

1 Q. In Order No. P.U. 29 (2013), the Board effectively deferred consideration of a final
2 form of load variation allocation for Hydro's RSP. Does Hydro plan to file evidence
3 as part of the General Rate Application to modify the RSP rules for the treatment of
4 load variation? If yes, when will the evidence be filed?

5

6

7 A. Hydro's proposed change to existing RSP rules relates to an alternate sharing
8 methodology advocated by Hydro for the load variation component of the plan.
9 Hydro has filed its recommended sharing of the load variation, including supporting
10 analysis, a number of times with the Board. Hydro's June 2006 RSP Report was filed
11 with the Board on June 30, 2006, June 30, 2009, July 30, 2013 as part of the RSP
12 filing, and is filed here as Attachment 1 as part of the record of this GRA proceeding.

13

14 The June 2006 RSP Report includes a principled recommendation of sharing the
15 load variation component of the RSP proportionately among customer classes
16 based on energy, that is, in the same manner as the Cost of Service treatment
17 which was approved in February 1993. Hydro believes this report provides the
18 basis for approval of its recommendation; however, responses to RFIs in the RSP
19 and IC Rates proceeding also lend further weight to this recommendation.¹ For
20 example, RFI V-NLH-5, included as Attachment 2 to this response, illustrates that
21 Hydro's proposed load variation allocation methodology for the net load variation
22 based upon energy ratios produces allocations which are closer to Cost of Service
23 results than the existing methodology.

24

25 Hydro's proposed RSP rules for the treatment of load variation are included in
26 Section B: Rates Schedules, pages 9-11 of 47 in this GRA filing.

¹ Please refer to Attachment 1, 2006 RSP Report, Section 3.3, Pages 13-16.



Review of the Operation of the Rate Stabilization Plan

For the Period January 1, 2004 to December 31, 2005

Prepared by Newfoundland and Labrador Hydro
June 30, 2006

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1 Introduction

This Rate Stabilization Plan (RSP) report was prepared by Newfoundland and Labrador Hydro (Hydro) in response to the Board of Commissioners of Public Utilities (the Board) Order No. P.U. 14 (2004), p. 78, which stated:

“The Board will direct NLH to complete a review of the operation of the RSP for the period January 1, 2004 to December 31, 2005. A report on this review setting out an assessment of the impact on customers should be filed with the Board no later than June 30, 2006.”

The Board’s full order is available from its website at:

<http://n225h099.pub.nf.ca/orders/order2004/pu/pu14-2004.pdf>

Hydro is also taking this opportunity to introduce a potential new provision of the RSP to stabilize fuel-related expenses for Hydro’s isolated systems.

The attached report contains conclusions, some of which propose modifications to the RSP rules. It is Hydro’s intention to discuss these potential changes during the mediation process; none of these proposals have been included in Hydro’s upcoming general rate application.

2 Background

Hydro's RSP was first established in 1986 for Newfoundland Power (NP) and the Island Industrial customers (IC) to smooth rate impacts for certain variations between actual results and test year Cost of Service (COS) estimates for: (i) hydraulic production, (ii) No. 6 fuel cost used at Hydro's Holyrood generating station, and (iii) customer load (NP and IC).¹ It was developed primarily in response to customer complaints of high electricity bills in the winter, caused monthly rate adjustments through the fuel adjustment clause of Hydro's rate schedule. Through this clause, customers were charged monthly variances in fuel costs in the following month. When there were large fuel cost increases in the winter, customers' rates could increase substantially at the same time they were experiencing high consumption. The RSP replaced this clause and also Hydro's water equalization provision, used to balance out Hydro's costs for varying hydraulic production.

From 1986 until the late 1990's, the RSP functioned reasonably well. The combined impact of hydraulic variations, fuel price variations and load variations produced acceptable RSP balances and customer rate impacts.

In 2001, the combined RSP balance grew nearly two and one-half times from \$35 million to \$85 million. RSP balances since 2000 are shown in **Table 1**. Full RSP history since 1986 is contained in Appendix A, and customer rates are in Appendix B.

¹ In 1993, NP's RSP was modified to include provisions relating to Rural rate changes.

Table 1: Customer Plan Balances

RSP Balances (\$ 000)				
	Newfoundland Power	Industrial Customers	Hydraulic Variation	Total RSP
2000	22,684	12,056	N/A	34,740
2001	60,300	24,768	N/A	85,068
2002	92,060	32,711	N/A	124,771
2003	114,790	40,914	N/A	155,704
2004	106,570	35,986	(5,521)	137,035
2005	79,900	23,790	(10,625)	93,065

At Hydro's 2001 General Rate Application (GRA), the RSP became an issue due to the size of uncollected balances owing from customers, and also there was concern that the RSP was distorting the price signal customers received. There were extensive discussions and the Board made a number of findings and recommendations in Order No. P.U. 7 (2002-2003). These included:

- Changes to historical and current plan write-off periods; and
- Simplified calculations to determine the allocation of activity between NP and IC.

At Hydro's next GRA in 2003, the RSP was again an issue due to continuing high balances owing from customers, the resulting distortion to price signals, and proposed customer rate impacts of dealing with the high balances. Hydro, NP, IC and the Consumer Advocate achieved a consensus regarding a number of changes to the operation of the RSP. These changes included:

- A change in the customer recovery/repayment related to hydraulic variations;
- Commencement of an annual fuel rider;
- A change in the customer assignment for the fuel component of customer load variation;

- Forecast of financing charges, combined with a one-year recovery/repayment period for the current plan; and
- Changes to the historical plan and the write-off periods.

In the Board's Order P.U. 40 (2003), the Board approved the changes as agreed to among the parties, effective January 1, 2004. This report reviews each of the changes for the two-year period since implementation.

3 RSP Revisions

Each of the following changes to the RSP, approved by the Board at Hydro's 2003 GRA in P.U. 40 (2003), is reviewed in context of the objective of the change, the 24-month period operating results, and Hydro's conclusions related to the change:

- Hydraulic variation;
- Fuel price variation and fuel rider;
- Customer Load Variation;
- Current plan recovery/repayment;
- Historical plan balances and write-offs.

3.1 *Hydraulic Variation*

Background

The hydraulic variation provision of the RSP smoothes customer rate impacts and stabilizes Hydro's financial position for varying levels of hydraulic production. Variations in hydraulic production (due to changes in rainfall and snowfall) impact levels of production at Holyrood and the amount of No. 6 fuel consumed. Hydro will owe money to customers when hydraulic production is higher than the test year² and there is lower consumption of No. 6 fuel at Holyrood. Customers will owe money to Hydro when hydraulic production is below test year levels and more barrels of No. 6 fuel are consumed at Holyrood. Over an extended period of time, cumulative hydraulic production variations should tend toward zero because test year production is set to the average expected from historical hydrological records.

Prior to 2001, the combined hydraulic and fuel price variations resulted in reasonable RSP balances³. In 2001, high fuel prices combined with below average hydraulic production levels produced RSP balances which were unacceptably high. Also, the method of setting customer

² Customer base rates are established on test year data, which incorporate average hydraulic production levels.

