

1 Q. (Re: Response to PUB-NLH-113, Attachment 1) Please identify the current basis for
2 allocating the rural deficit to customer classes and comment on the "fairness" of
3 using this method today versus 20 years ago when PUB-NLH-113, Attachment 1 was
4 issued.

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7 A. **Current Methodology**

8 The current basis for allocating the rural deficit to customer classes is detailed in
9 the Board's February 1993 Report resulting from the Cost of Service methodology
10 hearing. Page 62 of the Report states that "Mr. Baker has presented in his evidence
11 a method of allocating the deficit on the basis of a mini cost of service...The result of
12 this approach is to increase unit costs equally in the two Interconnected Systems."
13 The Board accepted the methodology proposed by Mr. Baker and in
14 Recommendation 23 of the Report it is stated: "The Board recommends the
15 approach illustrated in Exhibit GCB-5 (Appendix 1 of this Report) for the allocation
16 of the rural deficit for the purpose of the cost of service."

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18 **Deficit Recovery in Labrador Interconnected Rates**

19 Labrador Interconnected rates were changed to reflect the inclusion of the rural
20 deficit in September 2002.¹ Approximately \$5.0 million was allocated to the
21 Labrador Interconnected System.² However, the impact of the initial allocation of
22 the rural deficit to the Labrador Interconnected System was largely offset by the

¹ There was no rate proceeding to implement the approved Cost of Service methodology for the period 1993 to 2001.

² Source: Hydro Compliance Filing to Board Order No P.U. 7(2002-2003).

1 assignment of a revenue credit of \$3.7 million from secondary energy sales to CFB
2 Goose Bay (the “Secondary Revenue Credit”).³

3
4 In Order No. P.U. 7(2002-2003), the Board also ruled that the Secondary Revenue
5 Credit be applied to reduce the rural deficit rather than applied as a credit against
6 the cost of serving the Labrador Interconnected System. Because of the potential
7 large customer impacts of making this rate change, the Board required Hydro to
8 propose a plan for implementation at its next rate hearing in combination with a
9 plan to implement uniform rates for Labrador City, Happy Valley-Goose Bay and
10 Wabush. The phase-out of the Secondary Revenue Credit and the merger of the
11 three sets of rates concluded in 2011.⁴

12
13 The current General Rate Application is the first hearing before the Board in which
14 the Secondary Revenue Credit is fully credited to the rural deficit.

15
16 **Allocation Review**

17 The following analysis was utilized to assess whether the allocation
18 methodology approved in 1993 provides a reasonable allocation of the rural
19 deficit between Labrador Interconnected Customers and Newfoundland
20 Power customers.

³ The net effect was a revenue to cost ratio of 1.12 for the Labrador Interconnected System. This compared to 1.18 revenue to cost ratio for Newfoundland Power.

⁴ The Secondary Revenue Credit in the 2015 Test Year is approximately \$913,000, notably less than in the previous test years.

Table 1

Rural Deficit Comparison on a Unit Cost Basis⁵

	<u>2015 TY</u>
Labrador Interconnected	1.2¢
Newfoundland Power	<u>1.0¢</u>
Difference	<u>(0.2¢)</u>

Table 1 shows the rural deficit allocation expressed on an average unit cost per kWh for Labrador Interconnected Customers and Newfoundland Power customers.⁶ The average unit cost per kWh to be recovered through customer rates is approximately 0.2¢ per kWh or 20% higher for Labrador Interconnected Customers than for Newfoundland Power customers.

Table 2

Rural Deficit Comparison - Average Cost per Customer⁷

	<u>2015 TY</u>
Labrador Interconnected	\$653.15
Newfoundland Power	<u>\$216.64</u>
Difference	(\$436.51)

Table 2 shows the average annual cost per customer is approximately three times higher for Labrador Interconnected Customers than for Newfoundland Power customers.

⁵ Total deficit allocated divided by total kWh sales.

⁶ The unit cost was derived based upon the total allocated rural deficit using the Existing Methodology for the 2015 Test Year divided by the 2015 Test Year kWh usage of both Newfoundland Power and Labrador Interconnected.

⁷ Total 2015 Test Year rural deficit allocated using the Existing Methodology divided by number of customers in the Labrador Interconnected System and number of customers served by Newfoundland Power.

Domestic customers on the Labrador Interconnected System have materially higher average usage than customers of Newfoundland Power primarily as a result of a very high saturation of electric heating for customers living in an area of the Province with a very cold climate.⁸ The combination of the materially higher average usage and the higher average unit cost allocation of the rural deficit to the Labrador Interconnected System predominantly explains the higher average cost allocation per customer for Labrador Interconnected Customers for the 2015 Test Year.

