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**Board of Commissioners of Public Utilities
Financial Consultants Report
Newfoundland and Labrador Hydro
Compliance Application**

March 15, 2017

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1 **Introduction and Scope**

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3 On January 27, 2017, Newfoundland and Labrador Hydro (“the Company”) (“Hydro”) submitted an
4 Application filed in compliance with Order No. P.U. 49 (2016) (“the Compliance Application”) to the Board
5 of Commissioners of Public Utilities (“the Board”) with respect to its General Rate Application for 2014 and
6 2015 test years. The Compliance Application reflects the orders included in Board Order No. P.U. 49 (2016)
7 (the “GRA Order”) that was issued by the Board on December 1, 2016.

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9 Grant Thornton LLP (“Grant Thornton”) has undertaken a review of the Company’s Compliance
10 Application. The detailed scope of our financial review is as follows:

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- 12 • Review revised proposed 2013 average rate base;
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- 14 • Review Hydro’s proposals and calculations with respect to:
 - 15 ○ the 2014 and 2015 Test Year revenue requirement, average rate base and rate of return on
 - 16 average rate base for purpose of determining the 2015 revenue deficiency and the 2014
 - 17 revenue deficiency;
 - 18 ○ the 2015 Test Year revenue requirement, average rate base and rate of return on average rate
 - 19 base for rate setting; and
 - 20 ○ the 2016 revenue requirement, average rate base and rate of return on average rate base for
 - 21 purpose of determining the 2016 revenue deficiency.
- 22
- 23 • Review the recovery of revenue deficiencies:
 - 24 ○ Revenue deficiency calculations for 2014, 2015, and 2016 and proposed allocation of revenue
 - 25 deficiencies by customer class currently billed on interim rates;
 - 26 ○ Review proposals with respect to recovery of the deficiencies from customers; and
 - 27 ○ the 2017 revenue deficiency calculation included in Exhibit 3;
- 28
- 29 • Review of the impact of the RSP;
- 30
- 31 • Review the proposed four deferral and recovery mechanisms included in Exhibit 5;
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- 33 • Review excess earning definition; and
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- 35 • Verify Hydro’s proposed Schedule of Rates, Rules and Regulations as set out in Exhibit 14
- 36 incorporates the changes approved in P.U. 49 (2016) and verify the calculation of the proposed rates
- 37 necessary to meet the forecast revenue requirement in the 2015 Test Year for rate setting purposes as
- 38 set out in the Compliance Application.
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1 **Summary of Board's Findings**

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On December 1, 2016 the Board issued the GRA Order in the matter of the amended general rate application filed on November 10, 2014 (“the Amended GRA”) by Hydro. The Board made a number of decisions on proposals in, and matters arising from, Hydro’s Amended GRA. The following table is a summary of the Board’s findings with reference to the Compliance Application, P.U. 49 (2016) and our report within:

