# <u>NEWFOUNDLAND AND LABRADOR HYDRO</u> <u>SUPPLEMENTARY EVIDENCE OF SAM BANFIELD – NOV. 21, 2003</u>

- Q. The parties have reached agreement on proposed changes to the Rate
   Stabilization Plan (RSP) and have filed them with the Board as Consent #
   2. Please explain the proposed changes to the Rate Stabilization Plan as
   outlined in Consent # 2 which has been submitted to the Board for its
   review and approval.
- 6
- A. It is proposed that the four main elements of the Plan, that is, hydraulic,
  fuel, load, and rural rate alteration will continue. However, there are
  changes within each component.
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- 11 Q. Would you please explain the proposed changes to the hydraulic12 component of the RSP?
- 13

14 Α. Yes. The calculation of the hydraulic variation provision will remain the 15 same as in the current RSP but will be tracked separately from the other 16 components. It had been contemplated that due to the nature of the 17 hydraulic cycle (i.e., over time, the variation should tend to zero), this part 18 of the RSP might never have to be recovered from or refunded to 19 customers, similar to Hydro's treatment of the Water Equalization 20 Provision prior to the 1986 introduction of the RSP. However, after 21 analysis, using historic data of the amount to which the balance in this 22 component could accumulate and the effect on Hydro's balance sheet and 23 the risk to Hydro, it was agreed that a portion of the balance in this 24 component would be assigned annually to each customer for collection or 25 refund. It has been agreed that 25% of the balance in the hydraulic 26 variation provision, plus 100% of the financing charges for that year, be 27 recovered from or refunded to customers each year. This recovery or 28 refund will be calculated at the end of each calendar year and allocated to

Newfoundland Power and Industrial Customers at that time. Based on the
historic hydraulic cycle studied and an assumed \$30/bbl fuel price, the
balance in the hydraulic provision should not exceed a maximum of
approximately \$100 million and in most years the balance will be less.
Based on the hydraulic cycle from 1985 to the present, the annual
balances that would have accumulated in this hydraulic provision over that
time frame are shown in Chart 1 below.



The proposed change in the recovery of the hydraulic portion of the RSP will reduce the volatility of the rate adjustments for customers relating to this provision of the plan. Chart 2 shows the range of Industrial Customers' rate adjustments, based on historical data, of the proposed 25% recovery, plus financing, in contrast to the existing two-year amortization of the entire balance in the hydraulic component.



- 1 Q. Would you please explain the proposed changes to the fuel component of2 the RSP?
- 3

4 Α. Activity for the fuel component of the RSP will continue to be calculated in 5 the same manner as currently. However, the present RSP has had large 6 balances accumulate because of significant differences between the test 7 year price and actual price of fuel. The parties agreed that a proactive 8 mechanism to address this was needed. A fuel rider was developed and 9 is proposed which will take into account the forecast price of fuel. Each 10 year, three months before the recovery commences of the existing 11 balance, a forecast price of No. 6 fuel based on the PIRA forecast will be 12 determined to calculate the required fuel rider which will be combined with 13 the recovery or refund of the existing plan balance.

- Q. Will you please explain the proposed change in the load variation
   provision of the RSP?
- 3

4 Α. Yes. The load variation provision has two elements, revenue and fuel. In 5 the past, revenue variations were assigned to the customer class which 6 caused the variation. Fuel costs were treated as common costs and 7 shared proportionately among customer classes regardless of the 8 customer class that caused the variation. It is proposed to treat the fuel 9 component in the same manner as the revenue element is currently 10 treated. This means that the fuel element resulting from the load variation 11 will be assigned fully to the appropriate customer class. This 12 recommended treatment results in the customer class that caused a 13 change in load, being assigned the cost of fuel associated with that 14 change.

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16 Q. Please explain the proposed change in the Rural Rate Alteration17 component of the RSP?

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19 Α. The Rural Rate Alteration component of the RSP, as currently approved 20 by the Board, is calculated to account for changes in Rural revenues 21 which occur as a result of increases or decreases in Newfoundland Power 22 rates. This is a result of the fact that Rural rates on the Island 23 Interconnected and Isolated systems are, to a great extent, based on 24 Newfoundland Power rates. Another provision will be added to this 25 component of the RSP as outlined in the mediation agreement "Parties' 26 Agreement on Cost of Service and Rate Design Issues". Hydro will adjust 27 the Rural Rate Alteration component of the RSP based on its projection of 28 the 5-year phase-in of Labrador rates and the revenue credit available 29 from secondary energy sales to CFB Goose Bay.

- 1 Q. Please explain how the plan balances are to be recovered.
- 2

A. Recovery of the plan balance for each customer class is proposed to
occur over a one-year amortization period rather than the current two-year
period with the adjustment rate established to target a zero balance in the
customer plans at the end of each recovery period. This aspect of the
recommended changes will also tend to prevent a buildup in customer
RSP balances.