³ See Appendix A.

adjustment rates contributed to the problem because it was based on a perpetual or rolling one-third write-off of customer plan balances each year. With balances growing year over year, the adjustment rates did not produce the desired result of reducing plan balances.

During the 2003 GRA, there were several problems recognized with the hydraulic variation provision of the RSP:

- Over time, variations in hydraulic energy production would tend toward zero, but the value of hydraulic energy variations would never tend toward zero with increases and decreases in energy production priced at different test year fuel prices over the years.
- Increased hydraulic production could offset high fuel prices, obscuring proper marginal thermal production pricing signals.
- Incorporating the full hydraulic variation into annual customer rate adjustments does not accommodate the natural tendency of the hydraulic production variation provision to tend toward zero over time. Furthermore, when the perpetual rolling three-year write-off period was replaced with a discrete two-year write-off period in 2002, inclusion of the full hydraulic variation could unnecessarily increase the volatility of customer rate adjustments.
- Financing charges became a significant factor when dealing with large RSP balances.

A summary of recent changes to the hydraulic variation is shown in **Table 2**:

Table 2: Hydraulic Variation Change Summary

Change	Previous	Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)	Effective Jan 1, 2004 Order No. P.U. 40 (2003)
Customer Assignment Frequency	Monthly	Monthly	Annually
Customer Assignment Amount	100% of activity, plus 100% of financing	100% of activity, plus 100% of financing	25% of life-to-date activity, plus 100% of financing
Recovery Period	Perpetual or rolling 3-year	Discrete 2-year write-off	Discrete 1-year write-off

Beginning January 1, 2004, the customer assignment is now performed annually in December of each year, and is based on 25% of the life-to date hydraulic variation, plus 100% of the current year financing charges. The remaining portion of the life-to-date hydraulic variation remains on Hydro's balance sheet in the Hydraulic Variation Account, with the assumption that future production variations will offset the account balance.

Analysis

The reasonableness of the balance in the hydraulic variation account can be determined with a comparison between the cumulative energy variation and the cumulative account balance. They should both reflect the same circumstance (i.e., above average cumulative production should be represented with a credit account balance, and *vice versa*). **Table 3** shows the cumulative energy and amounts in the Hydraulic Variation Account. These amounts are derived from 2004 test year fuel costs (average of \$30/bbl), and hydraulic production variations will continue to be valued at this level until Hydro receives Board approval for a new test year. With current and projected fuel prices in the \$55/bbl range, a new test year will mean the value of each kWh of variation will be more than 80% higher. Using hydraulic production variances since 1986 at \$55/bbl fuel, the balance in the Hydraulic Variation Account could move between a positive \$80 million and a negative \$120 million.

However, the Hydraulic Variation Account is intended to function over an extended period of time and there has not yet been enough experience to draw any conclusions.

Table 3: Cumulative Hydraulic Variation

(Above) Below Average Production					
	GWh		\$ 000		
Year	Annual	Cumulative	Annual	⁽¹⁾	Cumulative
2004	(183)	(183)	(5,522)		(5,522)
2005	(187)	(370)	(5,104)		(10,626)

⁽¹⁾ Account balance after year-end customer assignment.

Conclusion

The cumulative energy and dollar amounts should continue to be monitored to ensure the reasonableness of the balance of the Hydraulic Variation account and that the balance continues to represent a level which Hydro should carry on its balance sheet.

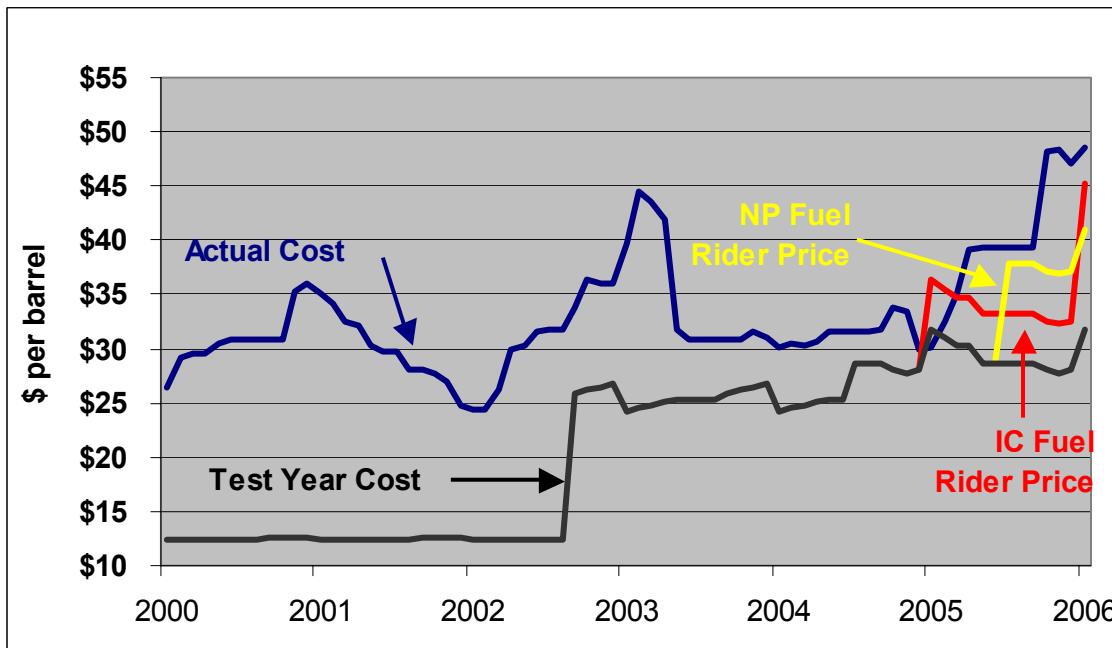
3.2 Fuel Price Variation and Fuel Rider

Background

The fuel price variation provision of the RSP smoothes customer rate impacts and stabilizes Hydro's financial position for changes in the cost per barrel of No. 6 fuel consumed at Holyrood. Hydro will owe money to customers when unit fuel costs are lower than the test year forecast; customers will owe money to Hydro when unit fuel costs are above the test year forecast.

Beginning in 2000, fuel costs per barrel were more than twice the level built into customer base rates, resulting in large balances accumulating in the RSP. Even over the course of only a few months, significant amounts accumulated in the RSP due to fuel price variations: \$14 million for the four-month period September to December, 2002, and a further \$31 million in the following six-month period. **Chart 1** reflects a comparison between actual fuel costs and the fuel prices reflected in customer rates.

Chart 1: No. 6 Fuel



During the 2003 GRA, the following problems were identified with the fuel price variation provision of the RSP:

- A two-year adjustment period did not prevent large plan balances and produced high customer rate adjustments.
- Once large plan balances were established, compound financing resulted in an additional burden.

A summary of recent changes to the fuel price variation is shown in **Table 4**.

