan Surplus) component of the Rate Stabilization Plan and credited to the Island industrial customer Rate Stabilization Plan effective June 30, 2013;
- 2) On June 30, 2013 the Island industrial customers' Rate Stabilization Plan will be credited with \$56.5 million, the estimated Rate Stabilization Plan amount required to phase-in industrial customer rates, based on Newfoundland and Labrador Hydro's General Rate Application. The remaining balance in the Rate Stabilization Plan Surplus on June 30, 2013, will be transferred to the credit of Newfoundland Power's Rate Stabilization Plan. No future adjustments will be made to these amounts credited. Effective July 1, 2013 all Island industrial customers, with the exception of Teck Resources, will be subject to the same standard industrial rate, equivalent to the existing base rate but excluding the Rate Stabilization Plan adjustment currently in place;
- 3) Teck Resources rate increase will be phased in, to a reasonable degree, in three equal annual percentage increases, and at the end of the phase-in period Teck Resources will be subject to the standard industrial rate;
- 4) Over the three year Island industrial rate phase in period, the shortfall in Newfoundland and Labrador Hydro's revenues when compared to revenue at the Board of Commissioners of Public Utilities-approved Island industrial customer rates, shall be funded from the Island industrial customer Rate Stabilization Plan;
- 5) Notwithstanding Items 1) through 4) above, effective January 1, 2014, the Island industrial customers will be subject to Rate Stabilization Plan rate changes in accordance with the Board of Commissioners of Public Utilities-approved methodology;
- 6) Newfoundland and Labrador Hydro's General Rate Application process shall include a Rate Stabilization Plan surplus refund plan to ratepayers. The refund plan shall comprise direct payments or rebates to ratepayers and shall not be in the form of an electricity rate adjustment. This refund plan will exclude Island industrial customers who will receive Rate Stabilization Plan surplus funds through the three year phase-in of new rates. The Board of Commissioners of Public Utilities shall make the final determination on the details of the refund to remaining ratepayers;
- 7) Newfoundland Power's portion of the Rate Stabilization Plan Surplus shall be distributed as a direct payment or rebate to its ratepayers and shall not be in the form of an electricity rate adjustment; and
- 8) Newfoundland and Labrador Hydro's General Rate Application shall be based on a 2013 test year in the determination of new electricity rates for customers.

**Order Number:**

OC2013-090

**Order Date:**

2013-04-04

**Department:**

Natural Resources

**Authority:**

Hydro Corporation Act, 2007

**Order Text:**

Under the authority of section 39(3) of the Hydro Corporation Act, 2007, the Lieutenant Governor in Council is pleased to direct the Board of Directors of Newfoundland and Labrador Hydro-Electric Corporation to bring about such applications and information to the Board of Commissioners of Public Utilities to facilitate Orders from that Board with the following effects:

- 1) Effective July 1, 2013, Island industrial customer rates will no longer be frozen. Effective on this date rate increases for island industrial customers will be phased in over a three year period, with funding for this phase-in to be drawn from the January 1, 2007 to June 30, 2013 accumulated Load Variation (the Rate Stabilization Plan Surplus) component of the Rate Stabilization Plan and credited to the Island industrial customer Rate Stabilization Plan effective June 30, 2013;
- 2) On June 30, 2013 the Island industrial customers' Rate Stabilization Plan will be credited with \$56.5 million, the estimated Rate Stabilization Plan amount required to phase-in industrial customer rates, based on Newfoundland and Labrador Hydro's General Rate Application. The remaining balance in the Rate Stabilization Plan Surplus on June 30, 2013, will be transferred to the credit of Newfoundland Power's Rate Stabilization Plan. No future adjustments will be made to these amounts credited. Effective July 1, 2013 all Island industrial customers, with the exception of Teck Resources, will be subject to the same standard industrial rate, equivalent to the existing base rate but excluding the Rate Stabilization Plan adjustment currently in place;
- 3) Teck Resources rate increase will be phased in, to a reasonable degree, in three equal annual percentage increases and at the end of the phase-in period Teck Resources will be subject to the standard industrial rate;
- 4) Over the three year Island industrial rate phase in period, the shortfall in Newfoundland and Labrador Hydro's revenues when compared to revenue at the Board of Commissioners of Public Utilities-approved Island industrial customer rates, shall be funded from the Island industrial customer Rate Stabilization Plan; and
- 5) Notwithstanding Items 1) through 4) above, effective January 1, 2014, the Island industrial customers will be subject to Rate Stabilization Plan rate changes in accordance with the Board of Commissioners of Public Utilities-approved methodology.

**Order Number:**

OC2013-091

**Order Date:**

2013-04-04

**Department:**

Natural Resources

**Authority:**

Hydro Corporation Act, 2007

**Order Text:**

Under the authority of section 39(3) of the Hydro Corporation Act, 2007, the Lieutenant-Governor in Council is pleased to direct the Board of Directors of Newfoundland and Labrador Hydro-Electric Corporation that:

- 1) during its General Rate Application process, it shall file a plan for the phase in of island industrial customer rates, including the application of the Rate Stabilization Plan funding, as described in OC2013-090;
- 2) during its General Rate Application process, it shall file a Rate Stabilization Plan surplus refund plan to ratepayers. The refund shall be a direct payment or rebate to ratepayers and shall not be in the form of an electricity rate adjustment. This refund plan will exclude Island industrial customers who will receive Rate Stabilization Plan surplus funds through the three year phase-in of new rates; and
- 3) it file its General Rate Application based on a 2013 test year in the determination of new electricity rates for customers.

Summary of Orders No. OC2013-207 and OC2013-208

OC2013-089 and OC2013-090 are amended by:

deleting the date “June 30, 2013” wherever it appears and substituting therefor the date “August 31, 2013”;

deleting the date “July 1, 2013” wherever it appears and substituting therefor the date “September 1, 2013”; and

deleting the words “\$56.5 million” wherever they appear and substituting therefor the words “\$49 million”.



## **Review of the Operation of the Rate Stabilization Plan**

For the Period January 1, 2004 to December 31, 2005

Prepared by Newfoundland and Labrador Hydro  
June 30, 2006

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# 1 Introduction

This Rate Stabilization Plan (RSP) report was prepared by Newfoundland and Labrador Hydro (Hydro) in response to the Board of Commissioners of Public Utilities (the Board) Order No. P.U. 14 (2004), p. 78, which stated:

“The Board will direct NLH to complete a review of the operation of the RSP for the period January 1, 2004 to December 31, 2005. A report on this review setting out an assessment of the impact on customers should be filed with the Board no later than June 30, 2006.”

The Board’s full order is available from its website at:

<http://n225h099.pub.nf.ca/orders/order2004/pu/pu14-2004.pdf>

Hydro is also taking this opportunity to introduce a potential new provision of the RSP to stabilize fuel-related expenses for Hydro’s isolated systems.

The attached report contains conclusions, some of which propose modifications to the RSP rules. It is Hydro’s intention to discuss these potential changes during the mediation process; none of these proposals have been included in Hydro’s upcoming general rate application.

## 2 Background

Hydro's RSP was first established in 1986 for Newfoundland Power (NP) and the Island Industrial customers (IC) to smooth rate impacts for certain variations between actual results and test year Cost of Service (COS) estimates for: (i) hydraulic production, (ii) No. 6 fuel cost used at Hydro's Holyrood generating station, and (iii) customer load (NP and IC).<sup>1</sup> It was developed primarily in response to customer complaints of high electricity bills in the winter, caused monthly rate adjustments through the fuel adjustment clause of Hydro's rate schedule. Through this clause, customers were charged monthly variances in fuel costs in the following month. When there were large fuel cost increases in the winter, customers' rates could increase substantially at the same time they were experiencing high consumption. The RSP replaced this clause and also Hydro's water equalization provision, used to balance out Hydro's costs for varying hydraulic production.

From 1986 until the late 1990's, the RSP functioned reasonably well. The combined impact of hydraulic variations, fuel price variations and load variations produced acceptable RSP balances and customer rate impacts.

In 2001, the combined RSP balance grew nearly two and one-half times from \$35 million to \$85 million. RSP balances since 2000 are shown in **Table 1**. Full RSP history since 1986 is contained in Appendix A, and customer rates are in Appendix B.

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<sup>1</sup> In 1993, NP's RSP was modified to include provisions relating to Rural rate changes.

**Table 1: Customer Plan Balances**

RSP Balances (\$ 000)				
	Newfoundland Power	Industrial Customers	Hydraulic Variation	Total RSP
2000	22,684	12,056	N/A	34,740
2001	60,300	24,768	N/A	85,068
2002	92,060	32,711	N/A	124,771
2003	114,790	40,914	N/A	155,704
2004	106,570	35,986	(5,521)	137,035
2005	79,900	23,790	(10,625)	93,065

At Hydro's 2001 General Rate Application (GRA), the RSP became an issue due to the size of uncollected balances owing from customers, and also there was concern that the RSP was distorting the price signal customers received. There were extensive discussions and the Board made a number of findings and recommendations in Order No. P.U. 7 (2002-2003). These included:

- Changes to historical and current plan write-off periods; and
- Simplified calculations to determine the allocation of activity between NP and IC.

At Hydro's next GRA in 2003, the RSP was again an issue due to continuing high balances owing from customers, the resulting distortion to price signals, and proposed customer rate impacts of dealing with the high balances. Hydro, NP, IC and the Consumer Advocate achieved a consensus regarding a number of changes to the operation of the RSP. These changes included:

- A change in the customer recovery/repayment related to hydraulic variations;
- Commencement of an annual fuel rider;
- A change in the customer assignment for the fuel component of customer load variation;

- Forecast of financing charges, combined with a one-year recovery/repayment period for the current plan; and
- Changes to the historical plan and the write-off periods.

In the Board's Order P.U. 40 (2003), the Board approved the changes as agreed to among the parties, effective January 1, 2004. This report reviews each of the changes for the two-year period since implementation.

### 3 RSP Revisions

Each of the following changes to the RSP, approved by the Board at Hydro's 2003 GRA in P.U. 40 (2003), is reviewed in context of the objective of the change, the 24-month period operating results, and Hydro's conclusions related to the change:

- Hydraulic variation;
- Fuel price variation and fuel rider;
- Customer Load Variation;
- Current plan recovery/repayment;
- Historical plan balances and write-offs.

#### 3.1 *Hydraulic Variation*

##### *Background*

The hydraulic variation provision of the RSP smoothes customer rate impacts and stabilizes Hydro's financial position for varying levels of hydraulic production. Variations in hydraulic production (due to changes in rainfall and snowfall) impact levels of production at Holyrood and the amount of No. 6 fuel consumed. Hydro will owe money to customers when hydraulic production is higher than the test year<sup>2</sup> and there is lower consumption of No. 6 fuel at Holyrood. Customers will owe money to Hydro when hydraulic production is below test year levels and more barrels of No. 6 fuel are consumed at Holyrood. Over an extended period of time, cumulative hydraulic production variations should tend toward zero because test year production is set to the average expected from historical hydrological records.

Prior to 2001, the combined hydraulic and fuel price variations resulted in reasonable RSP balances<sup>3</sup>. In 2001, high fuel prices combined with below average hydraulic production levels produced RSP balances which were unacceptably high. Also, the method of setting customer

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<sup>2</sup> Customer base rates are established on test year data, which incorporate average hydraulic production levels.

<sup>3</sup> See Appendix A.

adjustment rates contributed to the problem because it was based on a perpetual or rolling one-third write-off of customer plan balances each year. With balances growing year over year, the adjustment rates did not produce the desired result of reducing plan balances.

During the 2003 GRA, there were several problems recognized with the hydraulic variation provision of the RSP:

- Over time, variations in hydraulic energy production would tend toward zero, but the value of hydraulic energy variations would never tend toward zero with increases and decreases in energy production priced at different test year fuel prices over the years.
- Increased hydraulic production could offset high fuel prices, obscuring proper marginal thermal production pricing signals.
- Incorporating the full hydraulic variation into annual customer rate adjustments does not accommodate the natural tendency of the hydraulic production variation provision to tend toward zero over time. Furthermore, when the perpetual rolling three-year write-off period was replaced with a discrete two-year write-off period in 2002, inclusion of the full hydraulic variation could unnecessarily increase the volatility of customer rate adjustments.
- Financing charges became a significant factor when dealing with large RSP balances.

A summary of recent changes to the hydraulic variation is shown in **Table 2**:

**Table 2: Hydraulic Variation Change Summary**

<b>Change</b>	<b>Previous</b>	<b>Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)</b>	<b>Effective Jan 1, 2004 Order No. P.U. 40 (2003)</b>
Customer Assignment Frequency	Monthly	Monthly	Annually
Customer Assignment Amount	100% of activity, plus 100% of financing	100% of activity, plus 100% of financing	25% of life-to-date activity, plus 100% of financing
Recovery Period	Perpetual or rolling 3-year	Discrete 2-year write-off	Discrete 1-year write-off

Beginning January 1, 2004, the customer assignment is now performed annually in December of each year, and is based on 25% of the life-to date hydraulic variation, plus 100% of the current year financing charges. The remaining portion of the life-to-date hydraulic variation remains on Hydro's balance sheet in the Hydraulic Variation Account, with the assumption that future production variations will offset the account balance.

### Analysis

The reasonableness of the balance in the hydraulic variation account can be determined with a comparison between the cumulative energy variation and the cumulative account balance. They should both reflect the same circumstance (i.e., above average cumulative production should be represented with a credit account balance, and *vice versa*). **Table 3** shows the cumulative energy and amounts in the Hydraulic Variation Account. These amounts are derived from 2004 test year fuel costs (average of \$30/bbl), and hydraulic production variations will continue to be valued at this level until Hydro receives Board approval for a new test year. With current and projected fuel prices in the \$55/bbl range, a new test year will mean the value of each kWh of variation will be more than 80% higher. Using hydraulic production variances since 1986 at \$55/bbl fuel, the balance in the Hydraulic Variation Account could move between a positive \$80 million and a negative \$120 million.

However, the Hydraulic Variation Account is intended to function over an extended period of time and there has not yet been enough experience to draw any conclusions.

**Table 3: Cumulative Hydraulic Variation**

	(Above) Below Average Production			
	GWh		\$ 000	
	Annual	Cumulative	Annual <sup>(1)</sup>	Cumulative
2004	(183)	(183)	(5,522)	(5,522)
2005	(187)	(370)	(5,104)	(10,626)
<sup>(1)</sup>	Account balance after year-end customer assignment.			

## *Conclusion*

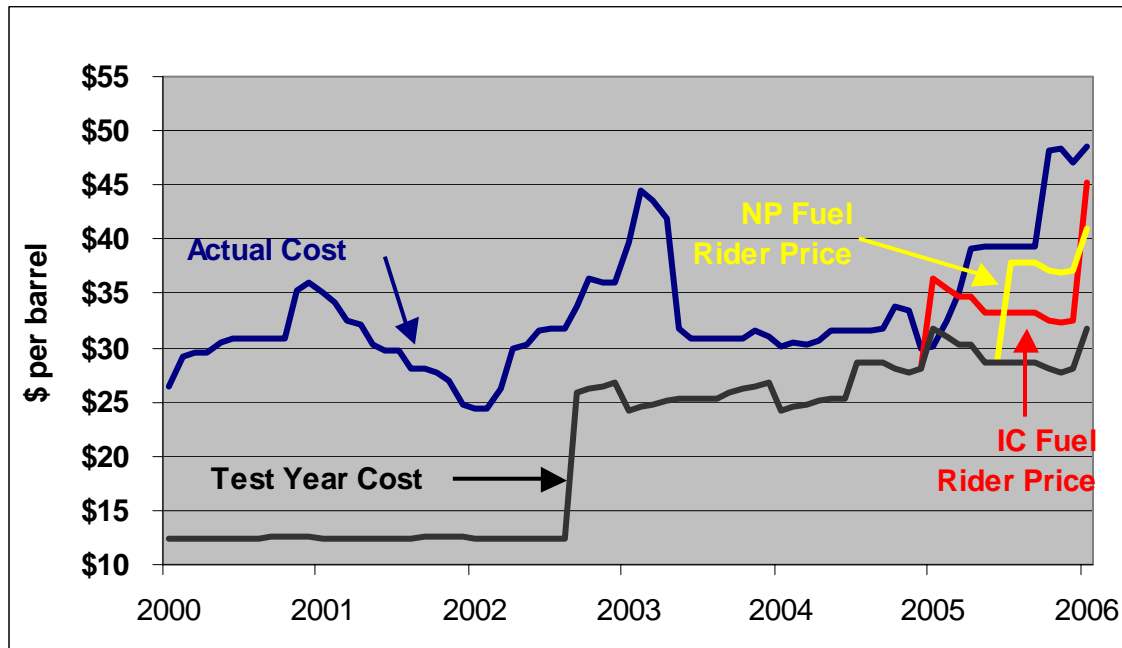
The cumulative energy and dollar amounts should continue to be monitored to ensure the reasonableness of the balance of the Hydraulic Variation account and that the balance continues to represent a level which Hydro should carry on its balance sheet.

## **3.2 Fuel Price Variation and Fuel Rider**

### *Background*

The fuel price variation provision of the RSP smoothes customer rate impacts and stabilizes Hydro's financial position for changes in the cost per barrel of No. 6 fuel consumed at Holyrood. Hydro will owe money to customers when unit fuel costs are lower than the test year forecast; customers will owe money to Hydro when unit fuel costs are above the test year forecast.

Beginning in 2000, fuel costs per barrel were more than twice the level built into customer base rates, resulting in large balances accumulating in the RSP. Even over the course of only a few months, significant amounts accumulated in the RSP due to fuel price variations: \$14 million for the four-month period September to December, 2002, and a further \$31 million in the following six-month period. **Chart 1** reflects a comparison between actual fuel costs and the fuel prices reflected in customer rates.

**Chart 1: No. 6 Fuel**


During the 2003 GRA, the following problems were identified with the fuel price variation provision of the RSP:

- A two-year adjustment period did not prevent large plan balances and produced high customer rate adjustments.
- Once large plan balances were established, compound financing resulted in an additional burden.

A summary of recent changes to the fuel price variation is shown in **Table 4**.

**Table 4: Fuel Price Variation Change Summary**

<b>Change</b>	<b>Previous</b>	<b>Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)</b>	<b>Effective Jan 1, 2004 Order No. P.U. 40 (2003)</b>
Basis for Customer Adjustment Calculations	Current December plan balances	Current December plan balances	NP: Current March plan balance, plus projected financing charges; IC: Current December plan balance plus projected financing charges
Fuel Rider	---	---	Fuel price projection incorporated into customer adjustment rates
Recovery Period	Perpetual or rolling 3-yr	Discrete 2-year write-off	Discrete 1-year write-off

Fuel rider calculations were introduced in an attempt to gain control over fuel price variations in the RSP and to send the proper price signal to customers. Under the existing RSP rules, the fuel rider is eliminated from customer RSP rates upon implementation of new base rates, based on the presumption that the latest available fuel forecast would be incorporated into customer base rates, making a fuel rider unnecessary. Because customer base rates changed on July 1, 2004, fuel riders were first implemented for IC as of January 1, 2005 (based on the September 2004 fuel price forecast) and for NP as of July 1, 2005 (based on the March 2005 fuel price forecast).

The change to the one-year write-off period was also an essential element in providing customers with timely price signals.

### *Analysis*

The performance of the IC fuel rider adjustment to date is shown in **Table 5**. Of the \$3.2 million IC fuel price variation for 2005, \$2.4 million, or 76%, was collected on a current basis through the fuel rider. Also, because the fuel price variation was in part collected on a current basis, financing charges were lower by approximately \$89,000.

**Table 5: Industrial Fuel Rider Performance**

	IC Fuel Price Variation <sup>(1)</sup> \$	Sales kWh <sup>(2)</sup>	Fuel Rider \$/kWh	Fuel Rider Adjustment \$
2005 Jan	(136,044)	112,560,731	0.00196	220,619
Feb	114,532	109,136,716	0.00196	213,908
Mar	406,545	122,483,694	0.00196	240,068
Apr	319,648	110,682,063	0.00196	216,937
May	60,554	105,616,596	0.00196	207,009
Jun	15,881	98,776,302	0.00196	193,602
Jul	237,445	110,910,423	0.00196	217,384
Aug	116,722	116,298,285	0.00196	227,945
Sep	215,033	115,676,988	0.00196	226,727
Oct	543,057	106,076,844	0.00196	207,911
Nov	693,829	67,881,626	0.00196	133,048
Dec	620,173	60,801,066	0.00196	119,170
Totals	<u>3,207,375</u>	<u>1,236,901,334</u>		<u>2,424,327</u>
<sup>(1)</sup> December 2005 RSP Report, p. 7				
<sup>(2)</sup> December 2005 RSP Report, p. 9				

The performance of the NP fuel rider adjustment to date is shown in **Table 6**. Of the \$10.1 million NP fuel price variation for the last six months of 2005, \$8.8 million, or 88%, was collected on a current basis through the fuel rider. However, the fuel price variation in the RSP is based on Holyrood production levels and needs to be viewed over a full 12-month period before any firm conclusions can be drawn.