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10 Q. Would you please explain how the RSP adjustment rate will be set?

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A. Yes. The RSP adjustment rate will be set to recover the plan balance
over a 12-month recovery period for each customer class. This rate will
be comprised of two components. The first component will be set to
recover annually:

- for Industrial Customers, the plan balance existing on December 31
   of each year plus the projected financing costs of the plan balance
   for the next twelve months; and
- 192)for Newfoundland Power, the plan balance existing on March 31 of20each year, less any projected recovery of the balance for April, May21and June, plus the estimated financing costs of the plan balance to22the end of the next recovery period.
- 23

The second component will be the fuel rider noted earlier in this supplementary evidence. This rider will be calculated for each customer class by first determining the anticipated amount owing to or from customers as a result of the fuel price forecast for the next recovery period (i.e. the difference between the price of fuel in base rates and the current forecast). This will be calculated in October for the Industrial Customers and in April for Newfoundland Power.

1		The total adjustment rate will be obtained by adding together the rate					
2		derived from the plan balance and the fuel rider. This adjustment rate will					
3		be charged to Industrial Customers on January 1 of each year and to					
4		Newfoundland Power on July 1 of each year.					
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6	Q.	What will be the benefits of the proposed changes to the RSP outlined in					
7		this evidence?					
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9	A.	The benefits of the proposed changes to the RSP are as follows:					
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11		• The Plan will have less tendency to build a significant balance					
12		because the projected fuel price variation is collected over one					
13		year;					
14							
15		• There will be an improved price signal to customers since the					
16		proposed Plan incorporates a projection of the anticipated fuel price					
17		for the upcoming period;					
18							
19		• The recommended hydraulic provision results in greater rate					
20		stability for this component of the Plan; and					
21							
22		• With the July 1 rate setting for Newfoundland Power being					
23		determined in April, rather than December, the price signal is more					
24		current.					
25							
26	Q.	Will the Plan result in more stable rates for customers?					
27							
28	Α.	No, not necessarily. Although, as outlined previously, the hydraulic					
29		recovery or refund is anticipated to reduce rate volatility, the customer					
30		balance in the plan, including the fuel price variation, is being collected					
31		over one year and thus rates may overall, in fact, be more volatile.					

- However, rates will reflect a more current fuel price signal and thus
   provide customers with a timelier and more indicative price signal
   regarding their electricity consumption.
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- Q. Consent # 3, Historical Plan Balances has been filed with the Board and
  other parties. Please outline the proposed changes regarding the
  recovery of the historical Rate Stabilization Plan balances.
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9 As of December 31, 2003, there is a forecast balance of \$94.2 million Α. 10 remaining in the August 2002 RSP with a remaining amortization period of 11 four years. There is also a forecast balance of \$72.8 million in the RSP 12 which commenced September 1, 2002, with an amortization period of two 13 years. These projected balances would have resulted in an estimated 14 additional increase of 6% to Newfoundland Power customers on July 1, 15 2004 and contribute to an estimated overall increase of 32.9% to Industrial 16 Customers on January 1, 2004. To reduce the immediate impact on 17 customers' rates, it is proposed that both RSP balances will be added 18 together and recovered over a four-year period starting on January 1, 19 2004 for Industrial Customers and July 1, 2004 for Newfoundland Power.

This proposal results in a July 1, 2004 RSP forecast adjustment for Newfoundland Power customers of 3.1%, instead of the previously anticipated 6% and an overall forecast increase to Industrial Customers of 24. 22.6% instead of the previously anticipated 32.9%. Table 1 below outlines 25. the full impact of this proposed treatment of the RSP balances.

TABLE 1								
NEWFOUNDLAND AND LABRADOR HYDRO 2004 Projected End Consumer Impacts RSP: Proposed 4-Year Write-Off								
				End			End	
	Dec 31,	Jan 1,	Wholesale	Consumer	Jul 1,	Wholesale	Consumer	
	<u>2003</u>	<u>2004</u>	Increase	Increase	<u>2004</u>	Increase	Increase	
	(mills/kWh) (	mills/kWh)	%	%	(mills/kWh)	%	%	
NEWFOUNDLAND POWER								
Energy	47.89	53.62	12.0%	-	53.62	-	-	
Aug 2002 RSP Balance	3.24	3.24	-	-	3.36	-	-	
Dec 2003 RSP Bal (4-Yr Write-Off)	-	-	-	-	2.88	-	-	
Total Rate	51.13	56.86	11.2%	6.5%	59.86	5.3%	3.1%	

Newfoundland Power rates, including the July 1, 2004 adjustment, will be 17.1% higher than rates that were in effect at the end of 2003. End consumer rates will be 9.9% higher than rates in effect at the end of 2003.