Table 4: Fuel Price Variation Change Summary

Change	Previous	Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)	Effective Jan 1, 2004 Order No. P.U. 40 (2003)
Basis for Customer Adjustment Calculations	Current December plan balances	Current December plan balances	NP: Current March plan balance, plus projected financing charges; IC: Current December plan balance plus projected financing charges
Fuel Rider	---	---	Fuel price projection incorporated into customer adjustment rates
Recovery Period	Perpetual or rolling 3-yr	Discrete 2-year write-off	Discrete 1-year write-off

Fuel rider calculations were introduced in an attempt to gain control over fuel price variations in the RSP and to send the proper price signal to customers. Under the existing RSP rules, the fuel rider is eliminated from customer RSP rates upon implementation of new base rates, based on the presumption that the latest available fuel forecast would be incorporated into customer base rates, making a fuel rider unnecessary. Because customer base rates changed on July 1, 2004, fuel riders were first implemented for IC as of January 1, 2005 (based on the September 2004 fuel price forecast) and for NP as of July 1, 2005 (based on the March 2005 fuel price forecast).

The change to the one-year write-off period was also an essential element in providing customers with timely price signals.

Analysis

The performance of the IC fuel rider adjustment to date is shown in **Table 5**. Of the \$3.2 million IC fuel price variation for 2005, \$2.4 million, or 76%, was collected on a current basis through the fuel rider. Also, because the fuel price variation was in part collected on a current basis, financing charges were lower by approximately \$89,000.

Table 5: Industrial Fuel Rider Performance

		IC Fuel Price Variation ⁽¹⁾	Sales kWh ⁽²⁾	Fuel Rider \$/kWh	Fuel Rider Adjustment
		\$	kWh	\$/kWh	\$
2005	Jan	(136,044)	112,560,731	0.00196	220,619
	Feb	114,532	109,136,716	0.00196	213,908
	Mar	406,545	122,483,694	0.00196	240,068
	Apr	319,648	110,682,063	0.00196	216,937
	May	60,554	105,616,596	0.00196	207,009
	Jun	15,881	98,776,302	0.00196	193,602
	Jul	237,445	110,910,423	0.00196	217,384
	Aug	116,722	116,298,285	0.00196	227,945
	Sep	215,033	115,676,988	0.00196	226,727
	Oct	543,057	106,076,844	0.00196	207,911
	Nov	693,829	67,881,626	0.00196	133,048
	Dec	620,173	60,801,066	0.00196	119,170
	Totals	<u><u>3,207,375</u></u>	<u><u>1,236,901,334</u></u>		<u><u>2,424,327</u></u>

(1) December 2005 RSP Report, p. 7
 (2) December 2005 RSP Report, p. 9

The performance of the NP fuel rider adjustment to date is shown in **Table 6**. Of the \$10.1 million NP fuel price variation for the last six months of 2005, \$8.8 million, or 88%, was collected on a current basis through the fuel rider. However, the fuel price variation in the RSP is based on Holyrood production levels and needs to be viewed over a full 12-month period before any firm conclusions can be drawn.

Table 6: Newfoundland Power Fuel Rider Performance

	NP Fuel Price Variation ⁽¹⁾	Sales kWh ⁽²⁾	Fuel Rider \$/kWh	Fuel Rider Adjustment
	\$	kWh	\$/kWh	\$
2005 Jul	908,328	270,899,447	0.00428	1,159,450
Aug	459,002	272,663,419	0.00428	1,166,999
Sep	798,506	279,940,844	0.00428	1,198,147
Oct	2,095,571	345,179,856	0.00428	1,477,370
Nov	2,961,131	402,642,350	0.00428	1,723,309
Dec	<u>2,867,191</u>	<u>492,152,859</u>	0.00428	<u>2,106,414</u>
Totals	<u>10,089,729</u>	<u>2,063,478,775</u>		<u>8,831,689</u>

⁽¹⁾ December 2005 RSP Report, p. 7
⁽²⁾ December 2005 RSP Report, p. 8

As mentioned earlier, there was no fuel rider in place for NP on July 1, 2004, due to the change in base rates at the same time. However, depending upon the timing of a change in base rates, there may be a more current fuel rider forecast available than that used to establish test year base rates. The existing fuel rider provisions could function to update the fuel forecast, if appropriate, at the time new base rates are established.

For example, the September 2003 fuel forecast was used to establish 2004 test year base rates. When base rates were changed on July 1, 2004, the March 2004 fuel forecast was available for the purpose of establishing NP's fuel rider, but was not used in accordance with the current RSP rules. If the March 2004 fuel forecast had been implemented on July 1, 2004, it would have added \$2.70 per barrel into customers' rates and partially offset the average fuel price variation. For NP, the average fuel price variation for the period July 2004 to June 2005 was \$4.95 per barrel. For IC, the average fuel price variation for the period July 2004 to December 2004 was \$3.93 per barrel. Instead, these variances were reflected in NP rates one year later on July 1, 2005 and in IC rates on January 1, 2005.

Conclusion

Hydro is satisfied that to date the fuel riders have anticipated the correct fuel price trend, that they are significantly reducing customer plan balances from what they otherwise would be, and that customers are provided with an appropriate and timely price signal.

Hydro believes that the rules governing the application of the fuel rider should be changed such that when new test year base rates are implemented, if there is a more current fuel rider forecast (either September or March), it should be implemented at the same time as the change in base rates.

3.3 Customer Load Variation

Background

At Hydro's 2003 GRA, the parties agreed that both the revenue and the fuel amounts related to load variation should be assigned to the plan (NP or IC) where the load variation occurred.

Previously, revenues were assigned to the plan based on which customer class caused the load variation, but the related fuel costs were allocated between NP and IC based on the 12 months-to-date energy ratios for each customer class. The change in customer assignment was considered to improve fairness because costs would now be assigned between NP and IC based on causality. Recent changes are summarized in **Table 7**.

Table 7: Customer Load Variation Change Summary

Change	Previous	Effective Sept 1, 2002 Order No. P.U. 7 (2002-2003)	Effective Jan 1, 2004 Order No. P.U. 40 (2003)
Fuel Component of Load Variation	Cost of service allocation	Energy allocation ratios	100% where incurred
Revenue Component of Load Variation	100% where incurred	100% where incurred	100% where incurred
Recovery Period	Perpetual or rolling 3-year	Discrete 2-year write-off	Discrete 1-year write-off

Analysis

One measure of fairness when it comes to evaluating the customer allocations performed in the RSP is the degree to which the RSP adjustment rate anticipates a re-setting of customer base rates using a Cost of Service study. If the change were to be incorporated into a new test year, the RSP adjustment rate should be representative of the change to base rates. Hydro has evaluated both the previous and the existing RSP allocation of customer load variation against the Cost of Service treatment⁴. This evaluation showed that both the previous and existing methods produce widely different results which led Hydro to conclude that the customer allocation for the load variation should be revised so that it is more closely aligned with Cost of Service treatment.