**Table 6: Newfoundland Power Fuel Rider Performance**

	NP Fuel Price Variation <sup>(1)</sup>	Sales	Fuel Rider	Fuel Rider Adjustment
	\$	kWh <sup>(2)</sup>	\$/kWh	\$
2005 Jul	908,328	270,899,447	0.00428	1,159,450
Aug	459,002	272,663,419	0.00428	1,166,999
Sep	798,506	279,940,844	0.00428	1,198,147
Oct	2,095,571	345,179,856	0.00428	1,477,370
Nov	2,961,131	402,642,350	0.00428	1,723,309
Dec	2,867,191	492,152,859	0.00428	2,106,414
Totals	<u>10,089,729</u>	<u>2,063,478,775</u>		<u>8,831,689</u>
<sup>(1)</sup> December 2005 RSP Report, p. 7				
<sup>(2)</sup> December 2005 RSP Report, p. 8				

As mentioned earlier, there was no fuel rider in place for NP on July 1, 2004, due to the change in base rates at the same time. However, depending upon the timing of a change in base rates, there may be a more current fuel rider forecast available than that used to establish test year base rates. The existing fuel rider provisions could function to update the fuel forecast, if appropriate, at the time new base rates are established.

For example, the September 2003 fuel forecast was used to establish 2004 test year base rates. When base rates were changed on July 1, 2004, the March 2004 fuel forecast was available for the purpose of establishing NP's fuel rider, but was not used in accordance with the current RSP rules. If the March 2004 fuel forecast had been implemented on July 1, 2004, it would have added \$2.70 per barrel into customers' rates and partially offset the average fuel price variation. For NP, the average fuel price variation for the period July 2004 to June 2005 was \$4.95 per barrel. For IC, the average fuel price variation for the period July 2004 to December 2004 was \$3.93 per barrel. Instead, these variances were reflected in NP rates one year later on July 1, 2005 and in IC rates on January 1, 2005.

## *Conclusion*

Hydro is satisfied that to date the fuel riders have anticipated the correct fuel price trend, that they are significantly reducing customer plan balances from what they otherwise would be, and that customers are provided with an appropriate and timely price signal.

Hydro believes that the rules governing the application of the fuel rider should be changed such that when new test year base rates are implemented, if there is a more current fuel rider forecast (either September or March), it should be implemented at the same time as the change in base rates.

## **3.3 Customer Load Variation**

### *Background*

At Hydro's 2003 GRA, the parties agreed that both the revenue and the fuel amounts related to load variation should be assigned to the plan (NP or IC) where the load variation occurred. Previously, revenues were assigned to the plan based on which customer class caused the load variation, but the related fuel costs were allocated between NP and IC based on the 12 months-to-date energy ratios for each customer class. The change in customer assignment was considered to improve fairness because costs would now be assigned between NP and IC based on causality. Recent changes are summarized in **Table 7**.

**Table 7: Customer Load Variation Change Summary**

<b>Change</b>	<b>Previous</b>	<b>Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)</b>	<b>Effective Jan 1, 2004 Order No. P.U. 40 (2003)</b>
Fuel Component of Load Variation	Cost of service allocation	Energy allocation ratios	100% where incurred
Revenue Component of Load Variation	100% where incurred	100% where incurred	100% where incurred
Recovery Period	Perpetual or rolling 3-year	Discrete 2-year write-off	Discrete 1-year write-off

## Analysis

One measure of fairness when it comes to evaluating the customer allocations performed in the RSP is the degree to which the RSP adjustment rate anticipates a re-setting of customer base rates using a Cost of Service study. If the change were to be incorporated into a new test year, the RSP adjustment rate should be representative of the change to base rates. Hydro has evaluated both the previous and the existing RSP allocation of customer load variation against the Cost of Service treatment<sup>4</sup>. This evaluation showed that both the previous and existing methods produce widely different results which led Hydro to conclude that the customer allocation for the load variation should be revised so that it is more closely aligned with Cost of Service treatment.

Hydro intends to propose a change in the method of allocating the load variation component of the RSP such that both the revenue and the fuel components of the load variation will be allocated between NP and IC using customer energy allocation ratios. In effect, customers will be allocated with Hydro's bottom line impact in the same proportion as energy costs are shared in a test year Cost of Service. **Table 8** compares the 2004 Test Year Cost of Service implications (based on \$30/barrel No. 6 fuel) of IC load variations with the existing and previous RSP treatments, as well as the proposed treatment. **Table 9** shows the same IC load variations based on a preliminary 2007 Test Year Cost of Service and \$55/barrel No. 6 fuel.

**Table 8: IC Load Variation Analysis (2004 Test Year)**

	Net Customer Impacts (\$ 000) (\$30/barrel No. 6 Fuel)			
	IC Load Reduction 100 GWh		IC Load Increase 100 GWh	
	IC	NP	IC	NP
2004 Cost of Service treatment	(367)	(1,436)	493	1,623
Existing RSP allocation (100% fuel allocation)	(2,087)	0	2,087	0
Previous RSP allocation (fuel allocated on energy ratios)	1,757	(3,547)	(1,641)	3,440
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(402)	(1,555)	453	1,507

<sup>4</sup> Cost of Service treatment reflects the change in fuel costs associated with the load variation, plus the reallocation of test year energy costs due to the change in customer allocation energy ratios. NP impacts contained in this report do not include any re-allocation of the Rural deficit.

**Table 9: IC Load Variation Analysis (Preliminary 2007 Test Year)**

	Net Customer Impacts (\$ 000) (\$55/barrel No. 6 Fuel)			
	IC Load Reduction 100 GWh		IC Load Increase 100 GWh	
	IC	NP	IC	NP
2007 Cost of Service treatment	(618)	(3,774)	823	4,022
Existing RSP allocation (100% fuel allocation)	(4,930)	0	4,930	0
Previous RSP allocation (fuel allocated on energy ratios)	2,673	(7,041)	(2,434)	6,819
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(636)	(3,976)	771	3,851

**Tables 8 and 9** both show that the existing allocation of IC load variation is an improvement over the previous method, but that it is not closely aligned with the Cost of Service treatment. However, for both test years, the tables demonstrate that the proposed allocation method is indeed in line with the Cost of Service treatment.

While the existing RSP allocation may seem advantageous to IC in light of the recent reduction in Abitibi Consolidated Inc. (ACI) Stephenville's load, the reverse is also true. If there is an increase in IC load, the IC will be allocated with 100% of the fuel costs associated with the increase in load.

Results for the same load variation for NP, for both the 2004 and 2007 Cost of Service, are shown in **Table 10** and **Table 11**.

**Table 10: NP Load Variation Analysis (2004 Test Year)**

	Net Customer Impacts (\$ 000) (\$30/barrel No. 6 Fuel)			
	NP Load Reduction 100 GWh		NP Load Increase 100 GWh	
	NP	IC	NP	IC
2004 Cost of Service treatment	504	(397)	(487)	459
Existing RSP allocation (100% fuel allocation)	(62)	0	62	0
Previous RSP allocation (fuel allocated on energy ratios)	1,230	(992)	(1,191)	962
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(45)	(13)	46	13

**Table 11: NP Load Variation Analysis (Preliminary 2007 Test Year)**

	Net Customer Impacts (\$ 000) (\$55/barrel No. 6 Fuel)			
	NP Load Reduction 100 GWh		NP Load Increase 100 GWh	
	NP	IC	NP	IC
2007 Cost of Service treatment	1,205	(652)	(1,172)	753
Existing RSP allocation (100% fuel allocation)	170	0	(170)	0
Previous RSP allocation (fuel allocated on energy ratios)	2,008	(1,269)	(1,950)	1,229
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	134	25	(135)	(24)

The improvement of the proposed allocation method over the existing allocation method is not as pronounced for NP as it is for IC. With NP's end block rate based on the average cost of No. 6 fuel, NP's net load variation will be small.

### Conclusion

Hydro intends to propose a change to the customer allocation for the load variation provision of the RSP such that both the revenue and the fuel components of the load variation for both NP and IC are allocated on customer energy ratios.

### 3.4 Current Plan Recovery/Repayment

At a time when RSP balances were high, customer adjustment rates were based on a perpetual or rolling three-year write-off, and excluded forecast financing charges. Both of these factors contributed to unreasonably high plan balances and excessive financing charges, resulting in an improper price signal. The rolling three-year write-off did not deal successfully with significant activity in the plan. Rate impacts were smoothed and deferred, but high plan balances and compound financing charges placed an additional burden on ratepayers.

Commencing July 1, 2005 for NP and January 1, 2006 for IC, customer adjustment rates to recover current plan balances incorporated forecast financing charges and a one-year recovery period. Because the annual fuel rider has controlled current plan balances effectively, the anticipated benefits of these rate-setting provisions have not been necessary, but may prove useful in the future. **Table 12** shows representative plan balances for both NP and IC and the

difference in financing charges between the previous method and the current method of setting adjustment rates

**Table 12: Comparison of Financing Charges**

\$ 000					
NP			IC		
Plan Balance	Financing Charges		Plan Balance	Financing Charges	
	Previous Recovery	Current Recovery		Previous Recovery	Current Recovery
30,000	2,391	1,143	10,000	818	401
60,000	4,783	2,287	20,000	1,636	801
90,000	7,172	3,430	30,000	2,454	1,202

### Conclusion

Hydro believes that should large RSP balances recur, both the forecast financing and the one-year recovery provisions will prove worthwhile and these provisions should be retained.

## 3.5 Historical Plan Balances and Write-Offs

Balances in the RSP first became an issue at Hydro's 2001 GRA due to the large amounts owed by NP and IC to Hydro. In the order arising from that GRA, P.U. 7 (2002-2003), the Board fixed the outstanding historical RSP balance as of August 2002 and changed the recovery period for this balance from a perpetual annual one-third collection to a fixed five-year period. Outstanding RSP balances were again an issue at Hydro's 2003 GRA, due to an additional \$61 million activity occurring between September, 2002 and December 2003. In Order P.U. 40 (2003), the Board rolled the December 2003 current plan balances in with the historical plan balance, and maintained the original 5-year recovery period for the revised historical plan. The IC recovery period is due to finish December 31, 2007; NP's recovery period is due to finish June 30, 2008.

**Table 13** shows a recap of the historical RSP balances.

**Table 13: Historical RSP**

		RSP Balances (\$ million)			Write-Off Period	Collection Rates <sup>(1)</sup> (mills/kWh)	
		NP	IC	Total		NP	IC
Dec 2002	Original Historical	76.2	28.0	104.3	5	3.24	4.23
Dec 2003	Original Historical	70.2	24.4	94.6		3.66	4.68
	Sep 02 to Dec 03 Activity	<u>44.6</u>	<u>16.6</u>	<u>61.1</u>		<u>2.49</u>	<u>3.18</u>
	Revised Historical	<u>114.8</u>	<u>40.9</u>	<u>155.7</u>	4	<u>6.15</u>	<u>7.86</u>
Dec 2004	Revised Historical	101.7	32.3	133.9	3	6.36	7.51
Dec 2005	Revised Historical	79.8	25.1	104.9	2	7.07	10.14
Dec 2006	Revised Historical (Forecast)	52.7	18.5	71.1	1	7.52	22.77
Dec 2007	Revised Historical (Forecast)	19.4	0.0	19.4	--	--	--

<sup>(1)</sup> NP rate is effective July 1 of the next year; IC rate is effective January 1 of the next year.

With the introduction of the fuel rider and the one-year write-off period for the current plan, annual RSP customer adjustment rates should, in the future, be more representative of current year activity. These changes, in conjunction with the change in customer assignment related to the hydraulic variation provision, are intended to prevent current activity from escalating customer balances to the point where current activity would once again be rolled into historical plan balances and written off over an extended period.

The Board has indicated<sup>5</sup> that further extension of the recovery period beyond 2007 is not consistent with the principle of intergenerational equity and increases the risk that future industrial customers may be required to pay for costs that they did not cause to be incurred.

Hydro believes that the new provisions of the RSP will significantly reduce the size of future plan balances with the intent that the 2003 levels will not recur. With the collection of current activity under much-improved control, Hydro has indicated a willingness to consider some flexibility with the collection of outstanding historical plan balances, provided there is agreement among customers and provided consideration is given to the issue of intergenerational equity.

<sup>5</sup> Board Order P.U. 54(2004) was issued in response to a request by IC for rate relief when the fuel rider was implemented January 1, 2005.

### *Conclusion*

Hydro has indicated a willingness to extend the recovery period for the historical RSP, provided that there is agreement among customers and there is consideration given to the issue of intergenerational equity.

## 4 Customer Impacts

### 4.1 IC Rate Impacts

This section explores the significant customer rate impacts related to the combined effects of the IC historical plan balances and IC load variations.

The January, 2006 rate for the IC historical plan is 10.14 mills/kWh, and was intended to collect \$12.5 million. The rate was established based on 12 months-to-date energy sales for the class as of December, 2005, and does not include projected financing, unlike the adjustment rate for the current plan. With ACI Stephenville's load reduced for all of 2006, this rate is forecast to collect only \$8.2 million of the \$12.5 million, leaving an additional \$4.3 million for collection in 2007. This extra \$4.3 million, plus financing charges for 2006 of \$1.6 million and the reduced IC load are forecast to more than double the mill rate for the historical IC plan for 2007 from 10.14 mills/kWh in 2006 to 22.77 mills/kWh in 2007.

By itself, this increase would appear to be onerous to the IC. However, the large increase in the historical plan rate is projected to be offset with a considerable credit from the current plan. The credit is forecast to be 15.43 mills/kWh and is due to the net fuel savings associated primarily with ACI Stephenville's reduced load in 2006, accompanied by forecast higher than average hydraulic production for 2006. Without the combined impact from the historical and current plans, the IC RSP adjustment rate would be unstable. The IC rates for 2005 to 2007 are shown in **Table 14**. The projected change in the RSP rate on January 1, 2007 due to the elimination of the fuel rider should be considered in context of the full change in base rates, which is beyond the scope of this review.

**Table 14: IC RSP Rates**

	(mills/kWh)		
	1-Jan-2005 Actual	1-Jan-2006 Actual	1-Jan-2007 Forecast
Current Plan	2.70	(1.09)	(15.43)
Historical Plan	7.51	10.14	22.77
Fuel Rider	1.96	6.40	-
Total RSP Adjustment Rate	12.17	15.45	7.34

The change proposed for the customer allocation of load variation, plus adherence to the existing recovery schedule for historical plan balances should act to reduce such volatility in customer rates.

## 4.2 RSP Adjustment Rates for Aur Resources

In 2006, the special circumstances surrounding Hydro's new Industrial customer, Aur Resources, Inc., led Hydro to propose<sup>6</sup> that Aur Resources should be exempt from paying the IC historical plan rate for 2006. Hydro considered this exemption was warranted as a measure of fairness to address the intergenerational equity referred to previously.

### Conclusion

If the Board grants the proposed exemption for Aur Resources from the historical RSP adjustment rate for 2006, the exemption should continue until the IC historical plan is eliminated.

## 4.3 NP Rate Impacts

NP's load is generally stable and growing, and NP will not experience the wide swings in RSP rates which the IC have experienced due to load variation. However, NP currently has a significant annual recovery for its share of the historical RSP. While this rate remains stable until the historical plan recovery is completed June 30, 2008, NP's RSP adjustment rate for July 1, 2008 will reflect the removal of the historical plan component of the RSP. **Table 15** shows actual and forecast RSP rates for NP.

**Table 15: NP RSP Rates**

	(mills/kWh)			
	1-Jul-2005 Actual	1-Jul-2006 Forecast	1-Jan-2007 Forecast	1-Jul-2007 Forecast
Current Plan	0.81	(0.29)	(0.29)	(1.90)
Historical Plan	6.36	7.07	7.07	7.52
Fuel Rider	4.28	9.38	-	0.13
Total RSP Adjustment Rate	11.45	16.16	6.78	5.75

<sup>6</sup> Hydro's Application to the Board dated January 18, 2006.

As with IC, elimination of the fuel rider on January 1, 2007 should be considered in the context of the change in base rates, and not in isolation of the total RSP adjustment rate.

#### **4.4 Additional IC Concerns**

In the last year, Hydro has had discussions with each of its Industrial customers relating to various aspects of the RSP. With record high fuel prices in 2005, customer concerns and requests have ranged from further deferrals of historical and current plan balances, to each customer paying its own share of plan balances. ACI Stephenville's impact on both historical and current plans has been a concern in that customers believe they should not be charged with any increase due to ACI Stephenville's load reduction.

Options for changing the RSP include:

- a single plan between IC and NP, with a single adjustment rate;
- separate individual IC plans; and
- no plan.

Hydro is willing to explore with its customers any alternatives which respond to customer needs and which maintain the essential objectives of the RSP, with due regard to fairness between NP and IC, and among each of the IC. Hydro believes that these options warrant consideration in the future, after the existing historical plan balances, along with the offsetting credit from the current plan, have been repaid. In the interim, Hydro offers the following comments.

##### *A Single Plan*

If the Board accepts Hydro's proposal for allocation of the load variation component of the plan, a single plan for NP and IC is possible. It would provide cross-subsidization between IC and NP for the difference in what an adjustment rate was designed to repay/collect and what it actually repaid/collected. In other words, a common balance would be used each year for annual rate-setting. Any under or over collection or repayment would be readjusted across both NP and IC each year.

For a single plan to be implemented, the following would have to happen:

- The proposed common allocation of the load variation component of the plan would have to be approved by the Board;
- The effective date for rate adjustments would have to be the same for both NP and IC; and
- Any plan component which is not common between NP and IC; e.g., Rural rate alterations, would have to be adjusted with a separate rate or mechanism for NP.

In general, Hydro believes that a single plan would transfer some risk from the more volatile IC class to NP. The allocations performed within the RSP are not perfect, and the Board may wish to mitigate IC rate impacts in this fashion.

### *Individual IC Plans*

With a small number of customers in the IC rate class, it is easy to conceptualize individual plans for each of the IC. Hydro could consider supporting individual plans if individual plans did not preclude a common customer allocation of load variations, as previously discussed. Hydro envisions that individual plans would entail customer acceptance of the individual specific liability, supported by contract provisions. It is also conceivable that individual IC plans would allow tailored repayment/refund provisions that were mutually acceptable between the individual customer and Hydro.

### *No Plan*

A third possibility is that Hydro should offer an IC rate that excludes RSP adjustments and instead, includes some form of monthly fuel adjustment. Presumably, elimination of the IC RSP would also effectively eliminate the IC load variation provision. Hydro is not willing to forego the bottom line protection which the load variation provision affords. The incremental cost of Holyrood production (8.9 ¢/kWh) is significantly higher than the average all-energy industrial rate (5.0 ¢/kWh). While savings from a load reduction would be addressed through Hydro's excess earnings account, fuel costs associated with an increase in load would negatively impact Hydro's net income at the rate of 3.9 ¢/kWh for each additional kWh sold.

## *Conclusion*

There are several possibilities for fundamental changes to the RSP. Hydro is willing to pursue these or additional options with NP and the IC, but Hydro does not believe such changes should be entertained until the historical plan balances, along with the offsetting credits from the current plan, have been taken care of.

## 5 Other Issues

This review of the RSP has raised the issue of isolated systems diesel fuel and power purchase costs which Hydro believes is worthwhile exploring in the context of a complete RSP review.

### 5.1 *Isolated Diesel Fuel and Power Purchase Costs*

There has been an unprecedented increase in both diesel fuel and fuel-related power purchase costs<sup>7</sup> for isolated systems between Hydro's 2004 test year forecast and the 2007 forecast.

**Table 16: Isolated Systems Fuel-Related Costs**

(\$ 000 )				
	2004 Test Year	2007 Forecast	Increase	
			\$ 000	%
Isolated Systems Diesel Fuel	6,736	10,244 *	3,508	52%
Isolated Systems Power Purchases	771	1,677	906	118%
<b>Total</b>	<b>7,507</b>	<b>11,921</b>	<b>4,414</b>	<b>59%</b>
* Excludes Natuashish				

Hydro believes that such variances present an unreasonable regulated net income risk to Hydro. For the 2004 test year forecast, Hydro's regulated net income was set at \$11,612,000, and the expected variance in 2007 represents more than one-third of 2004 test year net income.

Hydro wishes to explore options with its customers and the Board to identify a reasonable solution that will limit Hydro's financial exposure (both positive and negative) to variances in isolated systems diesel fuel and power purchase costs. Hydro's aim is to avoid an undue administrative burden by using aggregate isolated diesel fuel and power purchase data. Through a new provision of the RSP (similar to existing Rural deficit impacts which are stabilized), such a mechanism would be proposed to collect additional fuel and power purchase costs from NP, and similarly, would refund fuel and power purchase savings to NP.

<sup>7</sup> Power purchases for isolated systems are, in part, based on avoided fuel costs.