#	Board Order No. P.U. 49(2016) Findings	Compliance Application	P.U. 49(2016)	GT Report
1	The recommendations set out in the Settlement Agreement and the Supplemental Settlement Agreement are accepted. Hydro will be required to reflect the impacts of these agreements in the revised proposals arising from this Decision and Order.	Exhibits 2 to 5	Page 18	Note 1
2	Hydro’s prudence compliance filing is accepted as being in accordance with Order No. P.U. 13(2016). Hydro will be required to reflect the impacts of the prudence disallowances in the revised proposals arising from this Decision and Order.	Exhibit 2, page 2	Page 20	Note 2
3	A common equity component in Hydro’s capital structure for rate setting purposes not to exceed 45% is accepted. The forecast capital structure proposed by Hydro for rate setting purposes is accepted, subject to any adjustments required as a result of the Board’s findings in this Decision and Order.	Exhibit 2	Page 21	Note 3
4	The target return on equity to be used in calculating the allowed rate of return on rate base for 2015 shall be 8.8%.	Exhibit 2, page 35	Page 21	Page 24
5	The target return on equity to be used in calculating the allowed rate of return on rate base for rate setting purposes beginning in 2016 shall be 8.5%.	Exhibit 2, page 24	Page 24	Page 31
6	Hydro will be required to file a proposal in relation to an adjustment mechanism for its target return on equity to reflect any future changes to Newfoundland Power’s approved target return on equity.	N/A	Page 24	Note 4
7	A range of rate of return on rate base of ± 20 bps is accepted.	Exhibit 2, page 40	Page 24	N/A
8	The 2015 test year customer load forecasts are accepted.	Exhibit 4, page 2	Page 28	Page 70
9	Hydro’s updated fuel price forecasts to be used in calculating the 2015 test year revenue requirement are accepted.	Exhibits 2 to 4	Page 29	Page 10
10	A conversion factor of 618 kWh/bbl for No. 6 fuel for the Holyrood Thermal Generating Station is accepted for the 2015 test year.	Exhibit 2, page 17	Page 32	Page 10
11	Hydro will be required to reduce the proposed 2015 test year intercompany charges by \$115,000 to account for fully burdened costs in the Admin Fee.	Exhibit 2, page 16	Page 38	Page 10
12	Hydro will be required to file on or before March 31, 2017 a proposal in relation to annual reporting, starting in 2017, of its intercompany activity, including a description of all services rendered, the cost charged back to and from the affiliates, the amounts involved and the methods used for determining these amounts.	N/A	Page 38	N/A
13	Hydro will be required to revise the proposed 2015 test year salaries and benefits costs to reflect: 1) a disallowance of \$4.0 million; 2) a vacancy allowance of 55 full time equivalents; and 3) the removal of the costs associated with the short-term incentive program.	Exhibit 2, page 25	Page 46	Page 10
14	Hydro’s proposed amortization, over a five-year period beginning in 2015, of the costs associated with the Holyrood black start diesels in the amount of \$5.2 million is accepted.	N/A	Page 51	Note 5

#	Board Order No. P.U. 49(2016) Findings	Compliance Application	P.U. 49(2016)	GT Report
15	Hydro will be permitted to, amortize over a three-year period beginning in 2015, general rate application costs for 2015 in the amount of \$750,000.	Exhibit 2, page 33	Page 51	Page 20
16	Hydro will be required to revise the proposed 2015 test year other operating costs to reflect: 1) general rate application and Board related costs of \$1.75 million including the amortization of the general rate application costs; and 2) a reduction of \$0.5 million for travel costs.	Exhibit 2, page 16	Page 51	Page 10
17	Hydro will be required to revise the amount of the 2015 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.	Exhibit 2, page 23/34	Page 60	Page 24
18	Hydro's proposal to defer and amortize, over a five-year period beginning in 2015, the 2015 costs of extraordinary transformer and breaker repairs not associated with imprudence is accepted.	N/A	Page 61	Note 6
19	Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of setting rates to reflect the findings of the Board in this Decision and Order.	Exhibit 2, page 14	Page 61	Page 10
20	Hydro's proposal to reflect the full-year impact of 2014 delayed in-service assets in its 2015 test year average rate base for the purpose of setting rates beginning in 2016 is accepted.	Exhibit 2, page 22	Page 64	Page 26
21	Hydro will be required to adjust its fuel inventory allowance in the 2015 forecast rate base to reflect the findings of the Board in relation to the 2015 test year fuel price forecasts.	Exhibit 2, page 21	Page 64	Page 26
22	Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for rate setting purposes to reflect the findings of the Board in this Decision and Order, including a target return on equity of 8.5%.	Exhibit 2, page 24	Page 66	Page 29
23	Hydro will be permitted recovery with respect to the 2014 revenue deficiency in an amount to be determined based on the findings of the Board in this Decision and Order.	Exhibit 2, page 9	Page 72	Page 35
24	Hydro will be required to reduce the proposed 2014 test year intercompany charges by \$106,000 to account for fully burdened costs in the Admin Fee.	Exhibit 2, page 8	Page 76	Page 8
25	Hydro will be required to revise the proposed 2014 test year salaries and benefits costs to reflect: 1) a disallowance of \$2.0 million; 2) a vacancy allowance of 52 full time equivalents; and 3) the removal of the costs associated with the short-term incentive program.	Exhibit 2, page 7	Page 78	Page 8
26	Hydro will be required to revise the proposed 2014 test year other operating costs to reflect: 1) general rate application and Board related costs of \$2.5 million; and 2) a reduction of \$0.5 million for travel costs.	Exhibit 2, page 8	Page 79	Page 8
27	Hydro will be required to file revised proposals to reflect the Board's findings in relation to the use of actual No. 6 fuel costs in the 2014 test year revenue requirement for the purpose of calculating the 2014 revenue deficiency.	Exhibit 3, page 4	Page 81	Page 46
28	Hydro will be required to revise the amount of the 2014 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.	Exhibit 2, page 13	Page 81	Page 21
29	Hydro will be required to file a revised 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the findings of the Board in this Decision and Order.	Exhibit 1, page 5	Page 81	Page 8
30	Hydro will be required to file a proposal for the recovery of the 2014 additional	Exhibit 2, page 9	Page 82	Page 9