Hydro intends to propose a change in the method of allocating the load variation component of the RSP such that both the revenue and the fuel components of the load variation will be allocated between NP and IC using customer energy allocation ratios. In effect, customers will be allocated with Hydro's bottom line impact in the same proportion as energy costs are shared in a test year Cost of Service. **Table 8** compares the 2004 Test Year Cost of Service implications (based on \$30/barrel No. 6 fuel) of IC load variations with the existing and previous RSP treatments, as well as the proposed treatment. **Table 9** shows the same IC load variations based on a preliminary 2007 Test Year Cost of Service and \$55/barrel No. 6 fuel.

Table 8: IC Load Variation Analysis (2004 Test Year)

	Net Customer Impacts (\$'000) (\$30/barrel No. 6 Fuel)			
	IC Load Reduction 100 GWh		IC Load Increase 100 GWh	
	IC	NP	IC	NP
2004 Cost of Service treatment	(367)	(1,436)	493	1,623
Existing RSP allocation (100% fuel allocation)	(2,087)	0	2,087	0
Previous RSP allocation (fuel allocated on energy ratios)	1,757	(3,547)	(1,641)	3,440
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(402)	(1,555)	453	1,507

⁴ Cost of Service treatment reflects the change in fuel costs associated with the load variation, plus the reallocation of test year energy costs due to the change in customer allocation energy ratios. NP impacts contained in this report do not include any re-allocation of the Rural deficit.

Table 9: IC Load Variation Analysis (Preliminary 2007 Test Year)

	Net Customer Impacts (\$ 000) (\$55/barrel No. 6 Fuel)			
	IC Load Reduction 100 GWh		IC Load Increase 100 GWh	
	IC	NP	IC	NP
2007 Cost of Service treatment	(618)	(3,774)	823	4,022
Existing RSP allocation (100% fuel allocation)	(4,930)	0	4,930	0
Previous RSP allocation (fuel allocated on energy ratios)	2,673	(7,041)	(2,434)	6,819
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(636)	(3,976)	771	3,851

Tables 8 and **9** both show that the existing allocation of IC load variation is an improvement over the previous method, but that it is not closely aligned with the Cost of Service treatment. However, for both test years, the tables demonstrate that the proposed allocation method is indeed in line with the Cost of Service treatment.

While the existing RSP allocation may seem advantageous to IC in light of the recent reduction in Abitibi Consolidated Inc. (ACI) Stephenville's load, the reverse is also true. If there is an increase in IC load, the IC will be allocated with 100% of the fuel costs associated with the increase in load.

Results for the same load variation for NP, for both the 2004 and 2007 Cost of Service, are shown in **Table 10** and **Table 11**.

Table 10: NP Load Variation Analysis (2004 Test Year)

	Net Customer Impacts (\$ 000) (\$30/barrel No. 6 Fuel)			
	NP Load Reduction 100 GWh		NP Load Increase 100 GWh	
	NP	IC	NP	IC
2004 Cost of Service treatment	504	(397)	(487)	459
Existing RSP allocation (100% fuel allocation)	(62)	0	62	0
Previous RSP allocation (fuel allocated on energy ratios)	1,230	(992)	(1,191)	962
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	(45)	(13)	46	13

Table 11: NP Load Variation Analysis (Preliminary 2007 Test Year)

	Net Customer Impacts (\$ 000) (\$55/barrel No. 6 Fuel)			
	NP Load Reduction 100 GWh		NP Load Increase 100 GWh	
	NP	IC	NP	IC
2007 Cost of Service treatment	1,205	(652)	(1,172)	753
Existing RSP allocation (100% fuel allocation)	170	0	(170)	0
Previous RSP allocation (fuel allocated on energy ratios)	2,008	(1,269)	(1,950)	1,229
Proposed RSP Allocation (fuel and revenue allocated on energy ratios)	134	25	(135)	(24)

The improvement of the proposed allocation method over the existing allocation method is not as pronounced for NP as it is for IC. With NP's end block rate based on the average cost of No. 6 fuel, NP's net load variation will be small.

Conclusion

Hydro intends to propose a change to the customer allocation for the load variation provision of the RSP such that both the revenue and the fuel components of the load variation for both NP and IC are allocated on customer energy ratios.

3.4 Current Plan Recovery/Repayment

At a time when RSP balances were high, customer adjustment rates were based on a perpetual or rolling three-year write-off, and excluded forecast financing charges. Both of these factors contributed to unreasonably high plan balances and excessive financing charges, resulting in an improper price signal. The rolling three-year write-off did not deal successfully with significant activity in the plan. Rate impacts were smoothed and deferred, but high plan balances and compound financing charges placed an additional burden on ratepayers.

Commencing July 1, 2005 for NP and January 1, 2006 for IC, customer adjustment rates to recover current plan balances incorporated forecast financing charges and a one-year recovery period. Because the annual fuel rider has controlled current plan balances effectively, the anticipated benefits of these rate-setting provisions have not been necessary, but may prove useful in the future. **Table 12** shows representative plan balances for both NP and IC and the

difference in financing charges between the previous method and the current method of setting adjustment rates

Table 12: Comparison of Financing Charges

\$ 000					
NP			IC		
Plan Balance	Financing Charges		Plan Balance	Financing Charges	
	Previous Recovery	Current Recovery		Previous Recovery	Current Recovery
30,000	2,391	1,143	10,000	818	401
60,000	4,783	2,287	20,000	1,636	801
90,000	7,172	3,430	30,000	2,454	1,202

Conclusion

Hydro believes that should large RSP balances recur, both the forecast financing and the one-year recovery provisions will prove worthwhile and these provisions should be retained.

3.5 Historical Plan Balances and Write-Offs

Balances in the RSP first became an issue at Hydro's 2001 GRA due to the large amounts owed by NP and IC to Hydro. In the order arising from that GRA, P.U. 7 (2002-2003), the Board fixed the outstanding historical RSP balance as of August 2002 and changed the recovery period for this balance from a perpetual annual one-third collection to a fixed five-year period. Outstanding RSP balances were again an issue at Hydro's 2003 GRA, due to an additional \$61 million activity occurring between September, 2002 and December 2003. In Order P.U. 40 (2003), the Board rolled the December 2003 current plan balances in with the historical plan balance, and maintained the original 5-year recovery period for the revised historical plan. The IC recovery period is due to finish December 31, 2007; NP's recovery period is due to finish June 30, 2008.

Table 13 shows a recap of the historical RSP balances.

Table 13: Historical RSP

		RSP Balances (\$ million)			Write-Off Period	Collection Rates ⁽¹⁾ (mills/kWh)	
		NP	IC	Total		NP	IC
Dec 2002	Original Historical	76.2	28.0	104.3	5	3.24	4.23
Dec 2003	Original Historical	70.2	24.4	94.6		3.66	4.68
	Sep 02 to Dec 03 Activity	<u>44.6</u>	<u>16.6</u>	<u>61.1</u>		<u>2.49</u>	<u>3.18</u>
	Revised Historical	<u>114.8</u>	<u>40.9</u>	<u>155.7</u>	4	<u>6.15</u>	<u>7.86</u>
Dec 2004	Revised Historical	101.7	32.3	133.9	3	6.36	7.51
Dec 2005	Revised Historical	79.8	25.1	104.9	2	7.07	10.14
Dec 2006	Revised Historical (Forecast)	52.7	18.5	71.1	1	7.52	22.77
Dec 2007	Revised Historical (Forecast)	19.4	0.0	19.4	--	--	--

⁽¹⁾ NP rate is effective July 1 of the next year; IC rate is effective January 1 of the next year.

