# BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

**ORDER NUMBER: P.U. 14 (2004)** 

APPENDIX J

# P.U. 40 (2003)

**IN THE MATTER OF** the *Electrical Power Control Act*, 1994 (the "*EPCA*") and the *Public Utilities Act* R.S.N. 1990, Chapter P-47 (the "*Act*");

**AND IN THE MATTER OF** an application by Newfoundland and Labrador Hydro ("Hydro") for approval of, *inter alia*, rates to be charged its customers (the "Application");

**AND IN THE MATTER OF** proposed amendments to the Rate Stabilization Plan.

### **Before:**

Robert Noseworthy Chair and Chief Executive Officer

Darlene Whalen, P. Eng. Vice-Chair

G. Fred Saunders Commissioner **WHEREAS** Hydro filed the Application with the Board of Commissioners of Public Utilities (the "Board") on May 21, 2003, which Application was amended on August 12, 2003, for an Order of the Board approving, among other things, the proposed rates for the various customers of Hydro to be effective January 1, 2004; and

WHEREAS the registered intervenors for the proceeding are the Consumer Advocate, Mr. Dennis Browne, Q.C.; Newfoundland Power Inc.; Hydro's Industrial Customers, namely Corner Brook Pulp and Paper Limited, Abitibi Consolidated Company of Canada-Stephenville and Grand Falls Divisions, North Atlantic Refining Limited and Voisey's Bay Nickel Company Limited; and the Towns of Labrador City and Wabush; and

**WHEREAS** as part of the proceeding the "Participating Parties", which for the purposes of this Order include Hydro and the registered intervenors, excepting the Towns of Labrador City and Wabush, held settlement discussions with respect to amendments to the Rate Stabilization Plan (the "RSP"); and

WHEREAS the RSP is established for two of Hydro's customers - Newfoundland Power and the Island Industrial customers - to smooth rate impacts for certain variations between actual results and Test Year Cost of Service estimates for (i) hydraulic production; (ii) No. 6 fuel cost used at Hydro's Holyrood generating station; (iii) customer load (Newfoundland Power and Island Industrial); and (iv) rural rates; and

WHEREAS Hydro advised during the hearing that the Participating Parties proposed that the RSP be amended as set out in Sections A, B, C and D of Schedule A to this Order (filed as Consent #2 in the proceeding) and further that, with the exception of the Industrial Customers who took no position, amendments as set out in Section E of Schedule A to this Order (filed as Consent #3 in the proceeding) should be made; and

**WHEREAS** Hydro has requested that the Board issue an Order on the proposed amendments prior to January 1, 2004 since the proposed changes to the RSP would, if accepted by the Board, result in changes to the January 1, 2004 annual RSP adjustment for the Industrial Customers; and

**WHEREAS** the Board has received no objection to the proposed amendments to the RSP set out in Schedule "A" to this Order or to the proposed timing of this Order; and

**WHEREAS** the Board is satisfied that the proposed amendments will not affect the rates charged to the Labrador Interconnected customers of Hydro or otherwise impact the issues to be determined in this Application in respect of the Labrador Interconnected System; and

**WHEREAS** the Board has considered the proposed amendments to the RSP and the relevant evidence and concurs with the amendments as presented; and

**WHEREAS** the Board will address any other specific issues surrounding the RSP, such as the monitoring issues raised during the hearing, as part of the ongoing regulatory supervision of the Board or in the final order flowing from the Application.

# **IT IS THEREFORE ORDERED THAT:**

Unless otherwise ordered by the Board, the Rate Stabilization Plan is hereby amended as set out in Schedule "A" effective January 1, 2004.

**DATED** at St. John's, Newfoundland and Labrador, this 16<sup>th</sup> day of December 2003.

Robert Noseworthy, Chair & Chief Executive Officer.

Darlene Whalen, P.Eng., Vice-Chair.

G. Fred Saunders, Commissioner.

G. Cheryl Blundon, Board Secretary. SCHEDULE "A"

ORDER NO. P.U. 40 (2003)

### **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.

#### 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



### **RATE STABILIZATION PLAN (continued)**

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:

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

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

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



### **RATE STABILIZATION PLAN (continued)**

 $(J-I) \times L$ 

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 five-year phase-in of the application of the credit from secondary energy sales to CFB Goose Bay to the rural deficit.

Monthly adjustments commence January, 2005, and 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 calculated as follows:

$$P = (O - R) \div 12$$

Where:

P = the monthly amount of the automatic rate adjustment

Q = the CFB Revenue Credit applied to the rural deficit in Hydro's Final 2004 Test Year Cost of Service

R = the CFB Revenue Credit applied to the rural deficit in 2005 to 2008, included in existing rates and outlined in the table below:



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<sup>&</sup>lt;sup>1</sup> Hydro's schedule of rates for its rural customers impacted by Newfoundland Power's rate changes as a result of the pass-through of Hydro's rate changes associated with the Test Year Cost of Service Study.

### **RATE STABILIZATION PLAN (continued)**

	Q	R	Q – R	P
2005	\$ 0	\$445,722	(\$445,722)	(\$37,143)
2006	\$ 0	\$593,461	(\$593,461)	(\$49,455)
2007	\$ 0	\$1,477,393	(\$1,477,393)	(\$123,116)
2008 <sup>2</sup>	\$ 0	\$2,504,056	(\$2,504,056)	(\$208,671)

### 2. Monthly Customer Allocation: Load and Fuel Activity

Each month, the load variation will be assigned to the customer class for which the load variation occurred

Each month, the year-to-date total for fuel price variation 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 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,

<sup>&</sup>lt;sup>2</sup> Monthly adjustments will continue after 2008 until a new Test Year Cost of Service is approved by the Public Utilities Board.



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### **RATE STABILIZATION PLAN (continued)**

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:

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

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)



### **RATE STABILIZATION PLAN (continued)**

- 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.
- 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

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.

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.

Where a new Test Year comes into effect while there is an existing fuel rider in place, 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



### **RATE STABILIZATION PLAN (continued)**

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.

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.

Where a new Test Year comes into effect while there is an existing fuel rider in place, 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.



### **RATE STABILIZATION PLAN**

#### **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**

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

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

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 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.



# **RATE STABILIZATION PLAN (continued)**

### 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.