### *Conclusion*

Hydro believes that its financial exposure due to variations in the uncontrollable price of diesel fuel, affecting both diesel fuel and power purchase costs for isolated systems, presents an unreasonable net income risk for Hydro and Hydro should be afforded some protection through the RSP.

## **6 Customer Perspectives**

Hydro anticipates that the conclusions and proposals contained in this report will be reviewed with Hydro's major customers during the mediation sessions.

## 7 Conclusions

1. Hydraulic Variation: Life-to-date energy and dollar amounts should continue to be monitored to ensure the reasonableness of the balance of the Hydraulic Variation account and that the balance continues to represent a level which Hydro is willing to carry on its balance sheet.
2. Fuel Variation/Fuel Rider: Hydro is satisfied that to date the fuel riders have anticipated the correct fuel price trend, that they are significantly reducing customer plan balances from what they otherwise would be, and that customers are provided with an appropriate and timely price signal.
3. Hydro intends to propose a change to the rules governing the application of the fuel rider such that when new test year base rates are implemented, if the fuel rider forecast is more current, it should be implemented at the same time as the change in base rates.
4. Load Variation: Hydro intends to propose a change to the customer allocation for the load variation provision of the RSP such that both the revenue and the fuel components of the load variation are allocated between NP and IC based on customer energy ratios.
5. Historical Plan Balances: Hydro has indicated a willingness to extend the recovery period for the historical RSP, provided that there is agreement among customers and there is consideration given to the issue of intergenerational equity.
6. If the Board grants the proposed exemption for Aur Resources from the historical RSP adjustment rate for 2006, the exemption should continue until the IC historical plan is eliminated.
7. Hydro believes that should large RSP balances recur, both the forecast financing and the one-year recovery provisions will prove worthwhile and these provisions should be retained.

8. There are several possibilities for fundamental changes to the RSP. Hydro is willing to pursue these or additional options with NP and the IC, but Hydro does not believe such changes should be entertained until the historical plan balances, along with the offsetting credits from the current plan, have been taken care of.
9. Diesel Fuel Impacts: Hydro believes that its financial exposure due to variations in the uncontrollable price of diesel fuel, affecting both diesel fuel and power purchase costs for isolated systems, presents an unreasonable net income risk to Hydro, and Hydro should be afforded some protection through the RSP.

### Appendix A: RSP History – Activity and Balances

(\$ 000)												
		Annual Activity							Plan Balances			
		Hydraulic	Fuel Cost	Load	RRA <sup>(1)</sup>	Financing	Other	Total	Adjustment	NP	IC	Hydraulic
1986		12,045	(11,814)	(2,506)		267		(2,008)		(1,889)	(119)	(2,008)
1987		54,280	(35,044)	(1,582)		709		18,363	(68)	8,063	8,222	16,285
1988		(726)	(34,175)	62		170		(34,669)	(245)	(18,498)	(131)	(18,629)
1989		15,341	(33,097)	1,378		(3,508)		(19,886)	5,704	(31,004)	(1,807)	(32,811)
1990		13,619	3,175	(1,781)		(1,666)	8,941 <sup>(2)</sup>	22,288	10,010	(4,445)	3,932	(513)
1991		(2,757)	(4,853)	(3,054)		(326)		(10,990)	3,803	(10,530)	2,830	(7,700)
1992		(198)	3,469	1,482		(111)	6,488 <sup>(3)</sup>	11,130	664	593	3,505	4,098
1993		(4,668)	7,397	1,834	(26)	746		5,283	47	3,825	5,636	9,461
1994		(17,077)	3,509	2,315	(120)	32		(11,341)	(2,120)	(5,610)	1,575	(4,035)
1995		(3,733)	19,015	1,820	(134)	537		17,505	(694)	6,900	6,016	12,916
1996		(7,419)	21,805	2,441	(140)	2,005		18,692	(1,506)	21,002	9,160	30,162
1997		(8,545)	24,507	(560)	(478)	3,346		18,270	(7,103)	27,644	13,734	41,378
1998		(967)	12,068	3,435	122	4,150		18,808	(11,227)	33,009	15,776	48,785
1999		(15,859)	9,128	5,050	(394)	3,223		1,148	(15,427)	21,436	12,892	34,328
2000		(16,614)	29,359	521	(880)	2,724	(862) <sup>(4)</sup>	14,248	(13,734)	22,684	12,056	34,740
2001		5,243	56,879	(3,506)	125	4,438		63,179	(11,152)	60,300	24,768	85,068
2002		6,967	46,113	(5,313)	(326)	7,189	184 <sup>(5)</sup>	54,814	(13,921)	92,060	32,711	124,771
2003		4,130	36,534	(2,846)	(227)	10,333		47,924	(16,669)	114,790	40,914	155,703
2004	Current	(7,362)	12,665	590	(949)	79	(12) <sup>(5)</sup>	5,012	(1,951)	4,909	3,713	(5,521)
	Historical					10,459	5 <sup>(5)</sup>	10,464	(32,236)	101,660	32,273	133,933
	Total	(7,362)	12,665	590	(949)	10,538	(6)	15,476	(34,187)	106,569	35,986	(5,521)
2005	Current	(8,646)	16,289	(1,431)	(2,329)	(309)		3,574	(18,660)	120	(1,296)	(10,625)
	Historical					8,768		8,768	(37,835)	79,781	25,086	104,867
	Total	(8,646)	16,289	(1,431)	(2,329)	8,459		12,342	(56,494)	79,900	23,790	(10,625)
<sup>(1)</sup> Rural Rate Alteration												
<sup>(2)</sup> 1989 PDD loss												
<sup>(3)</sup> 1991 Retail cost deferral												
<sup>(4)</sup> Industrial Rural deficit allocation												
<sup>(5)</sup> Billing adjustments												

### Appendix B: RSP History – Customer Adjustment Rates

Recovery (Refund) Rates (mills/kWh)									
Newfoundland Power						Industrial Customers			
Balance						Balance			
Dec 31		Adjustment Rate (mills/kWh) <sup>(1)</sup>				Dec 31		Adjustment Rate (mills/kWh) <sup>(1)</sup>	
\$ 000		Cur / Hist	Fuel Rider	Total		\$ 000		Cur / Hist	Fuel Rider Total
1986	(1,889)	0.04				(119)			
1987	8,063	0.41				8,222	0.58		
1988	(18,498)	(3.12)				(131)	0.92		
1989	(31,004)	(1.30)				(1,807)	(0.52)		
1990	(4,445)	(0.58)				3,932	0.24		
1991	(10,530)	(0.33)				2,830	0.24		
1992	593	0.05				3,505	0.54		
1993	3,825	0.30				5,636	1.37		
1994	(5,610)	(0.45)				1,575	0.69		
1995	6,900	0.55				6,016	1.24		
1996	21,002	1.67				9,160	2.07		
1997	27,644	2.14				13,734	3.15		
1998	33,009	2.65				15,776	4.87		
1999	21,436	1.75				12,892	3.50		
2000	22,684	1.77				12,056	2.80		
2001	60,300	1.77				24,768	5.14		
2002 <sup>(2)</sup>		1.77					2.80		
2002	92,060	3.24				32,711	4.23		
2003	114,790	6.85				40,914	7.87		
2004	Current	4,909	0.81	4.28	5.09	3,713	2.70	1.96	4.66
	Historical	101,660	6.36		6.36	32,273	7.51		7.51
	Total	106,569	7.17	4.28	11.45	35,986	10.21	1.96	12.17
2005	Current	120	2.61	7.93 <sup>(3)</sup>	10.54	(1,296)	(1.09)	6.40	5.31
	Historical	79,781	6.83		6.83	25,086	10.14		10.14
	Total	79,900	9.44	7.93	17.37	23,790	9.05	6.40	15.45

(1) Adjustment rates for NP are effective July 1 of the following year; adjustment rates for IC are effective January 1 of the following year.

(2) Sept 1, 2002

(3) Forecast



# Board of Commissioners of Public Utilities - Historical Review of the Rate Stabilization Plan of Newfoundland and Labrador Hydro

January 1<sup>st</sup> 1986 – December 31<sup>st</sup> 2009

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## 1 Introduction

2 Newfoundland and Labrador Hydro's ("Hydro" or "the Company") Rate Stabilization Plan ("RSP")  
3 was established effective January 1, 1986 with the objective of providing rate stability to customers and  
4 providing a mechanism to eliminate volatility in Hydro's revenue requirement due to events beyond its  
5 control. As established, the RSP provided for adjustments to recover differences between the forecast  
6 test year costs used to set rates and the actual costs attributable to:

- 7 • differences in the price of No.6 Fuel;
- 8 • variations in hydraulic production; and
- 9 • variations in load.

10 The plan was modified in 1993 to include an adjustment to account for any variation in Hydro's rural  
11 revenues which may arise as Hydro's rural rates are changed, in accordance with Government policy, to  
12 reflect Newfoundland Power's rates. This provision was incorporated into the RSP as part of the 1993  
13 generic cost of service hearing.

14 During 2001, the balance in Hydro's RSP increased to approximately \$85.0 million as compared to  
15 \$34.7 million in 2000. This dramatic increase in the RSP balance, together with the forecast cost of No.  
16 6 fuel, generated significant concern and discussion with respect to the RSP during Hydro's 2001  
17 General Rate Hearing. As a result of the Board Order P.U.7 (2002-2003), further changes were made  
18 in 2002 flowing from Hydro's 2001 General Rate Hearing. These changes are discussed in further  
19 detail in this report.

20 During the 2003 General Rate Hearing, the parties involved reached a settlement agreement on further  
21 proposed changes to the RSP. These changes included: allocating 25% of the hydraulic portion to be  
22 refunded to, or recovered from customers, each year; the introduction of the fuel rider, and changing  
23 the allocation of the fuel element of the load variation component to the customer class that caused the  
24 change in load. In P.U. 40 (2003) the Board approved the changes as outlined in the settlement  
25 agreement. These changes, along with several other modifications included in the settlement agreement  
26 and Board Order, are discussed in further detail in this report.

27 The Company filed a General Rate Application in 2006 and included in this application proposals for  
28 further changes to the RSP. These proposals were subject to the settlement negotiation process. The  
29 changes in the settlement agreements dated October 20, 2006 and November 23, 2006 were approved  
30 by the Board in P.U. 46 (2006) and P.U. 8 (2007).

- 1 The scope of our engagement with respect to the Rate Stabilization Plan is to provide a report that will  
2 document the history of the Plan from its inception in 1985 to the end of 2009, including the following:
- 3 • History of the Plan including an outline of any changes to the methodology over the years  
4 and the authorization for these changes;
  - 5 • Provision of a schedule of the annual results allocated between the Industrial Customers  
6 and Newfoundland Power since the inception of the Plan; and
  - 7 • Description of the impact that the changes had on the annual balances of the Plan for the  
8 Industrial Customers and for Newfoundland Power, and any changes in the distribution of  
9 the costs and the benefits that have resulted from the changes that have taken place.
- 10 This report will highlight the changes that occurred in the RSP over the years and the results of these  
11 changes which the Board and other stakeholders may wish to consider in assessing whether further  
12 changes to Hydro's RSP are appropriate.
- 13 Appendix A of this report provides a schedule of the annual activity of the RSP and the annual  
14 balances allocated between the Industrial Customers and Newfoundland Power. This schedule begins  
15 in 1986, the year of the RSP implementation, up to and including December 31, 2009.

## 1     **The Implementation of the Rate Stabilization Plan**

2     Prior to the establishment of the RSP in 1986, Hydro used two separate accounts, a water equalization  
3     provision and a fuel adjustment charge, to adjust for variations in hydraulic and thermal production  
4     costs as compared to the test year forecasts that were used in the calculation of the rates Hydro charged  
5     its customers.

6     The water equalization provision was used to adjust costs of production due to variations in hydraulic  
7     generation which were caused by fluctuations in water availability. The fuel adjustment charge was a  
8     mechanism designed to pass on actual fuel costs to customers one month after they were incurred.  
9     This method of recovery resulted in significant volatility in electricity costs to customers, particularly in  
10    the winter months when consumption would be at its highest. During the early eighties fuel prices  
11    experienced substantial increases. This resulted in the public expressing discontentment due to  
12    significant increases in their monthly electricity bills as a result of the operation of the fuel adjustment  
13    charge.

14    In August, 1985 Hydro filed a referral to the Board of Commissioner of Public Utilities (“the Board”)  
15    of proposed rates for the supply of electric power to Newfoundland Light & Power Co. Limited  
16    (“NP”) and the Board of Trustees of The Power Distribution District of Newfoundland and Labrador  
17    (“PDD”). Included in this referral Hydro, as a means to address consumer concerns and reduce  
18    volatility in its revenue requirement, proposed the implementation of a RSP. The RSP would reduce  
19    volatility and improve stability of rates but ultimately all variations in costs would be borne by  
20    consumers. The RSP consolidated both the hydraulic and fuel adjustment charge accounts into a single  
21    plan.

22    In its report dated November 8, 1985 to the Government of Newfoundland and Labrador on the rate  
23    proposals filed by Hydro, the Board recommended that the RSP presented by Hydro be accepted, with  
24    some changes.

25    The components and details of the RSP that were implemented as of January 1, 1986 are as follows:

26    -     Water Variation Provision: This component was similar to the Water Equalization Provision that  
27    was in operation prior to the RSP. Costs/savings were accrued, or being charged, to the provision  
28    depending upon whether hydro production was above or below average. The variation in cost due  
29    to water conditions was determined by comparing the monthly normal hydro generation, as used  
30    in the 1986 final cost of service, with actual monthly hydro generation. This variation in gigawatt  
31    hours was converted to the equivalent barrels of oil needed to produce the equivalent energy from  
32    thermal production and then multiplied by the price per barrel of oil included in the cost of  
33    service. In the 1986 cost of service oil was priced at \$30 per barrel. This provision is referred to  
34    as the Hydraulic Production component in the monthly RSP reports.  
35

36    -     Fuel Cost Variation Provision: This component was used to account for the variations in the  
37    price of Bunker “C” fuel oil. It would compare the price per barrel of Bunker “C” included in the  
38    cost of service to the actual price per barrel for thermal production. Adjustments to the provision

were calculated by multiplying the number of barrels of oil used for thermal production each month by the monthly fuel cost variation.

- Load Variation: This component was not approved as presented by Hydro in its rate proposals filed in August, 1985. Hydro presented a “coverage cap”, which it proposed would prevent the company from over earning in situations where there was a decrease in load in comparison to the cost of service. The company proposed that Hydro’s interest coverage on its retail customers be capped at 1.20, and any revenue in excess of this would be refunded to customers the following year when the financial statements had been finalized.

The Board’s recommendations indicated that “any earnings variation because of a difference between the estimated load and the actual load be included in the Rate Stabilization Plans of Hydro and NLP.” (Page 88, Report to the Government of Newfoundland and Labrador on Rate Proposals Filed by Newfoundland and Labrador Hydro on August 6, 1985). The implementation of the Board’s recommendations was discussed in a letter to the Board dated March 26, 1986 from Mr. Cyril Abery, President and Chief Executive Officer of Hydro. Based on this letter the load variation would be determined by comparing the monthly cost of service sales with the actual monthly sales, and multiplying the difference in gigawatt hours by the Holyrood mill rate based on the cost of fuel per barrel used in the cost of service study. The total revenue received due to the load variation would be deducted to determine the adjustment to be made to the load variation provision.

In the letter dated March 26, 1986 Mr. Abery also proposed that variations arising from changes in the actual volume of secondary energy purchased for resale to retailers in comparison to the cost of service would also form part of the RSP. He indicated that this type of variation impacted directly on the load which Hydro would have to service from its own plants and hence impact Hydro’s earnings.

The load variation component of the RSP includes two components; a revenue component and a fuel component. These two components together adjust for the net contribution attributable to a variation in energy sales. With respect to the revenue component, if the actual energy sales are less than the cost of service sales the difference flows through the plan as a charge to the particular customer group (i.e. retail verses industrial), and vice versa, if the sales are greater than the cost of service sales, the difference is a credit for the particular customer group in the plan. The adjustment amount is determined by multiplying the difference in actual versus cost of service energy sales for each customer group by its respective energy mill rate. The fuel component of the load variation is calculated by taking the total sales in kWhs from both customer groups, comparing it to the total cost of service kWh sales and multiplying the difference by the thermal generation energy mill rate which is based on the cost of service oil price per barrel. If the actual sales are less than the cost of service, the fuel component is a credit to the plan and if the actual sales are greater this component is a charge to the plan.

For example, in December 1986 the actual energy sales were greater than the cost of service sales for the retail group by 27.02 GWh and the industrial group sales were less than the cost of service

1 by 4.78 GWh. The revenue component adjustment for the retail group was a credit to the plan of  
2 \$1,145,000 ( $27.02 \text{ GWh} \times 4.237\text{¢/kWh}$ ), and the fuel component adjustment was a charge to the  
3 plan of \$1,351,000 ( $(27.02 \times 5.0\text{¢/kWh})$ ). The revenue component adjustment for the industrial  
4 group was a charge to the plan of \$104,000 ( $4.78 \text{ GWh} \times 2.168\text{¢/kWh}$ ) and the fuel component  
5 adjustment was a credit to the plan of \$239,000 ( $(4.78 \times 5.0\text{¢/kWh})$ ).

6 Beginning in January, 1986 the cost of financing the RSP was calculated using Hydro's embedded cost  
7 of debt and added to the balance in the plan on a monthly basis.

8 The Board also accepted Hydro's recommendation of a \$50 million cap (positive or negative) on the  
9 plan that would obligate the Company, in the event that the cap was reached or exceeded, to come to  
10 the Board to review the operation of the plan.

11 **Changes Recommended by the Board in its November 8, 1985 Report**

12 In its report to the Government of Newfoundland and Labrador on November 8, 1985, the Board  
13 recommended the acceptance of Hydro's RSP with the following changes:

- 14 (a) One third of the balance in the RSP at the end of June each year commencing in 1987  
15 would be amortized over the next twelve months. The amortization would be billed to NP  
16 on a kWh basis calculated using the kWh sold in the previous 12 months. This recovery  
17 would be debited or credited to the RSP on a monthly basis.
- 18 (b) Hydro was required to inform the Board of the amounts being accrued in each month, the  
19 balance accrued to date and the status of the amount being amortized.
- 20 (c) NP was required to calculate a rate adjustment per kWh by dividing the sum of the annual  
21 amortization to be billed by Hydro plus any balance in NP's rate stabilization account  
22 referred to in (d), by the total kWh sold in the previous twelve months and calculate the  
23 charge to be included in customers' bills in the following twelve months, and apply to the  
24 Board for approval of the July 1 rate adjustment resulting from this annual calculation.
- 25 (d) Under or over collections by NP would be carried forward in an interest bearing rate  
26 stabilization account.
- 27 (e) NP would report to the Board monthly the amount collected to date and the balance  
28 remaining.
- 29 (f) As noted above in the description of the load component, the Board recommended that  
30 any earnings variation because of a difference between the estimated load and the actual  
31 load be included in the RSP of Hydro and NP. This was recommended so that Hydro's  
32 earnings would not vary.
- 33

34 The Board was of the opinion that this plan would limit the amount of the RSP through the yearly  
35 adjustment. The rate adjustment would be made at the end of June so that the impact of a possible  
36 increase would be less severe than if the rate change happened in the winter. The Board indicated that  
37 the rate adjustment would be automatic and would not require a Hydro referral and a subsequent pass  
38 through hearing by NP.

**Introduction of the Industrial Customers to the RSP**

When the RSP was originally recommended for approval in the November 9, 1985 report, it only included the retail customers, not the Industrial Customers. However, in a letter dated March 26, 1986 from Mr. Cyril Abery to Mr. Gordon MacDonald, Chairman of the Board of Commissioners of Public Utilities, Mr. Abery proposed for the Board's approval the establishment of two separate RSPs, one for Hydro's retail customers (NP and PDD) and one for the Industrial Customers. Based on this letter it was noted that this was proposed as a result of discussions that Hydro had with NP due to concerns that NP had addressed regarding the approach used to determine the monthly balance in its RSP. The Board, however, did not give formal approval for this plan because at that time its authority was limited to hearing applications that had been referred to it by Hydro and making recommendations to the Provincial Government regarding the issues brought forward in those applications. The 1985 application and report dealt only with the rates to be charged by Hydro to NP and PDD, not to the Industrial Customers.

Mr. Abery indicated that the by establishing two segregated RSPs for retail and Industrial Customers it would allow Hydro to reflect the revenue that would have been collected from each customer group, had the actual results of load, hydro production and fuel price changes been known at the time the cost of service was prepared and filed with the Board. Hydro believed that this would result in the retail and Industrial Customers being treated fairly and independently of each other as it was based on the cost of service methodology approved by the Board.

The letter also indicated that Hydro felt that this proposed approach would be consistent with the recommendations made by the Board in its report dated November 8, 1985 and it would also satisfy the concerns expressed by NP.