## INDUSTRIAL CUSTOMERS

Island Industrial customers, in combination with the 12.2% base rate increase, will see a total increase of 22.6% including the RSP adjustment.

- Q. Mr. Banfield, other Hydro witnesses have been questioned regarding the
  Rural deficit. Could you please outline how the Rural deficit is calculated
  and if the calculation has been filed with the Board?
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5 Α. The Rural deficit is calculated as an integral part of the Cost of Service 6 Study filed as an exhibit in the evidence of Mr. Robert Greneman. The 7 deficit is calculated as revenues less allocated costs for Rural customers 8 on the Island Interconnected system, as well as Rural customers on the 9 Isolated systems, including L'Anse au Loup. There is a significant shortfall 10 in revenues when compared to the costs of providing service to Rural 11 customers, resulting in a deficit. It is important to note that while Rural 12 revenues are readily identifiable by customer, allocated costs are more 13 controversial and the subject of debate such as, for example, the 14 assignment of the transmission on the Great Northern Peninsula. The

1 Board's decisions approving the costing methodology has had, and will 2 continue to have, an impact on the amount reported as the Rural deficit. 3 For example, assignment of the Great Northern Peninsula generation and 4 transmission assets to Hydro Rural increases the Rural deficit by 5 approximately \$9 million. Costs are also allocated through the Cost of 6 Service Study to Hydro Rural for materials management, finance, 7 information technology, human resource management and other required 8 services. Increases or decreases in the Rural deficit can only be 9 explained through reference to the Cost of Service Study and analysis of 10 Hydro's overall costs including, for example, fuel, power purchases and 11 interest costs. Schedule 1 attached outlines changes in the Rural deficit 12 from 1999 to 2004.

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- 14 Q. How does Hydro manage the Rural deficit?
- 15

16 Α. The Rural deficit is managed by maximizing revenues and controlling 17 In its original May filing, Hydro had submitted a number of costs. 18 initiatives regarding increasing Rural revenues, including elimination of 19 preferential rates and elimination of the lifeline block for general service 20 customers on Isolated systems. While these initiatives have been 21 modified by direction from the Government, Hydro continues to seek to 22 maximize revenues where possible. For instance, Hydro supports the 23 implementation of a seasonal lifeline block for domestic customers on 24 Isolated systems, however, this support is contingent on revenue 25 neutrality which would result in no further increase in the Rural deficit. 26 With regard to cost control in Rural areas, a number of initiatives have 27 been outlined by Mr. Wells and Mr. Martin. Mr. Martin is responsible for 28 the direct costs of Rural Operations.

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- Q. Is it reasonable to assume that the Rural deficit can be reduced?
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3 Α. While the Rural deficit can be controlled by the means outlined, it is 4 unlikely that in the absence of increased revenues, through increased 5 rates, that there can be a significant reduction in the deficit. As outlined in 6 filed evidence, general inflationary pressures on costs will outstrip any 7 offsetting incremental inflationary increase in revenues, which are a 8 fraction of costs, resulting in a deficit which, all else being equal, will trend 9 upward. Hydro is cognizant of this reality and will use whatever means 10 possible to control the Rural deficit while also providing reliable customer 11 service.

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Rural Deficit (\$millions)									
Year	Rural Island Interconnected	Labrador & Island Isolated	Total						
2004 Test Year	19.2	21.9	41.1						
2003 Forecast	21.9	22.2	44.1						
2002 Actual	21.2 <sup>(1)</sup>	23.4	44.6						
2001Actual	12.1 <sup>(2)</sup>	22.0	34.1						
2000 Actual	6.7	20.0 <sup>(3)</sup>	26.7						
1999 Actual	5.8	16.3	22.1						

<sup>(1)</sup> Increase over 2001 is mainly due to a change in assignment of Rural transmission and generation from common to specifically assigned.

(2) Increase over 2000 is mainly due to Rural share of No. 6 fuel costs which increased in total from \$50m in 2000 to \$99m in 2001.

<sup>(3)</sup> Increase over 1999 is mainly due to diesel fuel increase of \$2m and operating costs increase of \$1m.

## 9 Increase from 1999 to 2004:

10 11

### **Rural Island Interconnected**

Increase from 1999 to 2004 is mainly due to a change in assignment of
 Rural transmission and generation from common to specifically assigned
 and Rural share of increased fuel, purchased power and interest costs
 which increased by approximately \$80m on the Island Interconnected
 system from 1999 to 2004 partially offset by an increase in Rural revenues
 of \$6m.

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## 19 Labrador & Island Isolated

- 20 Increase from 1999 to 2004 is mainly due to increase in fuel of \$4m,
- interest and depreciation of \$2m and operating and maintenance of \$3
- 22 partially offset by an increase in revenue of \$3m.

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