

1 Q. **Reference: Volume I, Section 5.7 and Volume 3, Exhibit 10, Issue Topic: Long Term Supply Cost**
2 **Variance Deferral Account**

3 Please provide a version of Exhibit 10 that highlights the proposed changes in the definition of
4 the Long Term Supply Cost Variance Deferral Account when compared to the existing Supply
5 Cost Variance Deferral Account definition.

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8 A. Please refer to NP-NLH-093, Attachment 1.

Long-Term Supply Cost Variance Deferral Account Definition



Newfoundland and Labrador Hydro **Long-Term** Supply Cost Variance Deferral Account Definition

Newfoundland and Labrador Hydro's ("Hydro") **Long-Term** Supply Cost Variance Deferral Account is established to smooth rate impacts for Hydro's Utility customer, Newfoundland Power Inc. ("Newfoundland Power"), and Island Industrial customers and to provide Hydro the opportunity to recover supply cost variances between the forecasts reflected in customer rates and the actual costs incurred.

The formulae used to calculate the account'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

1.0 Muskrat Falls Project ("Project") Cost Variances

The **Project Cost Variances** will reflect the variance from test year costs for the Muskrat Falls Purchase Power Agreement ("PPA") and the Transmission Funding Agreement ("TFA").

Project Cost Variances will be calculated monthly based on the following formula:

$$(A - A_T) + (B - B_T)$$

Where:

A = Actual Purchased Power Expense from Muskrat Falls PPA Charges;

A_T = Test Year Purchased Power Expense from Muskrat Falls PPA Charges;

B = Actual Purchased Power Expense from TFA Charges; and

B_T = Test Year Purchased Power Expense from TFA Charges.

2.0 **Rate Mitigation Fund Variances**

The Rate Mitigation Fund Variance will be calculated monthly based on the following formula:

$$(R_T - R)$$

Where:

R_T = Test Year Rate Mitigation (\$); and

R = Actual Rate Mitigation (\$).

3.0 Project Cost Recovery

Charges applied to customers to recover Project costs will be credited to the **Project Cost Recovery** component of the deferral account and tracked by customer class.

4.0 Holyrood Thermal Generating Station (“Holyrood TGS”) Fuel Cost Variance

Holyrood TGS Fuel Cost Variances will be calculated monthly based on the following formula:

$$(C - C_T)$$

Where:

C = Actual Holyrood TGS Fuel Cost incurred in the month to supply firm energy to customers on the Island Interconnected System; and

C_T = Test Year Holyrood TGS Fuel Cost in the month to supply firm energy to the customers on the Island Interconnected System.

5.0 Other Island Interconnected System Supply Cost Variance

The account shall be charged or credited monthly with the **Other Island Interconnected System Supply Cost Variance** incurred by Hydro on the Island Interconnected System that is in excess of the Cost Variance Threshold in the calendar year.

Variations resulting from both the price and volume of the following thermal generation sources shall be charged or credited to this account:

- Holyrood Combustion Turbine;
- Hardwoods Gas Turbine;
- Stephenville Gas Turbine;
- St. Anthony Diesel Plant; and
- Hawkes Bay Diesel Plant.

Variations resulting from the volume of the following on-island power purchases shall be charged or credited to this account:

- Exploits;
- Star Lake;
- Rattle Brook;
- Corner Brook Pulp and Paper Limited (“CBPP”) Cogeneration;

- St. Lawrence wind; and
- Fermeuse wind.

Variations from the price and volume of firm energy power purchases from CBPP shall be charged or credited to this account.

Variations resulting from the cost of off-island power purchases shall also be charged or credited to this account. Off-island power purchase costs shall not include any expenditure related to Muskrat Falls PPA, TFA or the Interim TFAs.

The **Other Island Interconnected System Supply Cost Variance** will be determined monthly by the following formula:

$$D + E + F + G$$

D = Test Year Thermal Generation Variances resulting from both price and volume.

Where:

D = (Actual Thermal Generation Cost in providing firm energy – Test Year Thermal Generation Cost).

E = Test Year Off-Island Power Purchase Variances resulting from both price and volume.

Where:

E = (Actual Off-Island Power Purchase Cost – Test Year Off-Island Power Purchase Cost).

F = Test Year Power Purchase Variances resulting from volume;

Where:

F = (Actual kWh Purchases – Test Year kWh Purchases) x (Test Year Purchase Cost in \$/kWh).

G = Variances based on firm energy purchases from CBPP.

Where:

G = (Actual CBPP Power Purchase Cost – Capacity Assistance Adjustment) – (Test Year CBPP Firm Energy Power Purchase Cost).

“Capacity Assistance Adjustment” shall represent any change in fixed capacity assistance payments as a result of firm energy purchases from CBPP.

The **Cost Variance Threshold** equals $\pm \$500,000^1$ in a calendar year.

¹ The effective date of the cost variance threshold commenced January 1, 2022.

6.0 Net Revenue from Exports Variance

The **Net Revenue from Exports Variance** is computed on monthly basis by the following formula:

$$(H_T - H)$$

Where:

Net Revenue from Exports reflects the revenues from Hydro exports less the costs incurred to export energy.

H_T = Test Year Net Revenues from Exports (\$); and

H = Actual Net Revenues from Exports (\$).