**Allocation of the Monthly Plan Activity**

According to the March 26, 1986 letter from Hydro, it was noted that the calculation of the plan balances for the retail and Industrial Customers would be prepared monthly. The letter indicated that Hydro would recalculate the 1986 cost of service by customer, replacing the 1986 costs with the actual costs as they became available, related to any changes which may occur in both firm and secondary loads, hydro production and/or fuel prices. The difference between the revised cost of service derived using the actual costs and the 1986 final cost of service filed with the Board would indicate the adjustment to be made in the balance of the two plans.

The letter goes on to explain that the adjustment to the balance of the plan for each group, retail and industrial, would be derived monthly by comparing the revised cost of service for the specific group with the 1986 final cost of service filed with the Board for the same customer group net of revenue received due to any changes in firm energy sales.

1     March 6, 1989 Hydro Referral to the Board

2     On March 6, 1989, Hydro issued a referral to the Board for proposed rates to be charged to retail  
3     customers. This was approximately three years after the implementation of the RSP. According to the  
4     Board's June 1, 1989 Report to the Government of Newfoundland and Labrador relating to its  
5     recommendations on Hydro's proposed rates to be charged to retail customers, the only changes that  
6     Hydro proposed for the RSP was to rebase the cost of service price per barrel of oil from \$30.00/bbl to  
7     \$18.00/bbl and to use the blended price of oil in its tanks at the end of each month. The latter was  
8     considered to be fine-tuning and would have a minimal impact. The Board recommended that the  
9     RSP remain as it was with the exception of the two changes noted above.

10    According to pages 46 and 47 of the Board's June 1, 1989 report, Hydro was of the opinion "that the  
11    RSP was operating the way it was designed to operate and was proving to be a satisfactory tool". NP  
12    agreed that the Plan "...was operating as designed to do but questioned whether or not the amount in  
13    it by the end of June should be reduced by a one time payment to customers..." and Mr. Joseph  
14    Hutchings, who was appointed by the Board to represent the general interest of the various classes of  
15    retail users of electricity, agreed with the other parties that "...the Plan was a good one and was  
16    working well."

## 1    **February 6, 1990 Hydro Referral to the Board**

2    On February 6, 1990, Hydro filed a referral to the Board of proposed rates for the supply of electric  
3    power to NP and rural customers. Based on the information included in the Board's June 11, 1990  
4    Report to the Government of Newfoundland and Labrador, there was an issue of \$8,941,000 in losses  
5    relating to PDD from April 1, 1989 to December 31, 1989 that was not covered by the Government  
6    subsidy. The Government fully subsidized PDD each year until March 31, 1989. However, beginning  
7    with the calendar year 1989 to 1991 the subsidy was going to be reduced each year, and in 1992 it  
8    would be eliminated. The RSP also had a positive balance of \$40.1 million on June 30, 1989 and was  
9    projecting a positive balance of \$19 million on June 30, 1990 (i.e. balance owing to ratepayers).

10   In its submission, Hydro submitted that these costs relating to the loss of the Government subsidy be  
11   deferred and recovered over a five year period. NP and the Consumer Advocate argued that some of  
12   the \$19 million projected surplus balance in the RSP be used to eliminate this amount rather than  
13   deferring it over five years. Although the Board considered the possibility of charging the deficit  
14   caused by the reduction of the subsidy to the equity of Hydro, it, according to the report dated June 11,  
15   1990 prepared by the Board, was prevented from making this recommendation by Section 4.3 of The  
16   Electrical Power Control (Amendment) Act ("EPCA").

17   Hydro was of the opinion that the surplus in the RSP should not be used to offset the deferred costs  
18   relating to the reduction of the subsidy. They indicated that the purpose of the RSP was to smooth  
19   variations caused by variations in fuel prices, climatic conditions and load and that it had performed  
20   extremely well over the previous four years in achieving this purpose.

21   The Board recommended in its June 11, 1990 Report to Government that the \$8,941,000 loss for PDD  
22   from April 1, 1989 to December 31, 1989 be charged to the RSP. The Board was of the opinion that  
23   this offset would not interfere with the integrity of the RSP and it was the most suitable way of dealing  
24   with the unforeseen loss of the Government subsidy.

## 1    **November 12, 1991 Hydro Referral to the Board**

2    On November 12, 1991, Hydro filed a referral to the Board of proposed rates for the supply of electric  
3    power to NP and rural customers. Based on the information included in the Board's April 13, 1992  
4    Report to the Government of Newfoundland and Labrador that summarized the information presented  
5    to the Board and the Board's recommendations on the rates proposed by Hydro in its referral, there  
6    were two items included in the referral that impacted the operation of the RSP. Firstly, Hydro made a  
7    referral that the purchase price of Bunker "C" oil used for the purpose of the RSP be decreased from  
8    \$18 per barrel to \$14 per barrel effective January 1, 1992.

9    Secondly, under a provision of the EPCA Chapter 40 of the 1989 Statutes of Newfoundland Hydro  
10    was permitted to defer costs it incurred during 1991 which would, unless recovered from its customers,  
11    cause Hydro to recover less than the interest coverage approved as a result of the 1990 Rate Referral.  
12    This deferral was estimated to be \$9,015,000 and Hydro was recommending in its referral that this  
13    balance be written off against the balance in the RSP allocated to Newfoundland Power as of January 1,  
14    1992.

15    In addition to these two Hydro referrals, NP had submitted during the hearing that the extra revenue  
16    Hydro would receive because of rate adjustments received by NP between Hydro hearings should flow  
17    to the RSP between Hydro rate referrals and flow back to customers. Hydro's rural rates on the Island  
18    Interconnected and Isolated systems have been primarily based on NP rates. Therefore, when a rate  
19    adjustment for NP had been approved by the Board, Hydro's rural customers received the same rate  
20    change without a rate referral having been filed by Hydro.

### 21    **Purchase Price of Bunker "C" Oil**

22    In its April 13, 1992 Report to Government, the Board recommended that the purchase price of  
23    Bunker "C" oil used for the purpose of the RSP be changed to \$12.50 per barrel. This  
24    recommendation differed from Hydro's \$14 per barrel due to falling oil prices from the time the  
25    referral was filed with the Board and the conclusion of the hearing.

### 26    **The \$9 million of Costs Deferrals in the 1991 Revenue Shortfall**

27    As noted on page 38 of the Board's Report to Government, during 1991 Hydro operated under the  
28    authority of the EPCA Chapter 40 of the 1989 Statutes of Newfoundland and revised January 1, 1990.  
29    Section 4.1 ( c ) states the following:

30            "4.1 Notwithstanding the other provisions of this Act, the Hydro Corporation shall include in  
31            its forecast costs filed with the Public Utilities Board  
32                    ( c ) the costs incurred after March 31, 1989, including fees or charges paid to the  
33                    Crown, which have been deferred by the Hydro Corporation and which would, unless  
34                    recovered from its customers, cause the Hydro Corporation to recover less than the  
35                    minimum margin of profit approved by the Public Utilities Board under clause B of  
36                    subparagraph (i) of paragraph (d) of section 3 in the year in which the costs were  
37                    incurred."

1 Under this provision, Hydro was permitted to defer costs that were in accordance with this Section of  
2 the EPCA however the EPCA was amended in December, 1991 to eliminate Hydro's right to the  
3 deferral of costs incurred after 1991. Hydro explained that if the deferred costs were to be recovered in  
4 the 1992 test year, the proposed rate increase to NP would be approximately 11%. However if the  
5 deferral was recovered through the RSP, then the proposed rate increase would be approximately 3.8%.  
6 Therefore, the recovery of the deferral through the RSP would lessen the impact of the rate increase  
7 that Hydro required from NP in 1992.

8 NP had indicated during the hearing that Hydro's proposal to offset the deferral in the RSP was  
9 reasonable. It also proposed that the July 1<sup>st</sup> RSP adjustment be based on the balance in the RSP  
10 account on December 31 of the previous year and, to facilitate this request, NP proposed that the  
11 deferral be rolled into the RSP on December 31, 1991.

12 The Board recommended in its April 13, 1992 Report to Government that costs of up to \$9,015,000  
13 incurred in 1991 be deferred and written off against the balance in the RSP allocated to NP as of  
14 December 31, 1991.

#### 15 **Revenue from NP Rate Changes**

16 Hydro's rural rates on the Island Interconnected and Isolated systems have been primarily based on NP  
17 rates. Therefore, when a rate adjustment for NP has been approved by the Board, Hydro's rural  
18 customers received the same rate change without a rate referral having been filed by Hydro.

19 During the hearing, NP submitted that the extra revenue Hydro would earn because of rate  
20 adjustments received by NP between Hydro hearings should flow to the RSP and flow back to  
21 customers. They indicated that this would effectively reduce the subsidy being paid by NP and  
22 Industrial Customers until the next Hydro rate referral rather than increasing Hydro's net income.

23 Hydro did not consider NP's proposal to be appropriate; it proposed that any earnings in excess of its  
24 test year interest coverage be refunded to customers. NP did not agree with the cap on the interest  
25 coverage, as this approach allowed Hydro, when it was not in an over-earning situation, to apply the  
26 additional revenue against expenses that were not included in the forecast revenue requirement upon  
27 which rates were set and ratepayers would not see the direct benefit of the additional revenue. Also, as  
28 a result of the 1990 NP pass through of Hydro's rate increase, the Board approved the inclusion of a  
29 provision in NP's Rate Stabilization Account ("RSA") to ensure it did not over or under collect revenue  
30 as a result of Hydro's rate increase.

31 According to page 100 of the April 13, 1992 Report to Government, the Board agreed with NP that the  
32 extra revenue received as a result of rate adjustment between rate referrals should be credited to the  
33 RSP.

34 The Board recommended that at the upcoming hearing on Hydro's cost of service methodology, it  
35 should present for the Board's consideration a provision to be included in the RSP which would credit  
36 the RSP with any additional revenue received as a result of NP's rate adjustments.

## 1     **June 26, 1992 Referral to the Board**

2     On June 26, 1992, Hydro filed a referral to the Board for the proposed cost of service methodology,  
3     and a proposed method for adjusting its RSP to take into account the variation in Hydro's rural  
4     revenues resulting from variations in the rates set by the Board to be charged by NP to its customers.  
5     The latter was a recommendation of the Board resulting from the November 12, 1991 rate referral.

6     In its pre-filed evidence and during the hearing, Hydro presented a provision to be included in the RSP  
7     so that the plan would be credited with the additional revenue received by Hydro as a result of NP's  
8     rate adjustments between rate referrals. The provision presented, as noted in the Board's February,  
9     1993 Report to Government (page 63), was as follows:

- 10           1     "The additional revenue be calculated on a monthly basis;  
11           2     The additional revenue be determined by rate class, using the individual components  
12                 of each rate;  
13           3     The additional revenue be calculated using the actual billings for each month less the  
14                 revenue which would have resulted from rates in existence in the test year when the  
15                 cost of service was approved;  
16           4     This policy become effective with the next NP rate alteration, subsequent to the  
17                 conclusion of this hearing, and  
18           5     The policy applies to all alterations (increase and decreases) to NP rates that could  
19                 result in a change in Hydro's rural revenues."  
20

21     According to the information in the Board's 1993 Report to the Government of Newfoundland and  
22     Labrador, NP agreed with Hydro's proposal, however NP noted that Hydro should develop a  
23     mathematical approach with all variables defined which would explain how the automatic adjustments  
24     were to be calculated and it should be set out in its Rules and Regulations. NP noted that this was a  
25     practice that they followed.

26     The Board recommended that the provision set out above be included in the RSP along with NP's  
27     proposal that a mathematical equation with all variables defined be included in Hydro's Rules and  
28     Regulations.

## 1     **2001 General Rate Review**

2     On May 31, 2001, Hydro filed an Application with the Board for a general rate review. This  
3     Application began the first comprehensive review of Hydro since it became fully regulated in 1996.  
4     Included in this Application were several proposed changes to the operation of the RSP as well as  
5     rebasings the variables (price of fuel, Holyrood efficiency factors, test year Hydraulic production, etc.)  
6     included in the RSP as a result of an updated cost of service. During the hearing of this Application  
7     there was extensive discussion relating to the RSP, including the complexity of the plan, the balance  
8     outstanding and the recovery of this balance, and the future operation of the plan.

9     Hydro proposed a number of changes to the operation of the RSP. They were as follows:

### 10         a)   Hydraulic Production Variation

- 11                 ▪   Addition of mini-hydro plants to the calculation of hydraulic production  
12                     variation.
- 13                 ▪   Holyrood conversion factor to be changed from 605 kWh/bbl to 610 kWh/bbl.
- 14                 ▪   The forecast hydraulic production included in Hydro's test year cost of service  
15                     would also require a change in the calculation of the Hydraulic Production  
16                     Variation. In its Application, Hydro's proposed 2002 test year forecast of  
17                     hydraulic production of 4,285.00 GWh from 4,205.32 GWh.

### 18                 b)   Load Variation

- 19                 ▪   Interruptible energy no longer included in the plan. Barrels related to this energy  
20                     were also proposed to be excluded from the fuel price variation calculation (along  
21                     with the existing exclusion for barrels related to emergency sales).

### 22                 c)   Customer Splits:

- 23                 ▪   No longer base the RSP split on Test Year Cost of Service Study; instead use the  
24                     12 month-to-date invoiced /bulk transmission energy used, as well as Test Year  
25                     Rural Deficit Allocation.

### 26                 d)   Rate Calculation

- 27                 ▪   Energy rates to be established on the same basis as the customer split, i.e. 12  
28                     month-to-date invoiced /bulk transmission energy.

### 29                 e)   Other

- 30                 ▪   The purchase price of No.6 Fuel used for the purposes of the RSP be changed  
31                     from \$12.50 per barrel to \$20 per barrel to be effective January 1, 2002.
- 32                 ▪   Change the finance charge from Hydro's embedded cost of debt to Hydro's  
33                     weighted average cost of capital ("WACC").
- 34                 ▪   Increase the RSP cap for NP from \$50 million to \$100 million.

**P.U. Order No. 7 (2002-2003)**

As a result of the hearing related to Hydro's 2001 General Rate Review on June 7, 2002 the Board issued Order No. P.U. 7 (2002-2003) which included a number of orders related to Hydro's proposals and other issues that arose during the hearing.

The Board approved all of the proposals noted above with the exception of the following:

- a) Holyrood Fuel Efficiency Factor: The Board ordered an efficiency factor of 615 kWh/bbl as opposed to the 610kWh/bbl as proposed by Hydro.
- b) 2002 Test Year Hydraulic Forecast: The Board ordered a test year hydraulic forecast of 4,425 GWh as opposed to the 4,285 GWh proposed by Hydro.
- c) Purchase Price of No. 6 Fuel: The Board also ordered that the cost of service price for No. 6 fuel to be used in the RSP for calculating the fuel price variation would be an annual average fuel price of \$25.47/bbl as opposed to \$20/bbl that was proposed by Hydro. The price set by the Board was based on the monthly 2002 fuel forecast prices that were filed in Table 1 of R.J. Henderson's, 2<sup>nd</sup> Supplementary Evidence. The Board also ordered Hydro to file updated 12 month fuel forecasts as part of its quarterly reporting to the Board.
- d) Retail Cap: The Board ordered the elimination of the \$50 million cap as opposed to increasing the cap to \$100 million as proposed by Hydro.

**Recovery of the Balance in the RSP**

According to Hydro the method of recovering the balance in the RSP that was set in 1985 had been working well. The balance was recovered from the customers over a three year period using a declining balance method. However, during the hearing there was discussion as to whether a shorter time frame should be considered due to the increasing balances in the plan. In its final argument submission, Hydro indicated that it was not opposed to a shorter time frame but did note the impact on customers of using an accelerated recovery method.

As a result of trying to balance the issue of matching the recovery of costs in the period that the costs were incurred and the overall impact on customer rates, the Board's orders included the following:

- The Board did not allow any additional recovery of the existing RSP balance until 2003. The RSP mill rate for the Industrial Customers was reset to the rate that was effective January 1, 2001 for the remainder of 2002 and the RSP mill rate for NP remained at the rate that was effective July 1, 2001. The NP mill rate would be in effect until July 1, 2003.
- The existing balances in the RSP were fixed as of the end of the month prior to the effective date of rate implementation based on the current methodology. This occurred August 31, 2002 for NP and the Industrial Customers, and this balance became known as the "Old Plan". Any balances that would accumulate in the plan after August 31, 2002 would be known as the "New Plan".

- 1       • The recovery of the “Old Plan” was to be recovered over a five year period commencing in  
2       2003 using a straight line recovery method. Interest was accumulated and maintained on the  
3       balance using the WACC.
- 4       • The recovery or credits of balances that accumulated in the “New Plan” would be calculated  
5       using a straight line method over a two year period. This would be effective January 1, 2004  
6       for the Industrial Customers and July 1, 2004 for NP.

## 1     **2003 General Rate Review**

2     On May 21, 2003, Hydro filed an Application with the Board for a general rate review. This  
3     Application did not include any major proposals with respect to the operation of the RSP other than  
4     rebasings the price of fuel, hydraulic production, Holyrood efficiency factor and load forecast as a result  
5     of the updated cost of service included with the Application. However, while the hearing was ongoing  
6     representatives for Hydro, NP, the Industrial Customers and the Consumer Advocate were engaged in  
7     settlement discussions separate from the hearing, and without participation of Board staff or Board  
8     Counsel, relating to certain amendments to the RSP.

9     On November 13, 2003, Hydro filed proposed amendments to the RSP (Consents #2 and #3)  
10    requesting that the Board approve these amendments to be effective January 1, 2004. The parties that  
11    participated in the settlement discussions consented to the filing of the proposed amendments with the  
12    exception of the Industrial Customers, who took no position with respect to the amendments of the  
13    provisions that related to the recovery of the plan balances. On December 15, 2003, the Board issued  
14    Order No. P.U. 40 (2003), ordering that the proposed amendments be effective as of January 1, 2004.  
15    The RSP continued to include the four main elements, that being, hydraulic, fuel, load and rural rate  
16    alteration; however there were changes within the components. The amendments also included  
17    changes in the calculation of the recovery or refund of plan balances.

### 18    **Hydraulic Variation Component**

19    The calculation of the hydraulic variation component did not change but it would be tracked separately  
20    from the other components. However only 25% of the annual balance in the hydraulic variation  
21    component, plus 100% of financing charges for that year, would be recovered from or refunded to  
22    customers each year. This amount, which is defined as the “Hydraulic customer assignment” would be  
23    removed from the Hydraulic Variation Account at the end of each year.

24    As indicated in Hydro’s Rules and Regulations relating to the formulae used to calculate the activity in  
25    the RSP, the hydraulic customer assignment would be allocated among the Island Interconnected  
26    customer groups of NP, Industrial Customers and the Rural Island Interconnected. The allocation  
27    would be based on percentages derived from 12 months-to-date kWh for: Utility Firm and Firm-Up  
28    Secondary invoiced energy, Industrial Firm invoiced energy and Rural Island Interconnected bulk  
29    transmission energy.

30    The portion of the hydraulic customer assignment that would be allocated to the Rural Island  
31    Interconnected will be re-allocated between NP and the regulated Labrador Interconnected customers  
32    in the same proportion that the Rural Deficit is allocated in the approved Test Year Cost of Service  
33    study. The Labrador Interconnected portion is written off to Hydro’s net income.

34    The portion of the hydraulic customer assignment allocated to NP and the Industrial Customers would  
35    be included with the RSP balances for each of these groups as of December 31<sup>st</sup> of each year.

36    The reason provided for this proposed change was that, due to the nature of the hydraulic cycle, it had  
37    been contemplated that this part of the RSP may never have to be recovered from or refunded to  
38    customers. However, after Hydro’s analysis, using historical data of the amount that could potentially

1 accumulate in this component and the possible effect on Hydro's risk and its balance sheet, it was  
2 agreed by the parties that 25% of the balance, plus 100% of financing charges for that year, be assigned  
3 annually to customers for collection or refund.

#### 4 **Fuel Cost Variation Component**

5 The calculation of the activity for the fuel component did not change, however it was noted that the  
6 large balances accumulating in the RSP in recent years were the result of significant differences between  
7 the test year price of fuel and the actual price of fuel. Prior to the start of this hearing the test year  
8 price of fuel was an annual average price of \$25.47/bbl and the actual average price of fuel in  
9 December 31, 2003 was \$31.05.

10 The parties involved in the settlement discussions agreed that a mechanism was needed to address this  
11 issue on a go forward basis. A fuel rider, which takes into account the forecast price of fuel was the  
12 mechanism proposed in Consent # 2 and approved by the Board. The determination of the fuel rider  
13 is included under the "Fuel Price Projection" in Hydro's Rules and Regulations relating to the RSP.

14 A fuel price projection is calculated using forecast oil prices provided by the PIRA Energy Group and  
15 the current US exchange rates to determine the fuel rider for the rate adjustments. This would occur in  
16 April each year for NP, to be included with the RSP adjustment effective July 1<sup>st</sup> and for the Industrial  
17 Customers it would occur in October each year to be included with the RSP adjustment effective  
18 January 1<sup>st</sup>.

