Q. **Reference: Grant Thornton Financial Consultants Report, dated August 23, 2019.**

The Grant Thornton Report recommends that Hydro propose a revision to the RSP rules to allow the use of the flat monthly price of No. 6 fuel as used by Hydro in its General Rate Compliance Application.

(a) Please explain, in Hydro's opinion, if the use of a flat monthly fuel cost is consistent with the current RSP rules on the operation and calculation of the RSP.

(b) Please provide the proposed rule change for the Board's approval as recommended in the Grant Thornton Report

A. (a) Given that Newfoundland and Labrador Hydro ("Hydro") is proposing to calculate fuel cost variations in the Rate Stabilization Plan ("RSP") relative to the annual average test year cost of No. 6 fuel rather than the monthly test year fuel cost, Hydro believes it is appropriate to revise the RSP rules.

(b) For Sections A 1, B 1.1 and B 1.2 of the RSP rules, Hydro proposes to replace the definition of variable "D" as follows:

- Existing: D = Monthly Test Year Cost of Service No. 6 Fuel Cost ($Can /bbl.); with
- Revision: D = Annual Average Test Year Cost of Service No. 6 Fuel Cost ($Can /bbl.).

Revised RSP rules reflecting the proposed changes are provided in Attachment 1 to PUB-NLH-013.

NEWFOUNDLAND AND LABRADOR HYDRO

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 + Net Ponded Energy – Spill Exports (kWh)
C = Test Year Cost of Service Holyrood Net Conversion Factor (kWh /bbl.)
D = Annual Average Test Year Cost of Service No. 6 Fuel Cost ($Can /bbl.)

Net Ponded Energy is defined as energy imports in kWh for ponding (Ponding Imports) less energy generated in kWh for the purposes of sale to external markets (Ponding Exports). The calculation of Net Ponded Energy shall exclude any Ponding Imports used to serve native load and spilled Ponded Energy (Ponding Spill), if applicable.

Spill Exports reflects production of energy during the month for sale to external markets to avoid spill (kWh), if applicable.

The metering point for determining the Ponding Imports is at Bottom Brook or the Labrador-Quebec border, as applicable. The metering point for Ponding Exports and Spill Exports is at Hydro's generation.

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

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 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).

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

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) x H

Where:

D = Annual Average 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 ÷ C) – K}

Where:

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

(J – I) x L

Where:

I = Actual Sales (kWh)
J = Test Year Cost of Service Sales (kWh)
L = Secondary Energy Firming Up Charge

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

1.3 Rural Rate Alteration

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
N = Existing rate
O = Actual Units (kWh, bills, billing demand)

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 the load 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 and the year-to-date portion of 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).

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

4. Plan Balances

Separate plan balances for Newfoundland Power, the Island Industrial customer class and the segregated load variation will be maintained. The RSP balances shall be adjusted by other amounts as ordered by the Board. 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 cost, 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 fuel contract premium or (discount) ($US/bbl) for the following January to December

U = the monthly average of the $Cdn / $US Bank of Canada Exchange Rate for the month of September

V = average Test Year Cost of Service cost of 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 Test Year, or an alternate forecast number of barrels as approved by the Board.

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 10th working day of October.

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

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 cost, 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 fuel contract premium or (discount) ($US/bbl) for the following July to June
V = average Test Year Cost of Service cost of No. 6 Fuel ($Can /bbl.)
W = the number of barrels of No. 6 fuel forecast to be consumed at the Holyrood Generating Station for the Test Year, or an alternate forecast number of barrels as approved by the Board.
X = the average of the March month-end PIRA Energy Group average monthly forecast for No. 6 fuel prices at New York Harbour for July to December of the current year and for the January to June period of the subsequent year.
Y = the monthly average of the $Cdn / $US Bank of Canada 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 10th working day of April.

NEWFOUNDLAND AND LABRADOR HYDRO

RATE STABILIZATION PLAN (Continued)

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.

NEWFOUNDLAND AND LABRADOR HYDRO
RATE STABILIZATION PLAN (Continued)

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.

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: RSP Surplus:

The Newfoundland Power allocated amount of the RSP Surplus will be refunded to Newfoundland Power and Hydro's Rural customers in accordance with Hydro's Customer Refund Plan approved in Order No. P.U. 36(2016).

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