With the introduction of the fuel rider and the one-year write-off period for the current plan, annual RSP customer adjustment rates should, in the future, be more representative of current year activity. These changes, in conjunction with the change in customer assignment related to the hydraulic variation provision, are intended to prevent current activity from escalating customer balances to the point where current activity would once again be rolled into historical plan balances and written off over an extended period.

The Board has indicated⁵ that further extension of the recovery period beyond 2007 is not consistent with the principle of intergenerational equity and increases the risk that future industrial customers may be required to pay for costs that they did not cause to be incurred.

Hydro believes that the new provisions of the RSP will significantly reduce the size of future plan balances with the intent that the 2003 levels will not recur. With the collection of current activity under much-improved control, Hydro has indicated a willingness to consider some flexibility with the collection of outstanding historical plan balances, provided there is agreement among customers and provided consideration is given to the issue of intergenerational equity.

⁵ Board Order P.U. 54(2004) was issued in response to a request by IC for rate relief when the fuel rider was implemented January 1, 2005.

Conclusion

Hydro has indicated a willingness to extend the recovery period for the historical RSP, provided that there is agreement among customers and there is consideration given to the issue of intergenerational equity.

4 Customer Impacts

4.1 IC Rate Impacts

This section explores the significant customer rate impacts related to the combined effects of the IC historical plan balances and IC load variations.

The January, 2006 rate for the IC historical plan is 10.14 mills/kWh, and was intended to collect \$12.5 million. The rate was established based on 12 months-to-date energy sales for the class as of December, 2005, and does not include projected financing, unlike the adjustment rate for the current plan. With ACI Stephenville's load reduced for all of 2006, this rate is forecast to collect only \$8.2 million of the \$12.5 million, leaving an additional \$4.3 million for collection in 2007. This extra \$4.3 million, plus financing charges for 2006 of \$1.6 million and the reduced IC load are forecast to more than double the mill rate for the historical IC plan for 2007 from 10.14 mills/kWh in 2006 to 22.77 mills/kWh in 2007.

By itself, this increase would appear to be onerous to the IC. However, the large increase in the historical plan rate is projected to be offset with a considerable credit from the current plan. The credit is forecast to be 15.43 mills/kWh and is due to the net fuel savings associated primarily with ACI Stephenville's reduced load in 2006, accompanied by forecast higher than average hydraulic production for 2006. Without the combined impact from the historical and current plans, the IC RSP adjustment rate would be unstable. The IC rates for 2005 to 2007 are shown in **Table 14**. The projected change in the RSP rate on January 1, 2007 due to the elimination of the fuel rider should be considered in context of the full change in base rates, which is beyond the scope of this review.

Table 14: IC RSP Rates

	(mills/kWh)		
	1-Jan-2005 Actual	1-Jan-2006 Actual	1-Jan-2007 Forecast
Current Plan	2.70	(1.09)	(15.43)
Historical Plan	7.51	10.14	22.77
Fuel Rider	1.96	6.40	-
Total RSP Adjustment Rate	12.17	15.45	7.34

The change proposed for the customer allocation of load variation, plus adherence to the existing recovery schedule for historical plan balances should act to reduce such volatility in customer rates.

4.2 RSP Adjustment Rates for Aur Resources

In 2006, the special circumstances surrounding Hydro's new Industrial customer, Aur Resources, Inc., led Hydro to propose⁶ that Aur Resources should be exempt from paying the IC historical plan rate for 2006. Hydro considered this exemption was warranted as a measure of fairness to address the intergenerational equity referred to previously.

Conclusion

If the Board grants the proposed exemption for Aur Resources from the historical RSP adjustment rate for 2006, the exemption should continue until the IC historical plan is eliminated.

4.3 NP Rate Impacts

NP's load is generally stable and growing, and NP will not experience the wide swings in RSP rates which the IC have experienced due to load variation. However, NP currently has a significant annual recovery for its share of the historical RSP. While this rate remains stable until the historical plan recovery is completed June 30, 2008, NP's RSP adjustment rate for July 1, 2008 will reflect the removal of the historical plan component of the RSP. **Table 15** shows actual and forecast RSP rates for NP.

Table 15: NP RSP Rates

	(mills/kWh)			
	1-Jul-2005 Actual	1-Jul-2006 Forecast	1-Jan-2007 Forecast	1-Jul-2007 Forecast
Current Plan	0.81	(0.29)	(0.29)	(1.90)
Historical Plan	6.36	7.07	7.07	7.52
Fuel Rider	4.28	9.38	-	0.13
Total RSP Adjustment Rate	11.45	16.16	6.78	5.75

⁶ Hydro's Application to the Board dated January 18, 2006.

As with IC, elimination of the fuel rider on January 1, 2007 should be considered in the context of the change in base rates, and not in isolation of the total RSP adjustment rate.

4.4 Additional IC Concerns

In the last year, Hydro has had discussions with each of its Industrial customers relating to various aspects of the RSP. With record high fuel prices in 2005, customer concerns and requests have ranged from further deferrals of historical and current plan balances, to each customer paying its own share of plan balances. ACI Stephenville's impact on both historical and current plans has been a concern in that customers believe they should not be charged with any increase due to ACI Stephenville's load reduction.

Options for changing the RSP include:

- a single plan between IC and NP, with a single adjustment rate;
- separate individual IC plans; and
- no plan.

Hydro is willing to explore with its customers any alternatives which respond to customer needs and which maintain the essential objectives of the RSP, with due regard to fairness between NP and IC, and among each of the IC. Hydro believes that these options warrant consideration in the future, after the existing historical plan balances, along with the offsetting credit from the current plan, have been repaid. In the interim, Hydro offers the following comments.

A Single Plan

If the Board accepts Hydro's proposal for allocation of the load variation component of the plan, a single plan for NP and IC is possible. It would provide cross-subsidization between IC and NP for the difference in what an adjustment rate was designed to repay/collect and what it actually repaid/collected. In other words, a common balance would be used each year for annual rate-setting. Any under or over collection or repayment would be readjusted across both NP and IC each year.

For a single plan to be implemented, the following would have to happen:

- The proposed common allocation of the load variation component of the plan would have to be approved by the Board;
- The effective date for rate adjustments would have to be the same for both NP and IC; an
- Any plan component which is not common between NP and IC; e.g., Rural rate alterations, would have to be adjusted with a separate rate or mechanism for NP.

In general, Hydro believes that a single plan would transfer some risk from the more volatile IC class to NP. The allocations performed within the RSP are not perfect, and the Board may wish to mitigate IC rate impacts in this fashion.