19 The calculation basically determines the difference between the average forecast price for the following  
20 12 months and the test year price and multiplies this difference by the number of barrels of fuel  
21 forecast to be consumed at the Holyrood generating station for the test year.

22 According to the Rules and Regulations, the Industrial Customer allocation of the forecast fuel price  
23 change will be based on the 12 months to date kWh as of the end of September and is the ratio of the  
24 Industrial Firm invoices energy to the total of: Utility Firm and Firmed-Up Secondary energy, Industrial  
25 Firm invoiced energy and the Rural Island Interconnected bulk transmission energy. The NP customer  
26 allocation is calculated in the same manner with the exception of the allocation being based on the 12  
27 months to date kWh as of the end of March.

#### 28 **Load Variation Component**

29 The change in this component of the RSP was to treat the fuel costs component of the load variation in  
30 the same manner as the revenue component. The revenue variation component is assigned to the  
31 customer class which caused the variation, however previously the fuel cost variation was treated as  
32 common costs and shared proportionately among the customer classes regardless of the class that  
33 caused the variation. It was allocated using customer energy ratios.

34 By treating the fuel costs in the same manner as the revenue variation, it meant that the fuel cost  
35 variation resulting from the load variation would be assigned fully to the appropriate customer class,  
36 and as a result the customer class that caused the change in the load would be assigned the cost or  
37 recovery of the fuel associated with the change.

1     **Rural Rate Alteration**

2     This component of the RSP is calculated to account for changes in Rural revenues which occur as a  
3     result of changes in NP rates. This is due to the fact that Rural rates on the Island Interconnected and  
4     Isolated systems are primarily based on NP rates.

5     During this hearing, there was a mediation agreement titled “Parties Agreement on Cost of Service and  
6     Rate Design Issues”, filed with the Board, that included settlement on various items included in  
7     Hydro’s application. Included in this agreement was an additional provision to be added to the Rural  
8     Rate component of the RSP: “Hydro will adjust the Rural Rate Alteration component based on its  
9     projection of the 5 year phase-in of Labrador rates and the revenue credit available from secondary  
10    energy sales to CFB Goose Bay.” This component was referred to as the “Rural Labrador  
11    Interconnected Automatic Rate Adjustments” and is contained in Section 1.3 (b) of Hydro’s Rules and  
12    Regulations relating to the RSP.

13    **Recovery of Plan Balances – Current and Historical Plans**

14    As a result of the amendments included in the Consents which were subsequently approved in P.U. 40  
15    (2003), the activity of the RSP commencing in January 2004 was allocated to a new plan that would be  
16    known as the “Current” plan. The balances in the “old” plan that accumulated up to August 31, 2002  
17    and the balance that accumulated in the “new” plan for the period September 1, 2002 to December 31,  
18    2003 were combined into a plan that would be known as the “Historical” plan.

19    ***The “Current” Plan***

20    The recovery of the balance in this plan would occur over a one year amortization period rather than a  
21    two year amortization. The adjustment rate would be established to target a zero balance in the  
22    customer plans at the end of each recovery period. This change was recommended to help alleviate  
23    increasing balances in customer RSP balances.

24    The RSP adjustment rate would be comprised of two components. The first component was set to  
25    recover the customer balances annually and would be calculated as follows:

- 26    -    **NP customers:** This balance would be the existing plan balance as of March 31<sup>st</sup>, less any projected  
27        recovery/refund of the balances for April, May and June, plus the estimated financing costs (using  
28        WACC) of the plan balance to the end of the next recovery period.  
29
- 30    -    **Industrial Customers:** This balance would be the existing plan balance on December 31<sup>st</sup> plus the  
31        projected financing costs of the plan balance for the next twelve months.  
32

33    The second component of the adjustment rate would be the fuel rider that was previously discussed in  
34    this report. The total adjustment rate would be the rate derived from the plan balance plus the fuel  
35    rider. The Industrial Customers’ rate is effective January 1<sup>st</sup> of each year and the NP rate is effective  
36    July 1<sup>st</sup>.

1     ***The “Historical” Plan***

2     This plan was the result of the combination of the NP and Industrial Customers’ balances outstanding  
3     up to August 31, 2002 and the balances that accumulated in the plan from September 1, 2002 to  
4     December 31, 2003.

5     As a result of the negotiations between the parties, it was proposed that to reduce the immediate impact  
6     on customers’ rates, both of these RSP balances would be added together and would be recovered over  
7     a four year period commencing January 1, 2004 for the Industrial Customers and July 1, 2004 for NP.  
8     This proposal was approved by the Board in P.U. 40 (2003).

9     **Rebasing of Variables**

10    As part of the updated cost of service included in this Application, a number of variables included in  
11    the operation of the RSP are rebased or set as a result of the new test year. The variables that were  
12    approved by the Board for the 2004 test year were as follows:

- |    |                                       |                                     |
|----|---------------------------------------|-------------------------------------|
| 13 | a) <u>Price of No. 6 Fuel:</u>        | average annual price of \$26.59/bbl |
| 14 | b) <u>Holyrood Conversion Factor:</u> | 630kWh/bbl                          |
| 15 | c) <u>Hydraulic Production:</u>       | 4,582.15 GWh                        |
| 16 | d) <u>Load Forecast:</u>              | 6107.50 GWh                         |

17    **Ongoing Monitoring**

18    As a result of the changes approved in P.U. 40 (2003), the Board directed Hydro to complete a review  
19    of the operation of the RSP for the period January 1, 2004 to December 31, 2005. The Board indicated  
20    in the Order that the review should assess the effectiveness of the revised RSP, including an assessment  
21    of the impact on customers in terms of rates based on the outstanding plan balance as of December 31,  
22    2005. The Board directed Hydro to file this report to the Board no later than June 30, 2006.

## 1     **2006 General Rate Review and Other RSP Activity During 2006**

2     On August 3, 2006, Hydro filed a general rate application with the Board for approval, among other  
3     items, of the rates to be charged for the supply of power and energy to its customers as of January 1,  
4     2007. As previously noted in P.U. 14 (2004), the Board ordered Hydro to prepare a report on the  
5     operation of the RSP for the period January 1, 2004 to December 31, 2005. Hydro filed this report on  
6     June 30, 2006 and, as part of its August 2006 application, Hydro requested that the changes proposed  
7     in the June 30, 2006 report be approved by the Board. Hydro also included other proposals for the  
8     Board's approval in addition to those included in the June report.

9     As part of the hearing process of the application there were several settlement agreements filed by the  
10    parties participating in this process. These agreements were the result of a negotiation process related  
11    to various issues presented in the application. The first agreement, "Agreement of Cost of Service,  
12    Rate Design and Rate Stabilization Plan" was filed October 6, 2006 and on November 23, 2006 the  
13    "Revenue Requirement Agreement", the "Supplementary COS, Rate Design and Other Issues  
14    Agreement" and the "Labrador Interconnected Rates Agreement" were filed with the Board.

### 15    **June 30, 2006 Report – Review of the Operation of the RSP**

16    The changes proposed by Hydro in this report were as follows:

- 17    - Fuel rider: When new test year base rates are implemented, if the fuel rider forecast is more  
18    current, a fuel rider which incorporates the new forecast should be implemented at the same time  
19    as the change in base rates.
- 20    - Load variation: Change the customer allocation for the load variation provision such that both the  
21    revenue and fuel components of the load variation are allocated between NP and the Industrial  
22    Customers based on the customer energy ratios. In Hydro's 2003 general rate application, the  
23    parties agreed that both the revenue and fuel components would be assigned where the load  
24    variation occurred (i.e. assigned to the customer class caused the load variation).
- 25    - Historical Plan Balances: Hydro indicated a willingness to extend the recovery period for the  
26    historical RSP, provided that there is an agreement among customers and there was consideration  
27    given to the issue of intergenerational equity.
- 28    - Aur Resources (i.e.: Teck Cominco): If the Board granted this company the proposed exemption  
29    from the historical RSP adjustment rate for 2006, this exemption should continue until the  
30    Industrial customer Historical Plan is eliminated.
- 31    - Diesel Fuel Impacts: Hydro believed that the variations in the uncontrollable price of diesel fuel  
32    presented an unreasonable net income risk to Hydro. As a result of this risk Hydro believed it  
33    should have some protection of this risk through the RSP.

1     **Other Proposals in the 2006 General Rate Application**

2     The application also included other proposals related to the operation of the RSP. These were as  
3     follows:

- 4             ▪     Change the treatment of NP's allocated share of the CFB Goose Bay Revenue Credit  
5                    whereby NP's portion of this credit would be removed from NP's base rates and  
6                    refunded to NP through the RSP based on secondary revenue.
- 7             ▪     Changes to the RSP to reflect the operation of the proposed annual automatic adjustment  
8                    mechanism for Hydro's rate of return on rate base.

9  
10    **October 20, 2006 Parties Agreement**

11    This Agreement titled, "The Parties' Agreement on Cost of Service, Rate Design and Rate Stabilization  
12    Plan" included agreement on several of the RSP issues to be put forward for the Board's approval.

13    The Parties agreed with Hydro's proposal relating to the fuel rider, that when new test year rates are  
14    implemented, if the fuel rider forecast is more current, a fuel rider which incorporates the new forecast  
15    should be implemented at the same time as the change in base rates. In P.U. 8 (2007), the Board  
16    accepted this approval in principle since it could not be used until the next general rate application  
17    (Hydro's RSP adjustment rates for January 1, 2007 were already implemented). The Board indicated in  
18    its Order that to ensure the purpose and language of this provision is appropriate for the next test year,  
19    this item should be discussed in the RSP review that was also included in this Agreement.

20    The Parties also agreed that the current provisions of the RSP should continue as approved for all  
21    hydraulic, fuel and load related components and all recovery related calculations with the exception of  
22    the following three issues which were not agreed upon:

- 23           1.   Whether the potential effects of the variations in rural diesel fuel costs and rural power  
24                purchase costs on Hydro's net income should be protected by the operation of the RSP;
- 25           2.   Whether there should be any limitations on the potential effects of the full or partial closure of  
26                the CFB Goose Bay facility on Hydro's net income; and
- 27           3.   The disposition of the forecast hydraulic production variation balance in the RSP.

28

29    The Agreement also indicated that the Parties agreed that the RSP would be reviewed with the intent to  
30    review the design objectives of the current RSP. The Agreement indicated that no later than October  
31    31, 2007, Hydro would host a Technical Conference, to be attended by the Parties and others as  
32    determined by the Parties, to discuss the re-design of the RSP and the Industrial Customer rate design.  
33    The Board agreed that a review of the RSP design would be appropriate and ordered in P.U. 8 (2007)  
34    that Hydro file with the Board, no later than May 31, 2007, a copy of the terms which are proposed for  
35    the RSP review, setting out the terms of reference, the specific review objectives, a list of participants, a  
36    planned timeline, and an outline of the review process.

**November 23, 2006 – Parties Agreement on Revenue Requirement**

In this Agreement, the Parties agreed on the disposition of the Hydraulic Production Variation balance as of December 31, 2006 and put forward the following proposals for the Board's consideration and approval:

***Newfoundland Power***

- Effective December 31, 2006, NP's portion of the actual RSP Hydraulic Production Variation balance as of December 31, 2006 would be allocated to NP's Historical RSP Balance
- Effective January 1, 2007, Hydro would decrease the RSP rate charged to NP as a result of the reduction in NP's Historical RSP balance as noted above. This would enable Hydro to amortize the collection of the reduced Historical RSP balance over 18 months (January 1, 2007 to July 1, 2008) and recognized that the RSP rates would be reset on July 1, 2008 in accordance with the normal operation of the RSP.
- Effective January 1, 2007, NP would reduce the RSA adjustment it charged its customers to reflect the change in the RSP rate noted above.

***Industrial Customers***

- The normal annual 25% allocation of the Industrial Customers' share of the actual Hydraulic balance as of December 31, 2006 would be incorporated in customer rates effective January 1, 2007 in accordance with the existing RSP rules, and
- The portion of the Industrial Customers' share of the actual Hydraulic credit balance, net of the allocation outlined above would be transferred, effective December 31, 2006, to the Industrial Customers' Historical RSP and used to reduce any charge, or increase any credit, which would otherwise be applied effective January 1, 2008 to the rates of the Industrial Customers under the current RSP rules.

**November 23, 2006 – Parties Agreement on COS, Rate Design and Other Issues**

In this Agreement, the Parties (including Hydro) agreed to withdraw two proposals that had been put forward by Hydro in its Application. The first withdrawn proposal related to the proposed change to the treatment of NP's allocated share of the CFB Goose Bay Credit. The Parties indicated that the current treatment of the CFB Goose Bay Revenue Credit would continue for the purpose of this Application, except to the extent of the proposed modification included in the agreement "Labrador Interconnected Rates" that was also filed on November 23, 2006. The second withdrawn proposal related to the introduction of a new provision in the RSP which would collect additional Rural Diesel fuel and power purchase costs from NP or similarly refund the savings to NP.

It was agreed by the Parties that these proposals would be discussed as part of the RSP review that was agreed to in the October 20, 2006 Agreement.

1     **November 23, 2006 – Parties Agreement on Labrador Interconnected Rates**

2     In this Agreement the Parties, with the exception of the Industrial Customers who took no position on  
3     this issue, put forward the following proposal to the Board relating to the operation of the RSP:

- 4     -     “A sufficient portion of the CFB Goose Bay Revenue Credit will be used to maintain existing rates  
5     paid by the Rural customers on the Labrador Interconnected system for 2007. The revenue  
6     shortfall to Hydro from maintaining existing rates will be recovered through the RSP. The RSP  
7     rules pertaining to the Rural Rate Alteration (Rural Labrador Interconnected Automatic Rate  
8     Adjustments) will be modified to reflect the foregoing and to facilitate the phasing in of the CFB  
9     Goose Bay revenue credit for secondary energy sales to reduce the Rural Deficit. The modified  
10     RSP rules will be submitted to the Board for approval.”

11  
12     **Government Directive**

13     On September 29, 2006, the Government of Newfoundland and Labrador (“the Government”) issued  
14     an Order in Council to the Board pursuant to section 5.1 of the EPCA, which directed the Board as  
15     follows:

16             *“The Board of Commissioners of Public Utilities is directed to adopt a policy that, if Newfoundland and*  
17             *Labrador Hydro applied to the Board on or before October 1, 2006 for a change in the Industrial Customers*  
18             *Rate Stabilization Plan which is not on the normal schedule for adjustments to that Plan, such change being*  
19             *associated with the withdrawal of a significant industrial customer and including a contribution to the historic*  
20             *portion of the Plan to offset implications of this withdrawal, the Board shall approve the application and, if the*  
21             *application is made on or before September 22, 2006, the Board shall apply procedures so that changes in*  
22             *Industrial Customer electricity rates are implemented no later than October 1, 2006;...”*

23  
24     Hydro did file an application to the Board on September 22, 2006 for approval of the revised 2006  
25     Industrial Firm Energy rates that reflected changes to the Industrial Customers’ RSP as a result of the  
26     closure of Abitibi Consolidated – Stephenville Division and the Order in Council noted above. These  
27     changes were approved by the Board in P.U. 31 (2006) as directed by the Government and the revised  
28     rate became effective as of October 1, 2006. The approved adjustments to the Industrial Customers’  
29     RSP were as follows:

- 30     -     The calculation of the fuel rider was revised to adjust the 2004 Test Year barrels of No. 6 fuel  
31     forecast to be consumed at the Holyrood Generating Station to reflect a reduction in load resulting  
32     from the closure of Abitibi Consolidated Inc – Stephenville Division;  
33     -     A modification of the calculation of the Historical Plan RSP recovery rate to reflect a \$10 million  
34     contribution from the Government to the plan on account of the closure of Abitibi Consolidated  
35     Inc – Stephenville Division; and  
36     -     The Industrial Customer kWh sales (2004 Test Year) were adjusted to reflect the closure of Abitibi  
37     Consolidated Inc – Stephenville Division.

**Order No. P.U. 46 (2006)**

Hydro filed a Revised Application on December 6, 2006 that incorporated the Settlement Agreements and the Government Directives and it filed a further application on December 20, 2006 requesting Board approval of the revisions to the RSP rules to reflect the intent of the December 6, 2006 Government Directive related to the rural rate alterations, the Settlement Agreements and the Revised Application.

Due to the timing of this hearing the Board was not in a position to issue a final order before January 1, 2007. However, on December 29, 2006, the Board issued P.U. 46 (2006). In this Order the Board did not approve all of the proposed changes but approved those which were appropriate in the context of the approval of interim rates that were to be effective January 1, 2007. The Board approved the following on an interim basis:

- i. Changes to the monthly amount of the 2007 automatic rate adjustment for the Rural Labrador Interconnected system resulting from the phase-in of the CFB Revenue Credit from secondary sales to CFB Goose Bay to the rural deficit, leaving the CFB Revenue Credit applied to the rural deficit in Hydro's final 2007 test year cost of service and future years to be determined later by final Order of the Board; and
- ii. The use of a reserve account to maintain the December 31, 2006 RSP Hydraulic Variation balance, net of the normal 25% December 31, 2006 allocation, with normal RSP financing charges applied, until the balance is disposed of later by final Order of the Board."

**Order No. P.U.8 (2007)**

This Decision and Order of the Board in the matter of Hydro's 2006 General Rate Application was issued April 12, 2007.

In this Order the Board indicated that it was satisfied that the allocation of a portion of the CFB Goose Bay Revenue Credit during the extended phase-in of uniform Labrador Interconnected rates was reasonable and consistent with regulatory principles and approved Hydro's proposed methodology for this allocation. However, the Board included in the Order that Hydro would be required to file supporting calculations with each annual application for approval of changes to Labrador Interconnected rates. The Board noted that the RSP rules submitted by Hydro included specific elements of the rates beyond 2007 for the Labrador Interconnected customers, since the Board indicated that future rates would require approval of the Board upon application by Hydro. The Board also ordered Hydro to revise the RSP rules to remove reference to the specific amounts in the Rural Rate Alteration for the years beyond 2007.

The Board also approved the distribution of the balance of the reserve account established in P.U. 46 (2006) in accordance with the special adjustment to the RSP Hydraulic Production Variation balance that was proposed in the Settlement Agreements. This one-time adjustment was set out in Schedule B of this Order and Hydro was required to revise the RSP rules that were submitted to exclude the reference to this one-time adjustment. Since this Order was not issued until April 12, 2007, Hydro

1 adjusted the 2007 opening balances for NP's Current RSP Plan and Historical Plan, as well as the 2007  
2 opening balance of the Industrial Customer's Historical Plan to reflect the distribution of the Hydraulic  
3 Plan balance as of December 31, 2006.

4 The changes to the rules in the RSP that Hydro submitted for approval also included references to the  
5 proposed Automatic Adjustment Mechanism ("AAM") that Hydro had proposed for the setting of  
6 future rates. The Board did not approve the use of an AAM at this time and therefore Hydro was  
7 ordered to revise the RSP rules to remove the reference to the AAM.

8 **Rebasing of Variables**

9 As part of the updated cost of service included in this Application, there were a number of variables  
10 that are included in the operation of the RSP that were rebased or set as a result of the new test year.  
11 The variables that were approved by the Board for the 2007 test year were as follows:

- |    |                                       |                                     |
|----|---------------------------------------|-------------------------------------|
| 12 | a) <u>Price of No. 6 Fuel:</u>        | average annual price of \$55.11/bbl |
| 13 | b) <u>Holyrood Conversion Factor:</u> | 630kWh/bbl                          |
| 14 | c) <u>Hydraulic Production:</u>       | 4,472.07GWh                         |
| 15 | d) <u>Load Forecast:</u>              | 5,820.10GWh                         |

16 **Order No. P.U. 32 (2006)**

17 On September 18, 2006, Hydro filed an application to the Board requesting approval to recover,  
18 through the RSP, the cost of No. 6 fuel burned at the Holyrood Generating Station with a sulphur  
19 content not exceeding 1% by weight instead of the lower cost of fuel with a sulphur content of 2%  
20 which was previously included in rates.. This approval was required in order for Hydro to be in  
21 compliance with a Certificate of Approval issued by the Department of Environment and Conservation  
22 which prohibited Hydro from burning any fuel with sulphur content greater than 1% by weight.

23 On October 20, 2006, the Board issued P.U. 32 (2006) approving the recovery by Hydro of the cost of  
24 burning 1% sulphur content No. 6 fuel at Holyrood through the RSP effective immediately.

1     **RSP Activity During 2007**

2     **Order No. P.U. 1 (2007)**

3     On January 20, 2006, the Board issued P.U. 1 (2006) approving interim rates for Aur Resources Inc.  
4     (now known as Teck Cominco), a new industrial customer that began operating at the Duck Pond Mine  
5     in Central Newfoundland. These interim rates included the Historical Plan balance portion of the RSP.  
6     On January 18, 2007, the Board issued P.U.1 (2007) approving the exclusion of the portion of the rate  
7     relating to the Historical Plan balance of the RSP, and Hydro was also ordered to refund or credit Aur  
8     Resources the difference between the rates approved in P.U. 1 (2006) and the rates approved in this  
9     Order.