Table 3
Deficit Allocation vs Customer Splits

	Deficit (\$millions)	%	Customers	%
Newfoundland Power	\$56.5	88.1%	260,771	95.7%
Labrador Interconnected	\$7.6	11.9%	11,600	4.3%
Total	\$64.1	100.0%	272,371	100.0%

Table 3 shows that while Labrador Interconnected Customers comprise 4.3% of the total customers contributing to the rural deficit, they are being required to contribute 11.9% of the rural deficit.

⁸ The annual normal heating degree days are 7,587 in Wabush and 6,538 in Goose Bay; these compare to 4,730 annual normal heating degree days in St. John's. The average annual Domestic usage for 2013 for customers coded as having electric heating in Labrador West was approximately 35,500 kWh, for Happy Valley-Goose Bay approximately 29,700 kWh and for Newfoundland Power customers was 18,350 kWh.

Table 4

Revenue to Cost Ratios⁹

	<u>2015 TY</u>
Labrador Interconnected	1.42
Newfoundland Power	<u>1.12</u>
Difference	(.30)

Table 4 shows the 2015 Test Year Cost of Service Study revenue to cost ratios reflecting the impact of the rural deficit allocation. The current rural deficit allocation methodology requires Labrador Interconnected Customers to pay rates that reflect a materially higher revenue to cost ratio than required of Newfoundland Power.¹⁰

For Newfoundland Power customers, the cost of purchases from Hydro comprises approximately 67.5% of total costs. Therefore, the percent impact of the rural deficit allocation on the bills of Newfoundland Power's customers is approximately 8% compared to 42% for Labrador Interconnected Customers.

Assessment

The current methodology results in materially higher customer billing impacts for Labrador Interconnected Customers primarily because they have higher electricity usage as a result of living in an area of the Province where the climate is materially colder.

⁹ Source: 2015 Test Year Cost of Service Study using the Existing Rural Deficit Allocation Methodology.

¹⁰ Fairness in rates is commonly assessed based upon revenue to cost ratios.

Hydro believes that the current methodology does not provide a reasonable sharing of the rural deficit between Labrador Interconnected Customers and Newfoundland Power customers.

Alternate Methodologies

At the 1992 Cost of Service Hearing, Hydro proposed that the rural deficit be allocated upon the basis of revenue requirement allocation. This method effectively maintains the same revenue to cost ratio for both the Labrador Interconnected System and Newfoundland Power. Hydro also considers the use of an allocation based upon total customers an option that may be reasonable.

Table 5 provides a comparison of the rural deficit impact per customer under the current method compared to an allocation based upon revenue requirement and an allocation based upon number of total customers.

Table 5
Average Annual Cost per Customer Comparison¹¹

	Existing Method	Revenue Requirement Method	Number of Customers Method
Labrador Interconnected	\$653.15	\$207.60	\$235.23
Newfoundland Power	\$216.64	\$236.46	\$235.23
Difference	(\$436.51)	\$28.87	0.00

Table 5 shows that average customer impacts are more comparable on a revenue requirement allocation basis than the current allocation method. The use of the

¹¹ Total 2015 Test Year deficit allocated divided by number of customers in Labrador Interconnected and number of customers served by Newfoundland Power.

number of total customers as the allocator eliminates the average cost difference per customer.¹²

Hydro believes both of these approaches provide a more reasonable sharing of the rural deficit between the Labrador Interconnected System and Newfoundland Power.

Impact of Methodology Change

Table 6 provides the average customer rate impacts if the Board approved a change to one of the alternate methodologies presented based upon the 2015 Test Year Cost of Service.

Table 6
Impact of Rural Deficit Allocation on Rate Change Proposals

	<u>Labrador Interconnected</u>	<u>Newfoundland Power</u>	<u>Newfoundland Power Customer</u>
Current Method ¹³	28.1%	3.1%	2.1%
Revenue Requirement Method	2.1%	4.1%	2.8%
Number of Customer Method	3.7%	4.1%	2.8%

Table 6 shows that both alternate methodologies effectively eliminate the material rate change proposed for Labrador Interconnected. For Newfoundland Power's customers the proposed decrease changes by approximately 1.4%.

¹² The use of the allocation of the rural deficit using number of customers may be reasonable for allocation between Newfoundland Power and Labrador Interconnected Customers. However, further allocation by rate class would normally consider customer usage characteristics and be allocated based upon a revenue basis.

¹³ Refer to Hydro's response to PUB-NLH-391.

1 Hydro believes the Board should approve a change in the allocation of the
2 rural deficit to one of the alternate methodologies. Hydro is hopeful that all
3 parties will be open to a change in the rural deficit methodology during the
4 scheduled negotiation process.