Individual IC Plans

With a small number of customers in the IC rate class, it is easy to conceptualize individual plans for each of the IC. Hydro could consider supporting individual plans if individual plans did not preclude a common customer allocation of load variations, as previously discussed. Hydro envisions that individual plans would entail customer acceptance of the individual specific liability, supported by contract provisions. It is also conceivable that individual IC plans would allow tailored repayment/refund provisions that were mutually acceptable between the individual customer and Hydro.

No Plan

A third possibility is that Hydro should offer an IC rate that excludes RSP adjustments and instead, includes some form of monthly fuel adjustment. Presumably, elimination of the IC RSP would also effectively eliminate the IC load variation provision. Hydro is not willing to forego the bottom line protection which the load variation provision affords. The incremental cost of Holyrood production (8.9 ¢/kWh) is significantly higher than the average all-energy industrial rate (5.0 ¢/kWh). While savings from a load reduction would be addressed through Hydro's excess earnings account, fuel costs associated with an increase in load would negatively impact Hydro's net income at the rate of 3.9 ¢/kWh for each additional kWh sold.

Conclusion

There are several possibilities for fundamental changes to the RSP. Hydro is willing to pursue these or additional options with NP and the IC, but Hydro does not believe such changes should be entertained until the historical plan balances, along with the offsetting credits from the current plan, have been taken care of.

5 Other Issues

This review of the RSP has raised the issue of isolated systems diesel fuel and power purchase costs which Hydro believes is worthwhile exploring in the context of a complete RSP review.

5.1 ***Isolated Diesel Fuel and Power Purchase Costs***

There has been an unprecedented increase in both diesel fuel and fuel-related power purchase costs⁷ for isolated systems between Hydro's 2004 test year forecast and the 2007 forecast.

Table 16: Isolated Systems Fuel-Related Costs

	(\$ 000)		Increase	
	2004 Test Year	2007 Forecast	\$ 000	%
Isolated Systems Diesel Fuel	6,736	10,244	*	3,508
Isolated Systems Power Purchases	771	1,677	906	118%
Total	7,507	11,921	4,414	59%

* Excludes Natuashish

Hydro believes that such variances present an unreasonable regulated net income risk to Hydro.

For the 2004 test year forecast, Hydro's regulated net income was set at \$11,612,000, and the expected variance in 2007 represents more than one-third of 2004 test year net income.

Hydro wishes to explore options with its customers and the Board to identify a reasonable solution that will limit Hydro's financial exposure (both positive and negative) to variances in isolated systems diesel fuel and power purchase costs. Hydro's aim is to avoid an undue administrative burden by using aggregate isolated diesel fuel and power purchase data. Through a new provision of the RSP (similar to existing Rural deficit impacts which are stabilized), such a mechanism would be proposed to collect additional fuel and power purchase costs from NP, and similarly, would refund fuel and power purchase savings to NP.

⁷ Power purchases for isolated systems are, in part, based on avoided fuel costs.

Conclusion

Hydro believes that its financial exposure due to variations in the uncontrollable price of diesel fuel, affecting both diesel fuel and power purchase costs for isolated systems, presents an unreasonable net income risk for Hydro and Hydro should be afforded some protection through the RSP.

6 Customer Perspectives

Hydro anticipates that the conclusions and proposals contained in this report will be reviewed with Hydro's major customers during the mediation sessions.

7 Conclusions

1. Hydraulic Variation: Life-to-date energy and dollar amounts should continue to be monitored to ensure the reasonableness of the balance of the Hydraulic Variation account and that the balance continues to represent a level which Hydro is willing to carry on its balance sheet.
2. Fuel Variation/Fuel Rider: Hydro is satisfied that to date the fuel riders have anticipated the correct fuel price trend, that they are significantly reducing customer plan balances from what they otherwise would be, and that customers are provided with an appropriate and timely price signal.
3. Hydro intends to propose a change to the rules governing the application of the fuel rider such that when new test year base rates are implemented, if the fuel rider forecast is more current, it should be implemented at the same time as the change in base rates.
4. Load Variation: Hydro intends to propose a change to the customer allocation for the load variation provision of the RSP such that both the revenue and the fuel components of the load variation are allocated between NP and IC based on customer energy ratios.
5. Historical Plan Balances: Hydro has indicated a willingness to extend the recovery period for the historical RSP, provided that there is agreement among customers and there is consideration given to the issue of intergenerational equity.
6. If the Board grants the proposed exemption for Aur Resources from the historical RSP adjustment rate for 2006, the exemption should continue until the IC historical plan is eliminated.
7. Hydro believes that should large RSP balances recur, both the forecast financing and the one-year recovery provisions will prove worthwhile and these provisions should be retained.

8. There are several possibilities for fundamental changes to the RSP. Hydro is willing to pursue these or additional options with NP and the IC, but Hydro does not believe such changes should be entertained until the historical plan balances, along with the offsetting credits from the current plan, have been taken care of.
9. Diesel Fuel Impacts: Hydro believes that its financial exposure due to variations in the uncontrollable price of diesel fuel, affecting both diesel fuel and power purchase costs for isolated systems, presents an unreasonable net income risk to Hydro, and Hydro should be afforded some protection through the RSP.

Appendix A: RSP History – Activity and Balances

(\$ 000)										
	Annual Activity						Adjustment	Plan Balances		
	Hydraulic	Fuel Cost	Load	RRA ⁽¹⁾	Financing	Other		NP	IC	Hydraulic
1986	12,045	(11,814)	(2,506)		267		(2,008)	(1,889)	(119)	(2,008)
1987	54,280	(35,044)	(1,582)		709		18,363	(68)	8,063	8,222
1988	(726)	(34,175)	62		170		(34,669)	(245)	(18,498)	(131)
1989	15,341	(33,097)	1,378		(3,508)		(19,886)	5,704	(31,004)	(1,807)
1990	13,619	3,175	(1,781)		(1,666)	8,941 ⁽²⁾	22,288	10,010	(4,445)	3,932
1991	(2,757)	(4,853)	(3,054)		(326)		(10,990)	3,803	(10,530)	2,830
1992	(198)	3,469	1,482		(111)	6,488 ⁽³⁾	11,130	664	593	3,505
1993	(4,668)	7,397	1,834	(26)	746		5,283	47	3,825	5,636
1994	(17,077)	3,509	2,315	(120)	32		(11,341)	(2,120)	(5,610)	1,575
1995	(3,733)	19,015	1,820	(134)	537		17,505	(694)	6,900	6,016
1996	(7,419)	21,805	2,441	(140)	2,005		18,692	(1,506)	21,002	9,160
1997	(8,545)	24,507	(560)	(478)	3,346		18,270	(7,103)	27,644	13,734
1998	(967)	12,068	3,435	122	4,150		18,808	(11,227)	33,009	15,776
1999	(15,859)	9,128	5,050	(394)	3,223		1,148	(15,427)	21,436	12,892
2000	(16,614)	29,359	521	(880)	2,724	(862) ⁽⁴⁾	14,248	(13,734)	22,684	12,056
2001	5,243	56,879	(3,506)	125	4,438		63,179	(11,152)	60,300	24,768
2002	6,967	46,113	(5,313)	(326)	7,189	184 ⁽⁵⁾	54,814	(13,921)	92,060	32,711
2003	4,130	36,534	(2,846)	(227)	10,333		47,924	(16,669)	114,790	40,914
2004	Current	(7,362)	12,665	590	(949)	79	(12) ⁽⁵⁾	5,012	(1,951)	4,909
	Historical					10,459	5 ⁽⁵⁾	10,464	(32,236)	3,713 ⁽⁵⁾
	Total	(7,362)	12,665	590	(949)	10,538	(6)	15,476	(34,187)	(5,521) ⁽⁵⁾
									101,660	32,273
										133,933
2005	Current	(8,646)	16,289	(1,431)	(2,329)	(309)		3,574	(18,660)	120
	Historical					8,768		8,768	(37,835)	(1,296) ⁽⁵⁾
	Total	(8,646)	16,289	(1,431)	(2,329)	8,459		12,342	(56,494)	(10,625) ⁽⁵⁾
									79,900	23,790
										93,065