10    As a result of this Order, the 2007 opening balance of the Industrial Customer Historical Plan balance  
11    was increased by \$129,103 to reflect the refund of \$125,726 to Aur Resources for amounts collected  
12    from January 20, 2006 to December 31, 2006 and the related financing charges of \$3,377.

13    **Rural Rate Alteration**

14    Beginning January 2007, the Rural Rate Alteration included a monthly amount of \$92,560. This  
15    amount related to the phase-in of the credit from secondary energy sales to CFB Goose Bay to the  
16    Rural deficit. This was included in the November 23, 2006 Settlement Agreement “Labrador  
17    Interconnected Rates” and approved by the Board in P.U.8 (2007). The RSP Regulations received final  
18    approval in Order P.U. 14 (2007) which was issued May 17, 2007.

19    **Historical Plan Balance – Industrial Customers**

20    As ordered in P.U. 40 (2003) as a result of the Settlement Agreement filed in relation to the 2003  
21    General Rate Hearing, the balances in the “new” and “old” plans were consolidated as of December 31,  
22    2003 and the balance was to be recovered over a four year period. As of December 31, 2007, there was  
23    a credit balance in the Industrial Customers’ portion of the Historical Plan balance of \$1,382,494 and,  
24    in accordance with Section E of the RSP rules, this balance was transferred to the Industrial Customers’  
25    Current Plan. The recovery of NP’s portion of the Historical Plan Balance continued until June 30,  
26    2008.

## 1     **RSP Activity During 2008**

### 2     **Industrial Customers' RSP Rate**

3     In accordance with Section C of the RSP Regulations, Hydro is required to calculate a fuel price  
4     projection that includes forecast fuel price changes and determine the annual fuel rider for the rate  
5     adjustments. This is required to be calculated in October of each year for the Industrial Customers.

6     The amount of the forecast fuel price change and the details of an estimate of the fuel rider based on 12  
7     months to date kWh sales to the end of September is required to be reported to the Industrial  
8     Customers', NP and the Board by the 10th working day in October.

9     The RSP adjustment rate including the fuel rider for Industrial Customers' is to be calculated each year  
10    with an effective date of January 1<sup>st</sup>. On December 20, 2007, Hydro filed an application with the Board  
11    requesting that the rates currently in place for the Industrial Customers' would continue on an interim  
12    basis. The Board issued P.U. 34 (2007) approving that the rates for the Industrial Customers that were  
13    in effect for 2007 would continue after January 1, 2008 until the Board ordered final rates for the  
14    Industrial Customers in 2008. These interim rates continued throughout 2008. Therefore, the fuel  
15    rider has not been included in the Industrial Customers' RSP adjustment rate, as 2007 rates were based  
16    on a 2007 test year with no fuel rider component.

17    It is important to note that the 2007 RSP adjustment rates that were set as of January 1, 2007 were as  
18    follows:

- 19       -   The RSP adjustment rate for the Current Plan was a refund of 2.0 cents per kWh
- 20       -   The RSP adjustment rate for the Historical Plan was a recovery of 1.215 cents per kWh.

21    As a result of the completion of the Industrial Customer Historical Plan balance, these rates were  
22    combined to a refund rate of 0.785 cents per kWh on the Current plan balance effective January 1,  
23    2008. The refund rate for Teck Cominco continued at 2.0 cents per kWh as this company was excluded  
24    from the recovery of the Historical plan.

### 25    **Rural Rate Alteration**

26    Beginning January 2008, the Rural Rate Alteration included a monthly amount of \$32,433. This  
27    amount related to the phase-in of the credit from secondary energy sales to CFB Goose Bay to the  
28    Rural deficit. This received final approval in Order P.U. 33 (2007) which was issued December 21,  
29    2007.

### 30    **Historical Plan Balance – NP Customers**

31    The recovery of NP's portion of the Historical Plan Balance concluded June 30, 2008. At this time  
32    there was a credit balance in the Plan of \$2,238,025 that was transferred to the Current Plan in  
33    accordance with Section E of the RSP Regulations.

1     **RSP Activity During 2009**

2     **Industrial Customers' RSP Interim Adjustment Rate**

3     On December 11, 2008 Hydro filed an Application to the Board for approval to continue the existing  
4     RSP adjustment rates with the exception of Teck Cominco. The rates for this industrial customer  
5     would increase to the same level as the other Industrial Customers as the Historical Plan balance no  
6     longer existed. The Application also requested a revision to the RSP rules and regulations for Hydro's  
7     Industrial Customers to remove the reference to the Historical Plan balance.

8     On December 17, 2008 the Industrial Customers made a submission to the Board requesting that the  
9     interim rates be continued, with the existing differential for Teck Cominco, until March 31, 2009. The  
10    Industrial Customers' request was made to allow time for parties to request information and file  
11    evidence, and they suggested that Hydro should be required to file an application for final rates at least  
12    thirty days prior to the expiration of the interim rates.

13   On December 24, 2008, the Board issued P.U. 37 (2008) allowing the Industrial Customers rates to  
14   continue on an interim basis until March 31, 2009 and the Order also required Hydro to file an  
15   application by January 30, 2009 to finalize the interim rates for the Industrial Customers.

16   On January 16, 2009 Hydro filed an application requesting an extension of the filing deadline for an  
17   application to finalize rates until June 30, 2009 and approval to continue using interim rates for the  
18   Industrial Customers until the Board is able to deal with the application when it is filed.

19   The Board issued P.U. 6 (2009) on January 30, 2009 approving the continuation of the interim rates  
20   until the Board issues an Order with respect to the finalization of the rates. The Board also approved  
21   Hydro's request to extend the filing deadline of the application to finalize the interim rates to June 30,  
22   2009.

23   On June 30, 2009, Hydro filed an application with the Board concerning the RSP components of the  
24   rates to be charged to Industrial Customers. In its application, Hydro indicated that it had updated and  
25   completed its analysis of the fuel and load variation caused by the events in the pulp and paper industry  
26   that are described below and that the application of the existing RSP rules to calculate rates for  
27   Industrial Customers would result in significant and unreasonable rate volatility. Therefore, in this  
28   application, Hydro proposed that the rates for Teck Cominco Limited be the same as those in effect for  
29   the other Island Industrial Customers and that the existing interim rates currently in effect for these  
30   customers' be made final. The Board is currently in the process of scheduling a hearing to address this  
31   Application.

**Industrial Customer Load Requirements**

During the 4<sup>th</sup> quarter of 2008 to the 2<sup>nd</sup> quarter of 2009, there were significant announcements and events within the pulp and paper industry in the Province due to a deterioration of the global newsprint market. These events can be summarized as follows:

- On December 4, 2008, Abitibi Consolidated Inc announced it would be closing the paper mill in Grand Falls-Windsor as of March 31, 2009. As a result of the announced closure on December 16, 2008, the Government of Newfoundland and Labrador introduced and passed into law the *Abitibi – Consolidated Rights and Assets Act*. As a result of this legislation, the hydro electric generating assets owned by Abitibi were repatriated. In its June 30, 2009 Application, Hydro indicated that the impact of the repatriation of these assets on Island Interconnected electricity rates could not be estimated at this time.
- On January 7, 2009, Kruger Inc., owner of the Corner Brook Pulp and Paper mill, announced its intention to reduce its newsprint production by 25,000 tonnes in the first half of 2009. It indicated that this downtime would be spread across its three Canadian mills which included the mill in Corner Brook.
- On June 24, 2009, Kruger announced that it was going to idle its No. 4 paper machine in Corner Brook. This machine was shut down in March, 2009 for what was to have been an eight week period but in this announcement the Company indicated that the shutdown would continue indefinitely. Two paper machines remain active at the Corner Brook mill.

These events have had a significant impact on the load requirements of the Island Industrial Customers. The December 2009 RSP report compiled by Hydro indicates that the actual kWh sales included in the load variation component for Industrial Customers for 2009 was 384,777,985 kWh as compared to the cost of service sales of 894,300,000 kWh. The cost of service sales are based on the 2007 Test Year Cost of Service that was approved in P.U.8 (2007). This significant reduction in load resulted in a credit balance of \$25,874,401 (amount owing to Industrial Customers) being added to the Industrial Customers RSP plan balance. The overall outstanding RSP balance owing to Industrial Customers as of December 31, 2009 is \$36,874,648.

In the accompanying letter to the June 30, 2009 Application filed by Hydro it made reference to the proposal that Hydro had made in its June 30, 2006 report, “Review of the Operation of the Rate Stabilization Plan” which covered the period January 1, 2004 to December 31, 2005, relating to a change in the method of allocating the load variation component of the RSP. The proposal was stated as follows:

*“Hydro intends to propose a change in the method of allocating the load variation component of the RSP such that both the revenue and the fuel components of the load variation will be allocated between NP and IC using customer energy allocation ratios. In effect, the customers will be allocated with Hydro’s bottom line impact in the same proportion as energy costs are shared in as test year Cost of Service.”*

1 As indicated earlier in this report, this proposal was included in Hydro's 2006 General Rate Application  
2 and, as a result of negotiations between the parties involved in this hearing, a Settlement Agreement  
3 titled "Parties Agreement on the Cost of Service, Rate Design and Rate Stabilization Plan" indicated  
4 that the RSP would be reviewed with the intent to better reflect the design objectives of the RSP. It  
5 noted that the review would include whether the load variation component of the RSP was a necessary  
6 component in the plan. A Technical Conference was scheduled to be held no later than October 31,  
7 2007 where the redesign of the RSP would be discussed. According to Hydro, discussions were held  
8 during 2007 and 2008 with NP, the Industrial Customers and the Consumer Advocate on changes to  
9 the RSP rules but there was no consensus during those discussions.

10 Hydro indicated in its letter dated June 30, 2009 that it was its intention to file this proposed change  
11 relating to the load variation with the Board no later than the filing of its next General Rate  
12 Application. Hydro also noted in the letter that the June 30, 2009 Application did not contain any  
13 proposed changes to the components of the RSP, however the Board might wish to consider the  
14 following:

15 *"...suspension of the existing load variation allocation rules and holding in abeyance current and future load*  
16 *variation amounts until such time as Hydro can develop a proposal to address the current anomalies in the*  
17 *RSP...."*

18 Hydro has included the following note on the Plan Highlights of the December 31, 2009 RSP Report:

19 *"Disposition of the load variation is one of the issues to be considered by the Public Utilities Board in a pending*  
20 *bearing. This may impact the balances owing to customers in the current plan."*

21 **Rural Rate Alteration**

22 Beginning January 2009 the Rural Rate Alteration included a monthly amount of \$5,766 down from  
23 \$32,433 which was in effect as of January 1, 2008. This amount relates to the phase-in of the credit  
24 from secondary energy sales to CFB Goose Bay to the Rural Deficit. This received final approval in  
25 Order P.U. 34 (2008) which was issued by the Board December 22, 2008.

1     **Impact of Changes on the Annual Plan Balances for Newfoundland Power and the**  
2     **Industrial Customers**

3     There have been many changes that have occurred with regards to the operation of the RSP since its  
4     inception in 1985, nevertheless the RSP still contains the three main components that were originally  
5     included, namely the Hydraulic Production Variation, the Fuel Cost Variation and the Load Variation.  
6     However, there have been changes that have occurred within the operation of each of these  
7     components.

8     **Hydraulic Production Variation**

9     As a result of the proposed amendments that were filed with the Board on November 13, 2003 during  
10    the hearing of Hydro's 2003 General Rate Application, the parties involved agreed that only 25% of the  
11    annual balance in the hydraulic variation component, plus 100% of financing charges for that year  
12    would be recovered from or refunded to customers each year. The remaining portion of the Hydraulic  
13    Variation Account would be tracked as a separate plan balance. The reason for this change was that  
14    over the nature of the hydraulic cycle this part of the RSP may never have to be recovered from or  
15    refunded to customers; theoretically it should work out to zero over the cycle.

16    Since 2004, when the 25% annual assignment to the customer class was approved by the Board, the  
17    Hydraulic Production Variation has been in a credit balance which means the actual hydraulic  
18    production has exceeded the cost of service hydraulic production in each year. The annual customer  
19    assignment is prorated to the customer class based on the 12 month kWh sales from each class,  
20    including the Rural customers which is then reallocated between NP and the Labrador Interconnected  
21    customers. This reallocation is based on the same ratio which the Rural Deficit was allocated in the  
22    approved Cost of Service Study, which is 89.10% and 10.90% respectively.

23    Each year the portion allocated to NP is increasing as a result of the lower energy requirements  
24    experienced by the Industrial Customers. It is important to note that because the actual Hydraulic  
25    Production has exceeded the Cost of Service Hydraulic Production, the portion assigned to the  
26    customer classes each year represents an amount owed to customers. Hydro indicated during the 2003  
27    General Rate Hearing that the amount of Hydraulic Production included in the 2004 Test Year Cost of  
28    Service is based on the average expected from historical hydrological records and, theoretically, the  
29    balance in the Hydraulic Plan should tend to zero over an extended period of time. The portion  
30    assigned to the Current Plan each year since 2004 (with the exception of 2006 noted below) is as  
31    follows:

	25% Annual Assignment	Assignment to NP	% <sup>(1)</sup>	Assignment to IC	%	Credit Balance Accumulated in Hydraulic Plan
2004	\$ 2,225,594	\$ 1,722,445	77.39%	\$ 487,788	21.92%	\$ 5,521,528
2005	\$ 4,261,844	\$ 3,393,171	79.62%	\$ 839,170	19.69%	\$ 10,625,444
2006	\$ 6,642,336	\$ 5,726,000	86.20%	\$ 867,115	13.05%	\$ 15,977,692 <sup>(2)</sup>
2007	\$ 6,064,061	\$ 5,262,203	86.78%	\$ 758,949	12.52%	\$ 14,820,468
2008	\$ 12,652,056	\$ 11,117,816	87.87%	\$ 1,440,578	11.39%	\$ 30,902,837
2009	\$ 13,759,961	\$ 12,758,921	92.72%	\$ 895,664	6.51%	\$ 32,181,286

Note 1: The remaining % of the annual assignment is allocated to the Labrador Interconnected customers and written off to income in Hydro.

Note 2: In P.U. 7 (2008) the Board approved the proposal put forward in the November 23, 2006 Settlement Agreement "Parties Agreement on Revenue Requirement" that the full balance in the Hydraulic Plan as of December 31, 2006 be allocated to each customer and applied to the Historical Plan balances for each customer class. Therefore, starting January 1, 2007 the opening balance in the Hydraulic Plan was zero. The 2006 annual assignment of \$5,726,000 for NP was also allocated to its Historical Plan in 2006. The Industrial Customers annual assignment was assigned to its Current Plan.

## Fuel Cost Variation

The fuel cost variation component of the RSP began accumulating a significant balance owing from customers starting in the year 2000 when the 12 month year to date balance of this component as of December 31, 2000 was approximately \$29 million. At December 31, 2001 the 12 month year to date balance accumulated to approximately \$57 million. During 2001, Hydro filed a General Rate Application with a 2002 Test Year Cost of Service. Since 1992 the cost of service price of No. 6 fuel used in the RSP was \$12.50/bbl however the price of fuel had increased significantly over the years, and in 2000 the actual price of No. 6 fuel was an average of \$30.92 per barrel, and in 2001 the price averaged \$29.69 per barrel. This increase of the cost of fuel compared to the 1992 cost of service price led to the significant balances owing from customers. In P.U. 7 (2002-2003), the cost of service price of fuel was set at \$26.80/bbl.

Rebasing the fuel price should have helped alleviate the significant balances that were accumulating on an annual basis in this component of the RSP, however as of December 31, 2002 the year to date 12 month balance in the fuel variation component was approximately \$46 million and December 31, 2003 the year to date balance was approximately \$36.5 million. The actual price of No. 6 fuel in 2002 went from a low of \$24.33/bbl to a high of \$36.44/bbl and in 2003 the actual price went from a low of \$30.77/bbl high to a high of \$44.44/bbl. It should also be noted that the price of fuel was not the only factor causing the increasing balances in the fuel variation component. During this time Hydro was also experiencing poor hydraulic results which resulted in lower hydraulic energy production due to low

1 water levels in its reservoirs. As a result of the low water levels there was a requirement to produce  
2 more thermal energy at its Holyrood Generating Station thereby consuming a higher number of barrels  
3 than that included in the cost of service.

4 The parties involved in the settlement discussions resulting in the proposed RSP amendments that were  
5 filed on November 13, 2003 during the 2003 General Rate Hearing proposed that a fuel rider  
6 mechanism should be put in place to address the differences in the cost of service price of fuel and the  
7 actual price of fuel between general rate hearings. This proposal was approved by the Board. This fuel  
8 rider was calculated annually for NP and the Industrial Customers, and the result was included in the  
9 annual rate adjustment for the Industrial Customers effective January 1<sup>st</sup> and for NP effective July 1<sup>st</sup> of  
10 each year.

11 The fuel rider component of the rate adjustment, which is based on forecast fuel prices for the  
12 upcoming year, is calculated each year for the Industrial Customers and NP commencing January 1,  
13 2005 and July 1, 2005, respectively. The purpose of the fuel rider is to help alleviate rising balances in  
14 the Plan due to changes in fuel prices between Test Years and to provide customers with more  
15 appropriate and timely price signals. The tables below summarize the amount of the fuel cost variation  
16 that has been collected each calendar year with the use of a fuel rider. The first table is a summary of  
17 the Industrial Customers' fuel rider performance since its implementation on January 1, 2005.

Industrial Customers Fuel Rider Performance				
	Fuel Cost Variation	Sales (kWh)	Fuel Rider \$/kWh	Amount Collected Via Fuel Rider
2005	\$ 3,207,375	1,236,901,333	0.00196	\$ 2,424,327
2006	3,356,991	749,100,463	0.00640	4,794,243
2007	(722,338)	771,198,558	-	-
2008	3,159,108	690,182,871	-	-
2009	(294,414)	384,777,985	-	-
18	\$ 8,706,722	3,832,161,210	-	\$ 7,218,570

19 As 2007 was a test year, the RSP adjustment rate that was set for the Industrial Customers effective  
20 January 1, 2007 did not include a fuel rider and, as noted previously in this report, this customer class  
21 has been charged an interim rate for the RSP adjustment since January 1, 2008 (based on January 1,  
22 2007 rates), therefore there has not been a fuel rider component to this rate since 2006. During 2005  
23 and 2006, while the fuel rider was in operation, the amount collected represented 110% of the fuel price  
24 variation. In 2007, the fuel price variation resulted in a credit balance of \$722,338. The primary  
25 reasons for this balance is that from January to June the actual average No. 6 fuel costs was less than  
26 the cost of service fuel cost and during this year the hydraulic production exceeded the cost of service  
27 production by 217,363,830 kWh (4,689,433,830 kWh vs. 4,472,070,000 kWh). In 2008, the hydraulic  
28 production continued to exceed the cost of service. However increasing oil prices experienced during  
29 2008 (the actual average No. 6 fuel cost was \$71.59/bbl whereas the cost of service cost was  
30 \$55.47/bbl) resulted in a fuel variation of \$27,745,268 with the industrial customer's portion of this

- 1 variation being \$3,159,108 (11.4%). In 2009, the hydraulic production exceeded the cost of service  
2 production and fuel prices declined from 2008. From January, 2008 to October, 2008 the actual average  
3 No.6 fuel cost per barrel was lower than the cost of service fuel cost, with an average actual cost for the  
4 year of \$52.51 in comparison to \$55.47 average cost of service No. 6 fuel cost per barrel. This activity  
5 resulted in a credit balance of \$294,414 for the Industrial Customers.
- 6 The table below is a summary of the NP's fuel rider performance since its implementation on July 1,  
7 2005.

Newfoundland Power Fuel Rider Performance				
	Fuel Price Variation	Sales (kWh)	Fuel Rider \$/kWh	Amount Collected Via Fuel Rider
July 2005 – Dec 2006	\$ 10,089,729	2,063,478,775	0.00428	\$ 8,831,689
Jan 2006 – June 2006	14,061,261	2,530,607,012	0.00428	\$ 10,830,998
July 2006 - Dec 2006	8,106,645	2,086,223,525	0.00938	\$ 19,568,777
Jan 2007 – June 2007	(7,564,857)	2,782,169,476	0.00938	\$ 26,096,750
July 2007 – Dec 2007	2,556,498	2,208,158,217	0.00054	\$ 1,192,405
Jan 2008 – June 2008	15,959,018	2,790,446,773	0.00054	\$ 1,506,841
July 2008 – Dec 2008	8,421,747	2,169,226,262	0.00609	\$ 13,210,588
Jan 2009 – June 2009	(5,769,325)	2,797,456,158	0.00609	\$ 17,036,508
July 2009 – Dec 2009	1,575,336	2,306,580,558	0.00691	\$ 15,938,472
	\$ 47,436,052	21,734,346,756	-	\$ 114,213,028

- 8
- 9 Since the implementation of the fuel rider, this mechanism collected 241% of the fuel cost variation  
10 allocated to NP over the past 4.5 years. Based on the information above, there were periods of time  
11 over the 4.5 years where the fuel rider component collected more than the fuel price variation. As  
12 indicated previously in this report, the fuel rider for NP is calculated based on forecast oil prices  
13 provided by Hydro as of the end of March each year and the rate becomes effective July 1<sup>st</sup> of each  
14 year. The two periods that resulted in a credit fuel price variation occurred in the six months prior to  
15 the fuel rider change. In both of these periods the actual cost of No.6 Fuel per barrel was lower than  
16 the cost of service however the fuel rider was based on a forecast that predicted an increase in fuel  
17 prices over the cost of service. The other reason for the lower fuel price variations in comparison to  
18 that collected is the excess of the actual hydraulic production over the cost of service production over  
19 the last 5 years and therefore less fuel was required to be burned at the Holyrood Generating Station.