The account will be credited in December with an estimate of net export sales that occurred during the year, but the actual settlement value will not be finalized until the following period. The account will be adjusted in the following period for any difference between the estimated and actual value.

Revenues from non-firm sales on the Island Interconnected System supplied by hydraulic generation will also be credited to the Net Revenue from Exports Variance component.

Note: Revenues from Rate No. 5.1L – Non-Firm Energy to be added back. Please refer to response to PUB-NLH-090.

7.0 Transmission Tariff Revenue Variance

For the purpose of this deferral account, Transmission Tariff Revenues reflect the transmission revenues paid by third parties to enable exports. The **Transmission Tariff Revenue Variance** is computed on monthly basis by the following formula:

$$(I_T - I)$$

Where:

I_T = Test Year Transmission Tariff Revenues paid by third parties (\$); and

I = Actual Transmission Tariff Revenues paid by third parties (\$).

8.0 Load Variation

Firm: Firm load variation is determined based on the revenue variation for firm energy sales compared with the test year Cost of Service Study firm sales. It is calculated separately for Newfoundland Power firm sales and Island Industrial firm sales on a monthly basis, in accordance with the following formula:

$$(J_T - J_A) \times K_R$$

Where:

J_T = Test Year Cost of Service Firm Sales, by customer class (kWh);

J_A = Actual Firm Sales, by customer class (kWh); and

K_R = Firm Energy Rate, by customer class.

Where the rate designs include more than one energy block, the excess energy rate will apply in computing **Load Variation** transfers.

9.0 Rural Rate Alteration

The **Rural Revenue Adjustment** transfers to the Newfoundland Power plan balance: (i) changes in Hydro Rural revenues resulting from changes in Rural Rates between test years; and (ii) changes in Rural revenues on the Island Interconnected System as a result of changes in Rural load between test years. The **Rural Revenue Adjustment** is calculated on a monthly basis, in accordance with the following formula:

$$[(N_T - N_A) \times O_T] + [(P_T - P_A) \times Q_T]$$

Where:

N_T = Test Year Cost of Service rural rates;

N_A = Existing rural rates;

O_T = Test Year Billing Units (kWh, bills, billing demand);

P_T = Test Year kWh sales for Hydro Rural Island Interconnected (excluding street and area lighting);

P_A = Actual kWh sales for Hydro Rural Island Interconnected (excluding street and area lighting); and

Q_T = Test Year rates per class for Rural Island Interconnected System (excluding street and area lighting).

The **Rural Revenue Adjustment** will be allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion that the Rural Deficit was allocated in the approved Test Year Cost of Service Study. The portion allocated to Hydro Rural Labrador Interconnected will be removed from the plan and written off to Hydro's net income (loss).

10.0 Greenhouse Gas Credit Revenues Variance

The **Greenhouse Gas Credit Revenues Variance** is computed on monthly basis, beginning on January 1, 2021, by the following formula:

$$(T_T - T)$$

Where:

T_T = Test Year Greenhouse Gas Credit Revenues (\$); and

T = Actual Greenhouse Gas Credit Revenues (\$).

Section B

1.0 Plan Balances

Separate plan balances for the Utility and Island Industrial customers will be maintained in this account. Transfers to the Utility balance and the Island Industrial customer balance will reflect the monthly customer allocations of supply variations in the account. Transfers to the Utility balance will also reflect the monthly adjustments for the Rural Rate Alteration.

2.0 Financing Costs

Financing charges on the plan balances will be calculated monthly using Hydro's approved Test Year weighted average cost of capital.

3.0 Monthly Customer Allocation

Each month, the year-to-date variances in the Long-Term Supply Cost Variance Deferral Account will be allocated to demand and energy based on a consistent allocation methodology approved in the Test Year Cost of Service Study for each component, or otherwise approved by the Board for the allocation of the balances in this account.

3.1 Energy Allocation

Each month, the energy costs will be allocated among the Island Interconnected customer groups of (i) Newfoundland Power, (ii) Island Industrial Firm, and (iii) Rural Island Interconnected. The allocation will be based on percentages derived from 12 months-to-date kWh for: Utility Firm invoiced energy, Industrial Firm invoiced energy, and Rural Island Interconnected bulk transmission energy.

The portion of the energy costs which is initially allocated to Rural Island Interconnected will be re-allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion as the Rural Deficit is allocated in the most recently 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).

3.2 Demand Allocation

Each month, the demand costs will be allocated among the Island Interconnected customer groups of (i) Newfoundland Power, (ii) Island Industrial Firm, and (iii) Rural Island Interconnected. The allocation will be based on percentages derived from year-to-date kW for: Utility Firm invoiced monthly billing demand, Industrial Firm maximum invoiced demand multiplied by year-to-date months, and Rural Island Interconnected maximum peak demand multiplied by the year-to-date months.

The portion of the demand costs which are initially allocated to Rural Island Interconnected will be re-allocated between Newfoundland Power and regulated Labrador Interconnected customers in the same proportion as the Rural Deficit is allocated in the most recently 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).

4.0 Balance Disposition

Disposition of balances in the Supply Cost Variance Deferral Account will be subject to further approval by the Board.

5.0 Balance Transfers

The balances in the Supply Cost Variance Deferral Account shall be adjusted by other amounts as ordered by the Board.