⁽¹⁾ Rural Rate Alteration

⁽²⁾ 1989 PDD loss

⁽³⁾ 1991 Retail cost deferral

⁽⁴⁾ Industrial Rural deficit allocation

⁽⁵⁾ Billing adjustments

Appendix B: RSP History – Customer Adjustment Rates

Recovery (Refund) Rates (mills/kWh)									
Newfoundland Power									
	Balance								
	Dec 31	Adjustment Rate (mills/kWh) ⁽¹⁾							
	\$ 000	Cur / Hist	Fuel Rider	Total					
1986	(1,889)	0.04			(119)				
1987	8,063	0.41			8,222	0.58			
1988	(18,498)	(3.12)			(131)	0.92			
1989	(31,004)	(1.30)			(1,807)	(0.52)			
1990	(4,445)	(0.58)			3,932	0.24			
1991	(10,530)	(0.33)			2,830	0.24			
1992	593	0.05			3,505	0.54			
1993	3,825	0.30			5,636	1.37			
1994	(5,610)	(0.45)			1,575	0.69			
1995	6,900	0.55			6,016	1.24			
1996	21,002	1.67			9,160	2.07			
1997	27,644	2.14			13,734	3.15			
1998	33,009	2.65			15,776	4.87			
1999	21,436	1.75			12,892	3.50			
2000	22,684	1.77			12,056	2.80			
2001	60,300	1.77			24,768	5.14			
2002	⁽²⁾	1.77				2.80			
2002	92,060	3.24			32,711	4.23			
2003	114,790	6.85			40,914	7.87			
2004	Current	4,909	0.81	4.28	5.09	3,713	2.70	1.96	4.66
	Historical	101,660	6.36		6.36	32,273	7.51		7.51
	Total	106,569	7.17	4.28	11.45	35,986	10.21	1.96	12.17
2005	Current	120	2.61	7.93 ⁽³⁾	10.54	(1,296)	(1.09)	6.40	5.31
	Historical	79,781	6.83		6.83	25,086	10.14		10.14
	Total	79,900	9.44	7.93	17.37	23,790	9.05	6.40	15.45

(1) Adjustment rates for NP are effective July 1 of the following year; adjustment rates for IC are effective January 1 of the following year.

(2) Sept 1, 2002

(3) Forecast

RSP Rules and Components to be charged to Industrial Customers

1 Q. Please compare the results obtained in PUB-NLH-17 to those obtained in Vale-NLH-

2 4.

3

4

5 A. Please see the attached schedules. The difference between the class allocation to
6 NP and the IC using the proposed RSP methodology compared with the Cost of
7 Service is a result of the allocation of the other Test Year energy costs. Using the
8 Cost of Service study, the assumed load changes for each scenario reallocate these
9 other Test Year costs, while the RSP does not.

Comparison of PUB-NLH-17 to V-NLH-4

Scenario (i): Current forecast load for both NP and IC for 2014 to 2016

Line No	A			B			C			D		E		F		G		H	
	Sales Variance (kWh)	Firm Energy Rate (\$/kWh)	Increase (Decrease) in Revenue (\$)	PUB-NLH-17 Attachment 1, Col B	Col A x Col B	Load Variation (\$)	Total Increase (Decrease) to Customer Class (\$)	PUB-NLH-17 Attachment 1, Col F	Load Variation (\$)	PUB-NLH-17 Attachment 1, Col G	Increase (Decrease) to Customer Class Before Rural Deficit (\$)	PUB-NLH-17 Attachment 1, Col C + Col D	Col C + Col F	Cost of Service Increase (Decrease) in Revenue Requirement (\$)	V-NLH-4 Attachment 2, Col C				
2014																			
1	Utility	145,900,000	0.10400	15,173,600		10,568,691	25,742,291		29,704,604	44,878,204				45,307,573					
2	Industrial Customers	191,200,000	0.04782	9,143,184		24,591,744	33,734,928		3,102,833	12,246,017				13,332,197					
2015																			
3	Utility	198,200,000	0.10400	20,612,800		14,357,193	34,969,993		50,478,249	71,091,049				71,739,178					
4	Industrial Customers	363,900,000	0.04782	17,401,698		46,804,057	64,205,755		6,730,143	24,131,841				26,217,962					
2016																			
5	Utility	264,100,000	0.10400	27,466,400		19,130,852	46,597,252		72,620,995	100,087,395				100,532,210					
6	Industrial Customers	551,200,000	0.04782	26,358,384		70,894,191	97,252,575		11,895,246	38,253,630				41,821,196					

Comparison of PUB-NLH-17 to V-NLH-4

Scenario (ii): 100 GHW load reduction for IC for 2014 to 2016 and current forecast load for NP for 2014 to 2016

Comparison of PUB-NLH-17 to V-NLH-4

Scenario (iii): 100 GHW load reduction for NP for 2014 to 2016 and current forecast load for IC for 2014 to 2016

Line No	Sales Variance (kWh)	Firm Energy Rate (\$/kWh)	Increase (Decrease) in Revenue (\$)	Existing Methodology		Proposed Methodology		Cost of Service Increase (Decrease) in Revenue Requirement (\$)
				Load Variation (\$)	Class	Load Variation (\$)	Customer Class Before Rural Deficit (\$)	
	PUB-NLH-17			PUB-NLH-17		PUB-NLH-17		V-NLH-4
	Attachment 1,			Attachment 3,		Attachment 3,		Attachment 4,
	Col B		Col A x Col B	Col F	Col C + Col D	Col G	Col C + Col F	Col C
2014								
1	Utility	45,900,000	0.10400	4,773,600	3,324,900	8,098,500	23,520,122	28,293,722
2	Industrial Customers	191,200,000	0.04782	9,143,184	24,591,744	33,734,928	2,500,384	11,643,568
2015								
3	Utility	98,200,000	0.10400	10,212,800	7,113,403	17,326,203	44,363,601	54,576,401
4	Industrial Customers	363,900,000	0.04782	17,401,698	46,804,057	64,205,755	6,018,798	23,420,496
2016								
5	Utility	164,100,000	0.10400	17,066,400	11,887,061	28,953,461	66,554,166	83,620,566
6	Industrial Customers	551,200,000	0.04782	26,358,384	70,894,191	97,252,575	11,090,820	37,449,204