- 20 It is worth noting that any over collection of the fuel price variation in a year by the fuel rider becomes  
21 a part of the balance that is collected or refunded in the subsequent year. However, the above table  
22 does not illustrate a correlation between these two factors.

### 23 **Load Variation**

- 24 Although the allocation of the load variation component changed several times over the years, the  
25 allocation of the revenue component of the load variation did not change since the inception of the

RSP. The revenue component is allocated based on which customer class caused the change in the load. The allocation of the fuel component of the load variation did experience several changes; these changes can be summarized as follows:

1985 to August 31, 2002: Fuel component was allocated based on the latest Cost of Service that had been approved.

September 1, 2002 to December 31, 2003: Fuel component was allocated based on energy allocation ratios.

January 1, 2004 to Present: Fuel component is allocated on the same basis as the revenue component which is 100% to the customer class that caused the change in load. This change was a result of the proposed amendments that were filed November 13, 2003 based on agreement from all the parties involved in the 2003 General Rate Hearing (Hydro, NP and the Island Industrial Customers).

As noted previously, Hydro did propose in its 2006 General Rate Application that the revenue and fuel component of the load variation be allocated to the customer class using energy allocation ratios, however it was agreed in the settlement negotiations that this would be addressed in the agreed review of the design of the RSP, which to date has not occurred.

The change in allocating the fuel component to the customer class where the change in load occurred was considered to improve the fairness of the allocation of the load variation because the costs would now be allocated between NP and the Industrial Customers based on causality.

The table below presents the allocation of the load variation between customer classes since 2004.

Allocation of Load Variation							
Revenue Component		Fuel Component	Total Load Variation	Revenue Component		Fuel Component	Total Load Variation
(\$)		(\$)	(\$)	(\$)		(\$)	(\$)
2004				2007			
NP	(4,683,406)	3,988,531	(694,875)	NP	(5,684,950)	5,938,791	253,841
IC	(1,869,566)	3,154,692	1,285,126	IC	4,525,209	(10,787,285)	(6,262,076)
			590,251				(6,008,235)
2005				2008			
NP	5,115,147	(4,813,948)	301,199	NP	(2,983,192)	2,956,940	(26,252)
IC	2,618,789	(4,350,803)	(1,732,014)	IC	7,503,346	(17,818,525)	(10,315,179)
			(1,430,815)				(10,341,431)
2006				2009			
NP	7,325,661	(7,225,568)	100,093	NP	(15,753,937)	15,600,947	(152,990)
IC	15,667,463	(27,209,222)	(11,541,759)	IC	18,730,029	(44,604,431)	(25,874,402)
			(11,441,666)				(26,027,392)

1 As noted above, since 2006 the Industrial Customer class has experienced credit balances (amounts  
2 owing to customers) which have been significant. The amount of variation from 2006 to 2007  
3 decreased because 2007 was a test year which allowed the load forecasts to be rebased based on the  
4 approved cost of service. The 2007 load forecasts for the Industrial Customers would have excluded  
5 any load requirements for Abitibi Consolidated – Stephenville Division as the closure of that operation  
6 occurred in the Fall of 2005. The cost of service load forecast for the Industrial Customers decreased  
7 by 440,500,000 kWh from 2006 to 2007. However in 2007 the actual sales were lower than the cost of  
8 service and they continue to be significantly lower in comparison to the cost of service. Based on the  
9 information in the above table, the net load variation owing to the Industrial Customers group over the  
10 past six years is \$54,440,304. The actual kWh sales for the Industrial Customers group compared to the  
11 cost of service from 2004 to 2009 are summarized below:

Industrial Customers			
	Cost of Service Sales (kWh)	Actual Sales (kWh)	Sales Variance (kWh)
2004	1,360,529,201	1,432,581,251	72,052,050
2005	1,334,800,000	1,236,901,333	(97,898,667)
2006	1,334,800,000	749,100,463	(585,699,537)
2007	894,300,000	771,198,558	(123,101,442)
2008	894,300,000	690,182,871	(204,117,129)
2009	894,300,000	384,777,985	(509,522,015)

12  
13 The significant variance in load in 2006 relates to the closure of the Abitibi mill in Stephenville and the  
14 significant variance in 2009 relates to the closure of the Abitibi mill in Grand Falls –Windsor as well as  
15 the shutdown of one paper machine at Corner Brook Pulp and Paper. These variances will likely  
16 continue until the cost of service is updated for the change in load forecast relating to these Industrial  
17 Customers, assuming there is no addition of significant Industrial Customer requirements.

18 The load variation for NP has not been experiencing the same degree of variation as that of the  
19 Industrial Customers. Based on the table included on page 34, the net load variation for NP over the  
20 past six years is a balance owing from NP of \$218,584. The table below summarizes the activity within  
21 this customer class for the past six years.

Newfoundland Power			
	Cost of Service Sales (kWh)	Actual Sales (kWh)	Sales Variance (kWh)
2004	4,608,500,000	4,708,712,512	100,212,512
2005	4,772,700,000	4,664,093,036	(108,606,964)
2006	4,772,700,000	4,616,864,312	(155,835,688)
2007	4,925,800,000	4,990,718,593	64,918,593
2008	4,925,800,000	4,959,752,852	33,952,852
2009	4,925,800,000	5,111,194,217	185,394,217

1

2 As indicated in the above table, for most of the years, the actual sales have exceeded the cost of service,  
3 and on an overall basis for the past six years the net sales variance is a net increase of 120,035,522 kWh.  
4 This overall increase is primarily attributable to the increase in growth that NP has been experiencing  
5 over the past three years, particularly in the urban areas of the Province, and the fact that the load  
6 forecasts have not been rebased since this growth has occurred.

7 Hydro included an analysis of the various customer load variation methodologies in its June 30, 2006  
8 Report on the operation of the RSP for the period January 1, 2004 to December 31, 2005. In this  
9 Report, Hydro concluded that, based on its analysis, changing the customer allocation method so that  
10 both the revenue and the fuel are allocated based on customer energy ratios would tend to result in an  
11 allocation more aligned with the cost of service treatment. As noted previously, Hydro has indicated in  
12 its June 30, 2009 Application that this proposal will be included in its next general rate application.

### 13 Refund/Recovery Method

14 The other component of the RSP that experienced changes over the years was the method of  
15 recovering or refunding the balance from (to) customers. The recovery method changed from a three  
16 year declining balance recovery to a recovery of the current plan over a two year straight line  
17 amortization to a one year recovery period. The plan also split into a "Current Plan" and "Historical  
18 Plan", with the Historical plan balance being collected over a 4 year straight line amortization period  
19 commencing January 1, 2004 for the Industrial Customers and July 1, 2004 for NP.

## 1     **Summary of the Operation of the RSP**

2     As previously noted, the RSP was established in 1986 with the objective of providing rate stability to  
3     customers and providing a mechanism to eliminate volatility in Hydro's revenue requirement due to  
4     events beyond its control, such as the price of No. 6 fuel, variations in hydraulic production and  
5     variations in load requirements.

6     Based on the information included in Appendix A, the RSP appeared to be operating reasonably well  
7     until fiscal 2001. During the period of 1990 to 2000, oil prices were increasing as compared to the cost  
8     of service price of fuel. However, during this period, Hydro was experiencing hydraulic production in  
9     excess of the cost of service which resulted in a credit to the plan which offset a portion of the fuel cost  
10     variation.

11     From 2000 to 2001, the plan balance increased from a balance owing from customers of \$34.7million  
12     to \$85.1 million, and by December 31, 2003, the plan had accumulated to a balance of \$155.7 million  
13     (owing from customers). During this period, fuel prices continued to increase and exceeded the cost of  
14     service price of fuel, even though it had been rebased for the 2002 test year. Compounding this, Hydro  
15     also experienced poor hydraulic production due to low water levels in its reservoirs.

16     Although the Order arising from the 2001 General Rate Application implemented changes to the Plan  
17     which included splitting the plan into two sections, creating different collection periods, and changing  
18     the recovery/refund period of the newly incurred balance to two years, the problems continued.

19     More changes occurred during the general rate hearing relating to the 2004 test year primarily due to  
20     the significant balance that had accumulated in the plan. During this hearing, the parties involved  
21     negotiated changes to the RSP and presented them to the Board for approval. As a result the structure  
22     of the split was changed and it became a Current Plan and a Historical Plan. This was done to allow  
23     the recovery of the significant balances that had accumulated in the RSP up to December 31, 2003 over  
24     a longer amortization period to reduce the impact of overall rates to NP and the Industrial Customers.  
25     Approval was also given to recover/refund the balance in the Current plan over one year.

26     The RSP activity relating to the Current Plan commenced January 1, 2004, and at the end of the year  
27     the plan accumulated a balance owing from customers of \$3.1 million. Since December 31, 2004, the  
28     Current Plan has been in a credit balance and as of December 31, 2009, it has accumulated to a balance  
29     owing to customers of approximately \$122.0 million (this includes the Hydraulic balance of \$32.2  
30     million). This is due to a number of reasons:

- 31         -     The hydraulic production has exceeded the cost of service production each year since 2004.  
32                 With the exception of one year, 2006, 25% of this annual balance is allocated to NP and the  
33                 Industrial Customers each year and the remaining portion continues to grow in the Hydraulic  
34                 plan.
- 35         -     Load requirements for the Industrial Customers have decreased dramatically in comparison to  
36                 the cost of service primarily due to the events that have occurred within the pulp and paper  
37                 industry in the Province.

1       -   The Industrial customers have been charged interim rates relating to the RSP since January 1,  
2       2008 (based on January 1, 2007 rates). These rates do not reflect the recent activity on the  
3       RSP.

4       -   During 2007 and 2009, the RSP adjustment rate for NP included a fuel rider. During those  
5       years, however, the fuel cost variance was in a credit balance, which meant for a portion of  
6       2007 and 2009 the actual price of fuel was less than the cost of service. Therefore, NP was  
7       paying a fuel rider to alleviate the increasing cost of fuel in excess of the cost of service price  
8       but in reality the price had decreased below the cost of service price.

9       Although the 2006 General Rate Application resulted in a negotiated settlement that included a plan to  
10      review the RSP and there was Board approval of this settlement, this review has not been completed.

11      On June 30, 2009, Hydro filed an application concerning the RSP components of the rates to be  
12      charged to Industrial Customers. In this application, the Company has indicated that based on the  
13      analysis that it has completed of the fuel and load variations caused by the recent events, the existing  
14      RSP rules used to calculate rates for the Industrial Customers would result in significant and  
15      unreasonable rate volatility.

## Appendix A – Annual RSP activity and balances

Board of Commissioners of Public Utilities  
Historical Review of the Rate Stabilization Plan of  
Newfoundland and Labrador Hydro

Appendix A: RSP History - Activity and Balances

(In thousands of dollars)

	Annual Activity							(Recovery)/ Refund	Plan Balances			
	Hydraulic	Fuel Cost	Load	RRA	Financing	Other	Total		NP	IC	Hydraulic	Total
1986	12,045	(11,814)	(2,506)	-	267	-	(2,008)	-	(1,889)	(119)	-	(2,008)
1987	54,280	(35,044)	(1,582)	-	709	-	18,363	(68)	8,063	8,222	-	16,285
1988	(726)	(34,175)	62	-	170	-	(34,669)	(245)	(18,498)	(131)	-	(18,629)
1989	15,341	(33,097)	1,378	-	(3,508)	-	(19,886)	5,704	(31,004)	(1,807)	-	(32,811)
1990	13,619	3,175	(1,781)	-	(1,666)	8,941 <sup>1</sup>	22,288	10,010	(4,445)	3,932	-	(513)
1991	(2,757)	(4,853)	(3,054)	-	(326)	-	(10,990)	3,803	(10,530)	2,830	-	(7,700)
1992	(198)	3,469	1,482	-	(111)	6,488 <sup>2</sup>	11,130	664	593	3,505	-	4,098
1993	(4,668)	7,397	1,834	(26)	746	-	5,283	47	3,825	5,636	-	9,461
1994	(17,077)	3,509	2,315	(120)	32	-	(11,341)	(2,120)	(5,610)	1,575	-	(4,035)
1995	(3,733)	19,015	1,820	(134)	537	-	17,505	(694)	6,900	6,016	-	12,916
1996	(7,419)	21,805	2,441	(140)	2,005	-	18,692	(1,506)	21,002	9,160	-	30,162
1997	(8,545)	24,507	(560)	(478)	3,346	-	18,270	(7,103)	27,644	13,734	-	41,378
1998	(967)	12,068	3,435	122	4,150	-	18,808	(11,227)	33,009	15,776	-	48,785
1999	(15,859)	9,128	5,050	(394)	3,223	-	1,148	(15,427)	21,436	12,892	-	34,328
2000	(16,614)	29,359	521	(880)	2,774	(862) <sup>3</sup>	14,298	(13,734)	22,684	12,056	-	34,740
2001	5,243	56,879	(3,506)	125	4,438	-	63,179	(11,152)	60,300	24,768	-	85,068
2002	6,967	46,113	(5,313)	(326)	7,189	184 <sup>4</sup>	54,814	(13,921)	92,060	32,711	-	124,771
2003	4,130	36,534	(2,846)	(227)	10,333	-	47,924	(16,669)	114,790	40,914	-	155,704
2004 Current	(7,362)	12,665	590	(949)	79	(12) <sup>4</sup>	5,015	(1,951)	4,909	3,713	(5,521)	3,101
Historical					10,459	5 <sup>4</sup>	10,464	(32,236)	101,660	32,273		133,933
Total	(7,362)	12,665	590	(949)	10,538	(7)	15,479	(34,187)	106,569	35,986	(5,521)	137,034
2005 Current	(8,646)	16,289	(1,431)	(2,329)	(309)		3,574	(18,660)	120	(1,296)	(10,625)	(11,801)
Historical					8,768		8,768	(37,835)	79,781	25,086		104,867
Total	(8,646)	16,289	(1,431)	(2,329)	8,459	-	12,342	(56,495)	79,901	23,790	(10,625)	93,066
2006 Current	(10,678)	25,715	(11,442)	(4,337)	(2,067)		(2,809)	(35,396)	(19,268)	(14,406)	(15,978)	(49,652)
Historical					6,412	(10,000) <sup>5</sup>	(3,588)	(38,285)	53,893	9,101		62,994
Total	(10,678)	25,715	(11,442)	(4,337)	4,345	(10,000)	(6,397)	(73,681)	34,625	(5,305)	(15,978)	13,342
2007 Current	(19,761)	(5,772)	(6,008)	1,862	(3,097)	(1,383) <sup>6</sup>	(34,159)	23,918	(14,659)	(8,829)	(14,820)	(38,308)
Historical					1,972	(21,585) <sup>7</sup>	(19,613)	(32,839)	12,053	-		12,053
Total	(19,761)	(5,772)	(6,008)	1,862	(1,125)	(22,968)	(53,772)	(8,921)	(2,606)	(8,829)	(14,820)	(26,255)
2008 Current	(26,383)	27,745	(10,341)	(245)	(2,937)	(2,238) <sup>8</sup>	(14,399)	(440)	(10,330)	(11,994)	(30,903)	(53,227)
Historical					191		191	(14,482)	-	-	-	-
Total	(26,383)	27,745	(10,341)	(245)	(2,746)	(2,238)	(14,208)	(14,922)	(10,330)	(11,994)	(30,903)	(53,227)
2009 Current	(12,006)	(4,523)	(26,027)	(1,152)	(7,026)		(50,734)	(18,301)	(52,940)	(36,875)	(32,181)	(121,996)
Historical							-	-	-	-	-	-
Total	(12,006)	(4,523)	(26,027)	(1,152)	(7,026)	-	(50,734)	(18,301)	(52,940)	(36,875)	(32,181)	(121,996)

The information from this table for the years 1986 to 2005 was obtained from the June 30, 2006 report "Review of the Operation of the Rate Stabilization Plan For the Period January 1, 2004 to December 31, 2005". Appendix A: RSP History - Activity and Balances. For the years 2006 - 2009 the information was obtained from the December 31st RSP reports prepared by Hydro.

Note 1: This is the 1989 PDD loss be applied against the RSP.

Note 2: This is the 1991 retail cost deferral.

Note 3: This is the correction of Industrial Rural deficit allocation.

Note 4: These are billing adjustments.

Note 5: This is the \$10 million contribution from the Government of Newfoundland and Labrador towards the Industrial Customers Historical balance.

Note 6: This is the balance in the Industrial Customers Historical Account that was transferred to the Current Plan at the expiration of the Historical Plan on December 31, 2007.

Note 7: This represents the Hydraulic Balance as of December 31, 2006 that was allocated to the Historical Plans (NP and the Industrial Customers). This was approved by the Board in P.U. 8 (2007) that was issued April 12, 2007. Hydro revised the opening 2007 balances to account for this allocation.

Note 8: This is the balance in the NP Historical Account that was transferred to the Current Plan at the expiration of the Historical Plan on June 30, 2008.

## Appendix B – Time line of RSP activity

## **Purpose**

Appendix B provides a brief synopsis of the major changes to the RSP from implementation to December 31, 2009. Details on these changes are contained in the report.

## **January 1, 1986 - The Implementation of the Rate Stabilization Plan**

- Implementation of the RSP with the following components:
  - Hydraulic Production Component: Captures impacts of hydro production due to variances between expected average and actual water conditions.
  - Fuel Cost Variation Component: Captures impacts of variances between forecast and actual fuel costs.
  - Load variation: Captures impacts of variance between forecast load and actual load. Consists of 2 components:
    - Revenue component – variance allocated to customer group causing the variance.
    - Fuel component – allocated based on the approved cost of service.
- Cost of financing the RSP based on Hydro's embedded cost of debt, added to RSP on a monthly basis.
- \$50 million cap set on the plan before triggering a review.
- Refund/Recovery of RSP balance based on a three year declining balance method.
- Automatic rate adjustments to occur at June 30 of each year.
- Establishment of separate plans for retail customers and Industrial Customers.
- Reporting mechanisms established.

## **March 6, 1989 Hydro Referral to the Board**

- Rebasing of fuel cost and minor adjustment requiring use of blended price of oil.

## **February 6, 1990 Hydro Referral to the Board**

- \$8,941,000 loss for PDD from April 1, 1989 to December 31, 1989 charged to the RSP.

## **November 12, 1991 Hydro Referral to the Board**

- Rebasing of fuel cost.
- The 1991 retail cost deferral was written off against the RSP allocated to NP.

## **June 26, 1992 Referral to the Board**

- Rural Rate alteration added to RSP.
- Rules and Regulations updated to include a mathematical approach for automatic adjustments.

**2001 General Rate Review – Board Order P.U. 7 (2002-2003)**

- Hydraulic Production Variation
  - Addition of mini-hydro plants.
  - Holyrood conversion factor set at 615kWh/bbl.
  - Forecast hydraulic production for the 2002 test year set at 4,425 GWH.
- Load Variation
  - Interruptible energy removed from RSP.
- Customer Splits:
  - Based on 12 month-to-date invoiced /bulk transmission energy as well as Test Year Rural Deficit Allocation.
- Rate Calculation
  - Energy rates established on 12 month-to-date invoiced /bulk transmission energy.
- Rebasing of fuel cost.
- Finance charge based on WACC.
- Elimination of \$50 million retail cap.
- Additional recovery of the existing RSP balance delayed until 2003.
- RSP split between old plan (existing balances in the RSP as of August 31, 2002 to be recovered over five years) and the “New Plan” (RSP activity commencing September 1, 2002 to be recovered over two years).

**2003 General Rate Review – Board Order P.U. 40 (2003)**

- Hydraulic Variation Component: Recovery/refund limited to 25% of the annual balance plus 100% of financing charges.
- Fuel Cost Variation Component: Introduction of the fuel rider based on forecast oil prices.
- Load Variation Component: Allocation of the fuel costs component of the load variation to be based on the customer class that caused the load variation.
- Rural Rate Alteration: Addition of the Rural Labrador Interconnected Automatic Rate Adjustments (re: CFB Goose Bay).
- Recovery of Plan Balances – Current and Historical Plans
  - The “Current” Plan
    - RSP activity commencing January 1, 2004.
    - Recovery of the balance over a one year amortization period.
  - The “Historical” Plan
    - RSP activity prior to January 1, 2004
    - Recovered over a four year period commencing January 1, 2004 for the Industrial customers and July 1, 2004 for NP.