Comparison of PUB-NLH-17 to V-NLH-4

Scenario (iv): 100 GHW load increase for IC for 2014 to 2016 and current forecast load for NP for 2014 to 2016

Line No	Sales Variance (kWh)	Firm Energy Rate (\$/kWh)	Increase (Decrease) in Revenue (\$)	Existing Methodology		Proposed Methodology		Cost of Service Increase (Decrease) in Revenue Requirement (\$)	
				Total Increase (Decrease) to Customer Class		Increase (Decrease) to Customer Class Before Rural Deficit (\$)			
				Load Variation (\$)	PUB-NLH-17 Attachment 4, Col F	Load Variation (\$)	PUB-NLH-17 Attachment 4, Col G		
	PUB-NLH-17 Attachment 1, Col B		Col A x Col B						
2014									
1	Utility	145,900,000	0.10400	15,173,600	10,568,691	25,742,291	39,982,186	55,155,786	55,876,485
2	Industrial Customers	291,200,000	0.04782	13,925,184	37,453,535	51,378,719	4,872,920	18,798,104	20,221,214
2015									
3	Utility	198,200,000	0.10400	20,612,800	14,357,193	34,969,993	60,235,231	80,848,031	81,666,317
4	Industrial Customers	463,900,000	0.04782	22,183,698	59,665,848	81,849,546	9,070,901	31,254,599	33,806,646
2016									
5	Utility	264,100,000	0.10400	27,466,400	19,130,852	46,597,252	81,868,987	109,335,387	109,815,836
6	Industrial Customers	651,200,000	0.04782	31,140,384	83,755,982	114,896,366	14,807,521	45,947,905	50,112,260

Comparison of PUB-NLH-17 to V-NLH-4

Scenario (v): 100 GHW load increase for NP for 2014 to 2016 and current forecast load for IC for 2014 to 2016

Line No	Sales Variance (kWh)	Firm Energy Rate (\$/kWh)	Increase (Decrease) in Revenue (\$)	Existing Methodology		Proposed Methodology		Cost of Service Increase (Decrease) in Revenue Requirement (\$)	
				Total Increase (Decrease) to Customer Class		Increase (Decrease) to Customer Class Before Rural Deficit (\$)			
				Load Variation (\$)	PUB-NLH-17	Load Variation (\$)	PUB-NLH-17		
Attachment 1, Col B		Col A x Col B		Attachment 5, Col F		Attachment 5, Col G		Attachment 6, Col C + Col F	
2014									
1	Utility	245,900,000	0.10400	25,573,600	17,812,482	43,386,082	35,919,814	61,493,414	61,605,245
2	Industrial Customers	191,200,000	0.04782	9,143,184	24,591,744	33,734,928	3,687,805	12,830,989	14,492,454
2015									
3	Utility	298,200,000	0.10400	31,012,800	21,600,984	52,613,784	56,624,621	87,637,421	87,838,256
4	Industrial Customers	363,900,000	0.04782	17,401,698	46,804,057	64,205,755	7,421,501	24,823,199	27,634,707
2016									
5	Utility	364,100,000	0.10400	37,866,400	26,374,642	64,241,042	78,719,795	116,586,195	116,454,113
6	Industrial Customers	551,200,000	0.04782	26,358,384	70,894,191	97,252,575	12,677,819	39,036,203	43,473,983

Newfoundland and Labrador Hydro
Comparison of PUB-NLH-17 to V-NLH-4

NP-NLH-278, Attachment 2,

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Attachment 6

Scenario (vi): 100 GHW load increase for both NP and IC for 2014 to 2016

Line No	Sales Variance (kWh)	Firm Energy Rate PUB-NLH-17 Attachment 1, Col B	Increase (Decrease) in Revenue (\$)	Existing Methodology		Proposed Methodology		Cost of Service Increase (Decrease) in Revenue Requirement (\$) V-NLH-4 Attachment 7, Col C	
				Total Increase (Decrease) to Customer		Increase (Decrease) to Customer Class			
				Load Variation (\$)	Class	Load Variation (\$)	Deficit (\$)		
2014									
1	Utility	245,900,000	0.10400	25,573,600	17,812,482	43,386,082	46,145,484	71,719,084	72,035,517
2	Industrial Customers	291,200,000	0.04782	13,925,184	37,453,535	51,378,719	5,527,787	19,452,971	21,546,537
2015									
3	Utility	298,200,000	0.10400	31,012,800	21,600,984	52,613,784	66,339,467	97,352,267	97,642,734
4	Industrial Customers	463,900,000	0.04782	22,183,698	59,665,848	81,849,546	9,820,605	32,004,303	35,370,047
2016									
5	Utility	364,100,000	0.10400	37,866,400	26,374,642	64,241,042	87,934,487	125,800,887	125,630,235
6	Industrial Customers	651,200,000	0.04782	31,140,384	83,755,982	114,896,366	15,637,651	46,778,035	51,894,155

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Comparison of PUB-NLH-17 to V-NLH-4

NP-NLH-278, Attachment 2,

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Attachment 7

Scenario (vii): 100 GHW load reduction for both NP and IC for 2014 to 2016

Line No	Sales Variance (kWh)	Firm Energy Rate PUB-NLH-17 Attachment 1, Col B	Increase (Decrease) in Revenue (\$)	Existing Methodology		Proposed Methodology		Cost of Service Increase (Decrease) in Revenue Requirement (\$) V-NLH-4 Attachment 8, Col C	
				Total Increase (Decrease) to Customer		Increase (Decrease) to Customer Class Before Rural Deficit (\$)			
				Load Variation (\$)	Class (\$)	Load Variation (\$)	Deficit (\$)		
2014									
1	Utility	45,900,000	0.10400	4,773,600	3,324,900	8,098,500	12,876,243	17,649,843	17,999,806
2	Industrial Customers	91,200,000	0.04782	4,361,184	11,729,953	16,091,137	1,140,557	5,501,741	5,808,199
2015									
3	Utility	98,200,000	0.10400	10,212,800	7,113,403	17,326,203	34,276,281	44,489,081	45,323,373
4	Industrial Customers	263,900,000	0.04782	12,619,698	33,942,266	46,561,964	4,048,124	16,667,822	17,678,338
2016									
5	Utility	164,100,000	0.10400	17,066,400	11,887,061	28,953,461	57,009,547	74,075,947	74,985,910
6	Industrial Customers	451,200,000	0.04782	21,576,384	58,032,400	79,608,784	8,510,247	30,086,631	32,286,601