### **2003 General Rate Review – Board Order P.U. 14 (2004)**

- Rebasement of fuel, Holyrood conversion factor, hydraulic production and load forecast.

### **2006 General Rate Review and Other 2006 RSP Activity**

- Agreement in principal on use of fuel rider forecast during test year.
- Agreement for review of RSP with respect to design objectives.
- Agreement on the disposition of the Hydraulic Production Variation balance as of December 31, 2006.
- Labrador Interconnected Rates - allocation of a portion of the CFB Goose Bay Revenue Credit during the extended phase-in of uniform Labrador Interconnected rates to maintain existing rates. The revenue shortfall to Hydro from maintaining existing rates to be recovered through the RSP.
- Rebasement of fuel, Holyrood conversion factor, hydraulic production and load forecast.
- Approval to recover the cost of burning 1% sulphur content No. 6 fuel at Holyrood through the RSP.
- Approved, as directed by a Government Directive, of the following adjustments to the Industrial Customers RSP as a result of the closure of Abitibi Consolidated Inc – Stephenville Division:
  - Revisions of calculation of the fuel rider
  - Modification of the calculation of the Historical Plan RSP recovery rate to reflect a \$10 million contribution from the Government; and
  - Adjustment of the Industrial Customer kWh sales used in 2004 Test Year.

### **RSP Activity During 2007**

- Adjustment of rates for Aur Resources to exclude Historical Plan impacts.
- Rural Rate Alteration adjusted to include a monthly amount of \$92,560.
- Industrial Customer's recovery of the Historical Plan balance expired with a \$1,382,494 transferred to the Current Plan.

### **RSP Activity During 2008**

- Rural Rate Alteration adjusted to include a monthly amount of \$32,433.
- Interim rates put in place for Industrial Customers based on 2007 rates.
- NP's recovery of the Historical Plan balance expired with a credit balance of \$2,238,025 transferred to the Current Plan.

### **RSP Activity During 2009**

- Rural Rate Alteration adjusted to \$5,766/month.
- Industrial Customer rates continued to be based on interim rates.
- On June 30, 2009, Hydro filed an application with the Board concerning the RSP components of the rates to be charged to Industrial Customers.

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	Load Variation Utility	Financing Charges	Total to Date Utility A+B	Load Variation Industrial Customers	Financing Charges	Total to Date Industrial D+E	Cumulative Net Balance C+F
2007	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
January	14,973		14,973	(671,353)		(671,353)	(656,380)
February	(22,785)	91	(7,721)	(319,478)	(4,073)	(994,904)	(1,002,625)
March	(149)	(47)	(7,917)	(50,330)	(6,037)	(1,051,271)	(1,059,188)
April	(411)	(48)	(8,376)	(364,389)	(6,379)	(1,422,039)	(1,430,415)
May	(418)	(51)	(8,845)	288,748	(8,628)	(1,141,919)	(1,150,764)
June	(18,904)	(54)	(27,803)	(59,984)	(6,929)	(1,208,832)	(1,236,635)
July	13,625	(169)	(14,347)	(314,138)	(7,335)	(1,530,305)	(1,544,652)
August	35,540	(87)	21,106	(244,325)	(9,285)	(1,783,915)	(1,762,809)
September	16,651	128	37,885	(804,874)	(10,824)	(2,599,613)	(2,561,728)
October	(15,322)	230	22,793	(1,262,396)	(15,773)	(3,877,782)	(3,854,989)
November	24,208	138	47,139	(1,384,091)	(23,528)	(5,285,401)	(5,238,262)
December	206,832	286	254,257	(1,075,467)	(32,069)	(6,392,937)	(6,138,680)
	253,840	417	254,257	(6,262,077)	(130,860)	(6,392,937)	(6,138,680)

	Annual	Monthly
<b>Financing Rate</b>	<b>7.529%</b>	<b>7.281%</b>

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2008	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			254,257			(6,392,937)	(6,138,680)
January	(33,026)	1,543	222,774	(1,339,888)	(38,789)	(7,771,614)	(7,548,840)
February	(18,915)	1,352	205,211	(927,720)	(47,154)	(8,746,488)	(8,541,277)
March	(661)	1,245	205,795	(1,095,157)	(53,069)	(9,894,714)	(9,688,919)
April	(120)	1,249	206,924	(832,010)	(60,036)	(10,786,760)	(10,579,836)
May	(220)	1,256	207,960	(629,138)	(65,449)	(11,481,347)	(11,273,387)
June	(623)	1,262	208,599	(885,012)	(69,663)	(12,436,022)	(12,227,423)
July	25,119	1,266	234,984	(986,462)	(75,456)	(13,497,940)	(13,262,956)
August	8,649	1,426	245,059	(1,077,773)	(81,899)	(14,657,612)	(14,412,553)
September	16,959	1,487	263,505	(918,884)	(88,935)	(15,665,431)	(15,401,926)
October	(18,644)	1,599	246,460	(629,410)	(95,050)	(16,389,891)	(16,143,431)
November	36,014	1,495	283,969	(259,428)	(99,446)	(16,748,765)	(16,464,796)
December	(40,785)	1,723	244,907	(734,300)	(101,623)	(17,584,688)	(17,339,781)
	(26,253)	16,903	244,907	(10,315,182)	(876,569)	(17,584,688)	(17,339,781)

	Annual	Monthly
<b>Financing Rate</b>	<b>7.529%</b>	<b>7.281%</b>

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2009	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			244,907			(17,584,688)	(17,339,781)
January	(126,762)	1,486	119,631	(1,361,201)	(106,695)	(19,052,584)	(18,932,953)
February	(25,647)	726	94,710	(1,401,471)	(115,602)	(20,569,657)	(20,474,947)
March	(519)	575	94,766	(1,809,433)	(124,806)	(22,503,896)	(22,409,130)
April	(51)	575	95,290	(2,936,566)	(136,542)	(25,577,004)	(25,481,714)
May	(19,600)	578	76,268	(2,543,731)	(155,188)	(28,275,923)	(28,199,655)
June	(41,935)	463	34,796	(2,176,693)	(171,564)	(30,624,180)	(30,589,384)
July	(1,524)	211	33,483	(2,304,911)	(185,812)	(33,114,903)	(33,081,420)
August	11,032	203	44,718	(2,214,630)	(200,925)	(35,530,458)	(35,485,740)
September	1,008	271	45,997	(2,098,848)	(215,581)	(37,844,887)	(37,798,890)
October	(79,214)	279	(32,938)	(2,207,016)	(229,624)	(40,281,527)	(40,314,465)
November	(15,845)	(200)	(48,983)	(2,353,614)	(244,408)	(42,879,549)	(42,928,532)
December	146,068	(297)	96,788	(2,466,287)	(260,172)	(45,606,008)	(45,509,220)
	(152,989)	4,870	96,788	(25,874,401)	(2,146,919)	(45,606,008)	(45,509,220)
<b>Financing Rate</b>	<b>Annual 7.529%</b>	<b>Monthly 7.281%</b>					

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2010	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			96,788			(45,606,008)	(45,509,220)
January	(59,386)	587	37,989	(2,735,667)	(276,714)	(48,618,389)	(48,580,400)
February	(16,225)	230	21,994	(2,609,876)	(294,992)	(51,523,257)	(51,501,263)
March	(186)	133	21,941	(2,357,700)	(312,617)	(54,193,574)	(54,171,633)
April	35	133	22,109	(1,852,218)	(328,820)	(56,374,612)	(56,352,503)
May	(789)	134	21,454	(1,615,048)	(342,053)	(58,331,713)	(58,310,259)
June	(13,712)	130	7,872	(2,105,010)	(353,928)	(60,790,651)	(60,782,779)
July	13,851	48	21,771	(2,480,246)	(368,847)	(63,639,744)	(63,617,973)
August	(1,853)	132	20,050	(2,320,260)	(386,134)	(66,346,138)	(66,326,088)
September	3,503	122	23,675	(2,148,365)	(402,555)	(68,897,058)	(68,873,383)
October	(8,898)	144	14,921	(2,045,681)	(418,033)	(71,360,772)	(71,345,851)
November	(11,229)	91	3,783	(2,149,918)	(432,981)	(73,943,671)	(73,939,888)
December	(178,457)	23	(174,651)	(2,074,545)	(448,653)	(76,466,869)	(76,641,520)
	(273,346)	1,907	(174,651)	(26,494,534)	(4,366,327)	(76,466,869)	(76,641,520)
<b>Financing Rate</b>	<b>Annual 7.529%</b>	<b>Monthly 7.281%</b>					

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2011	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			(174,651)			(76,466,869)	(76,641,520)
Adj. Opening Bal. <sup>(1)</sup>				10,000,000		(66,466,869)	(66,641,520)
January	(1,226)	(1,060)	(176,937)	(2,223,796)	(463,963)	(69,154,628)	(69,331,565)
February	(73,663)	(1,074)	(251,674)	(2,305,324)	(419,596)	(71,879,548)	(72,131,222)
March	(1,002)	(1,527)	(254,203)	(2,232,420)	(436,129)	(74,548,097)	(74,802,300)
April	(746)	(1,542)	(256,491)	(2,229,608)	(452,321)	(77,230,026)	(77,486,517)
May	(598)	(1,556)	(258,645)	(2,374,929)	(468,593)	(80,073,548)	(80,332,193)
June	(59,940)	(1,569)	(320,154)	(3,158,402)	(485,846)	(83,717,796)	(84,037,950)
July	3,923	(1,943)	(318,174)	(3,379,500)	(507,958)	(87,605,254)	(87,923,428)
August	(24,464)	(1,931)	(344,569)	(2,761,381)	(531,545)	(90,898,180)	(91,242,749)
September	(16,299)	(2,091)	(362,959)	(2,208,116)	(551,525)	(93,657,821)	(94,020,780)
October	(51,085)	(2,202)	(416,246)	(2,199,626)	(568,269)	(96,425,716)	(96,841,962)
November	(68,408)	(2,526)	(487,180)	(2,150,505)	(585,063)	(99,161,284)	(99,648,464)
December	307,945	(2,956)	(182,191)	(2,287,721)	(601,661)	(102,050,666)	(102,232,857)
	14,437	(21,977)	(182,191)	(29,511,328)	(6,072,469)	(102,050,666)	(102,232,857)
Financing Rate	Annual 7.529%	Monthly 7.281%					

(1) Payment to the Provincial Government.

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2012	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			(182,191)			(102,050,666)	(102,232,857)
January	(145,587)	(1,105)	(328,883)	(2,231,865)	(619,192)	(104,901,723)	(105,230,606)
February	(102,601)	(1,995)	(433,479)	(1,915,631)	(636,491)	(107,453,845)	(107,887,324)
March	(1,597)	(2,630)	(437,706)	(1,960,973)	(651,976)	(110,066,794)	(110,504,500)
April	(225)	(2,656)	(440,587)	(1,679,464)	(667,830)	(112,414,088)	(112,854,675)
May	(268)	(2,673)	(443,528)	(1,686,265)	(682,072)	(114,782,425)	(115,225,953)
June	(111,984)	(2,691)	(558,203)	(1,995,954)	(696,442)	(117,474,821)	(118,033,024)
July	(20,953)	(3,387)	(582,543)	(2,272,037)	(712,778)	(120,459,636)	(121,042,179)
August	(35,192)	(3,535)	(621,270)	(1,982,204)	(730,889)	(123,172,729)	(123,793,999)
September	9,874	(3,770)	(615,166)	(2,177,242)	(747,351)	(126,097,322)	(126,712,488)
October	(30,888)	(3,733)	(649,787)	(2,161,352)	(765,096)	(129,023,770)	(129,673,557)
November	(25,911)	(3,943)	(679,641)	(2,232,153)	(782,852)	(132,038,775)	(132,718,416)
December	367,768	(4,124)	(315,997)	(2,252,950)	(801,145)	(135,092,870)	(135,408,867)
	(97,564)	(36,242)	(315,997)	(24,548,090)	(8,494,114)	(135,092,870)	(135,408,867)
Financing Rate	Annual 7.529%	Monthly 7.281%					

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2013	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Opening Balance			(315,997)			(135,092,870)	(135,408,867)
January	(273,521)	(1,917)	(591,435)	(2,298,140)	(819,676)	(138,210,686)	(138,802,121)
February	(107,515)	(3,589)	(702,539)	(2,256,852)	(838,593)	(141,306,131)	(142,008,670)
March	(4,021)	(4,263)	(710,823)	(2,340,268)	(857,375)	(144,503,774)	(145,214,597)
April	(5,865)	(4,313)	(721,001)	(2,225,295)	(876,777)	(147,605,846)	(148,326,847)
May	(792)	(4,375)	(726,168)	(1,697,095)	(895,598)	(150,198,539)	(150,924,707)
June	(70,263)	(4,406)	(800,837)	(1,919,658)	(911,330)	(153,029,527)	(153,830,364)
July	(29,133)	(4,859)	(834,829)	(2,063,881)	(928,507)	(156,021,915)	(156,856,744)
August	(43,934)	(5,065)	(883,828)	(1,979,336)	(946,663)	(158,947,914)	(159,831,742)
September							-
October							-
November							-
December							-
	(535,044)	(32,787)	(883,828)	(16,780,525)	(7,074,519)	(158,947,914)	-
Financing Rate	Annual 7.529%	Monthly 7.281%					

Estimated Phase-In Rates for the 2013 to 2015 Industrial Customer Rates Phase In effective September 1, 2013  
Teck Resources

Appendix E  
Page 1 of 1

Line No	A	B	C	D	E
	2013 Test Year	Existing Revenue including RSP at August 31 2013		Proposed Test Year Revenue	Reference
	Units	Rate	Revenue A x B	Rate	Revenue A x D
<b>Step 1: Determine Annual Percentage Increase</b>					
1 Demand	114,000 kW	6.68 \$/kW/mo	\$761,520	9.13 \$/kW/mo	\$1,040,820
2 Energy	71,800 MWh	36.76 mills/kWh	\$2,639,368	47.82 mills/kWh	\$3,433,476
3 Specifically Assigned Charges			\$186,169		\$215,009
4 Subtotal			\$3,587,057		\$4,689,305 Line 1 to 3
5 RSP	71,800 MWh	(20.00) mills/kWh	(\$1,436,000)	mills/kWh	\$0
6 Total			\$2,151,057		\$4,689,305 Line 4 to 5
7 Difference between Total Proposed Test Year Revenue and Existing					(\$2,538,248) Line 6, Col C less Line 6, Col E
8 mills/kWh			29.96		65.31 Line 6/Line 2, Col A
9 Annual Required Increase					<b>29.7%</b> See Note 1
	Existing Rates	F September 1 2013	G September 1 2014	H September 1 2015	
<b>Step 2: Determine Annual Revenue</b>					
10 Amount required to achieve 29.7% increase year over year	\$	638,004	\$ 827,235	\$ 1,073,009	
11 Revised Total to be paid by Teck Resources	\$ 2,151,057	\$ 2,789,061	\$ 3,616,296	\$ 4,689,305	Line 11 x (1 + Line 9, Col E)
<b>Step 3: Determine Teck Resources rate effective September 1, 2013</b>					
12 Revised RSP allocation required	\$	(797,996)			Line 5, Col C plus Line 10, Col F
13 Teck Resources RSP Surplus Adjustment rate effective September 1, 2013		(11.11) mills/kWh			Line 12/Line 5, Col A
	Existing Rates	I September 1 2013	J September 1 2014	K September 1 2015	
		Proposed Rates			
		Col I * (1 + Col E),			
		Line 9			
		2013 Test Year			
<b>Step 4: Calculate 3-Year (Interim) Phase-In Rate Components</b>					
14 Demand (\$/kW/month)	6.68	6.68	8.66	9.13	
15 Energy (mills/kWh)	36.76	36.76		47.82	
16 Energy Rate Adjustment (mills/kWh)		(11.11)			Line 13, Col F
17 Net Energy Rate	36.76	25.65	33.25	47.82	
18 RSP (mills/kWh)	(20.00)				
19 Specifically Assigned Charges	\$186,169	\$186,169	\$241,387	\$215,009	
	Existing Rates	L September 1 2013	M September 1 2014	N September 1 2015	
		Revenue at Proposed Rates			
<b>Step 5: Revenue Proof</b>					
20 Demand	\$761,520	\$761,520	\$987,387	\$1,040,820	Line 14 x Line 1, Col A
21 Energy	\$2,639,368	\$2,639,368	\$2,387,522	\$3,433,476	Line 15 x Line 2, Col A
22 Energy Adjustment	\$ (797,996)				Line 12, Col F
23 Specifically Assigned Charges	\$186,169	\$186,169	\$241,387	\$215,009	Line 19
24 Subtotal	\$3,587,057	\$2,789,061	\$3,616,296	\$4,689,305	Line 20 to 23
25 RSP	(\$1,436,000)				Line 18 x Line 5, Col A
26 Total	\$2,151,057	\$2,789,061	\$3,616,296	\$4,689,305	Line 24 to 25
27 % Change year over year		29.7%	29.7%	29.7%	

Note (1): ((29.96 mills per kWh/65.31 mills per kWh))^(1/(2012-2015))-1

Estimated Phase-In Rates for the 2013 to 2015 Industrial Customer Rates Phase In effective September 1, 2013  
Industrial Customers excluding Teck Resources

Appendix F  
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Line No	A		B		C	D	E	
Existing Revenue								
2013 Test Year		including RSP at August 31 2013			Proposed Test Year Revenue		Reference	
Units		Rate		Revenue	Rate	Revenue		
				A x B		A x D		
Step 1: Determine Annual Percentage Increase								
1	Demand	721,400	kW	6.68 \$/kW/mo	\$4,818,952	9.13 \$/kW/mo	\$6,586,382	
2	Energy	336,600	MWh	36.76 mills/kWh	\$12,373,416	47.82 mills/kWh	\$16,096,212	
3	Specifically Assigned Charges				\$498,143		\$1,580,426	
4	Subtotal				\$17,690,511		\$24,263,020	Line 1 to 3
5	RSP (Vale and Praxair)	38,600	MWh	(20.00) mills/kWh	(\$772,000)	mills/kWh	\$0	
6	RSP (Other Industrial Customers excluding Teck, Vale, and Praxair)	298,000	MWh	(7.85) mills/kWh	(\$2,339,300)	mills/kWh	\$0	
7	Total	336,600	MWh		\$14,579,211		\$24,263,020	Line 4 to 6
8	Difference between Total Proposed Test Year Revenue and Existing						(\$9,683,809)	Line 7, Col C less Line 7, Col E
9	mills/kWh				43.31		72.08	Line 7/Line 2, Col A
10	Annual Required Increase						18.5%	See Note 1

Phase-In Industrial Customer Rates				
	F September 1 2013	G September 1 2014	H September 1 2015	
Existing Rates				
	Col I * (1 + Col E), Line 10			
	2013 Test Year			
11	Demand (\$/kW/month)	6.68	7.92	9.13
12	Energy (mills/kWh)	36.76	43.56	47.82
13	RSP (mills/kWh)	(7.85)		
14	Specifically Assigned Charges	\$498,143	\$590,299	\$1,580,426

Revenue at Proposed Rates				
	I September 1 2013	J September 1 2014	K September 1 2015	
Existing Rates				
15	Demand	\$4,818,952	\$5,710,458	\$6,586,382
16	Energy	\$12,373,416	\$14,662,498	\$16,096,212
17	Specifically Assigned Charges	\$498,143	\$590,299	\$1,580,426
18	Subtotal	\$17,690,511	\$20,963,256	\$24,263,020
19	RSP	(\$3,111,300)		
20	Total	\$14,579,211	\$20,963,256	\$24,263,020
21	% Change year over year	21.3%	18.5%	15.7%

15	Demand	\$4,818,952	\$4,818,952	\$5,710,458	\$6,586,382	Line 11 x Line 1, Col A
16	Energy	\$12,373,416	\$12,373,416	\$14,662,498	\$16,096,212	Line 12 x Line 2, Col A
17	Specifically Assigned Charges	\$498,143	\$498,143	\$590,299	\$1,580,426	Line 14
18	Subtotal	\$17,690,511	\$17,690,511	\$20,963,256	\$24,263,020	Line 15 to 17
19	RSP	(\$3,111,300)				Line 13 x Line 5, Col A
20	Total	\$14,579,211	\$17,690,511	\$20,963,256	\$24,263,020	Line 18 to 19

Line 11 x Line 1, Col A  
Line 12 x Line 2, Col A  
Line 14  
Line 15 to 17  
Line 13 x Line 5, Col A  
Line 18 to 19

Note (1):  $((43.31 \text{ mills per kWh} / 72.08 \text{ mills per kWh})^{(1/(2012-2015))}-1$