#	Board Order No. P.U. 49(2016) Findings	Compliance Application	P.U. 49(2016)	GT Report
	supply costs not associated with imprudence as part of its revised proposals arising from this Decision and Order.			
31	Hydro's proposed reduction to the 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.	Exhibit 2, page 41	Page 83	Page 18
32	Hydro will be required to file a revised 2014 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2014 revenue deficiency reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.	Exhibit 2, page 1	Page 83	Page 22
33	Hydro's proposed reduction to the 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.	Exhibit 2, page 41	Page 85	Page 26
34	Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the findings of the Board in this Decision and Order.	Exhibit 2, page 1	Page 86	Page 12
35	Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2015 revenue deficiency, reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.	Exhibit 2, page 1	Page 86	Page 24
36	Hydro will be required to provide a report with its next general rate application in relation to the identification of the rural subsidy on customers' bills, addressing: i) practices in other jurisdictions; ii) other options to address transparency concerns; iii) what, if any, information customers would like to have on their bills in this circumstance; and iv) any other concerns or potential issues and options to address these.	N/A	Page 91	N/A
37	Hydro's proposed change to the methodology for the allocation of O&M costs in specifically assigned charges is not accepted. Hydro will be required to continue to use its existing methodology to allocate the proposed O&M costs in specifically assigned charges to Industrial customers on the Island Interconnected system.	Exhibit 4, page 2	Page 98	Page 70
38	Hydro's proposal to use the revenue requirement method to allocate the rural deficit between Newfoundland Power and the Labrador Interconnected system as of January 1, 2014 is accepted.	Exhibit 3, page 12	Page 105	Page 35
39	Hydro will be required to file updated test year cost of service studies to reflect the findings of the Board in this Decision and Order, for 2014 and 2015.	Exhibit 1, page 11	Page 105	N/A
40	Hydro's proposal to continue the existing load variation component of the RSP is accepted.	Exhibit 3, page 3	Page 107	Page 43
41	Hydro's proposed modification of the RSP rules to reflect an energy allocation approach is accepted, such that the allocation of the year-to-date net load variations in the RSP load variation component between Newfoundland Power and the Industrial customers effective September 1, 2013 will be based on energy ratios.	Exhibit 4, page 5	Page 108	Page 51 & Page 59
42	Hydro's proposed interim Labrador Industrial Transmission Rate will be approved on a final basis for existing customers. Hydro will be required to file a revised rate sheet to reflect that this rate is available to existing customers only.	Exhibit 3, page 10	Page 110	Page 73

#	Board Order No. P.U. 49(2016) Findings	Compliance Application	P.U. 49(2016)	GT Report
43	Hydro's proposal to implement rate increases for Hydro Rural non-Government Domestic and General Service customers on isolated systems that are higher than the average increase proposed for the Hydro Rural Interconnected customers as being in accordance with Government directive (OC2016-104) is accepted.	Exhibit 4, page 4	Page 112	Page 70
44	Hydro's proposal to adjust the average system losses used in the calculation of the energy charge to Industrial customers for non-firm service to 3.47% is accepted.	Exhibit 4, page 4	Page 112	Page 70
45	Hydro's proposed changes to the RSP rules are accepted.	Exhibit 1, page 10	Page 112	Page 60
46	Hydro's proposed changes to the Rules and Regulations are accepted.	Exhibit 1, page 10	Page 113	Page 70
47	Hydro will be required to file a proposal for the finalization of Industrial customer rates to reflect the findings of the Board in this Decision and Order.	Exhibit 4, page 4	Page 113	Page 70
48	Hydro will be required to file a revised Schedule of Rates, Rules and Regulations and revised RSP Rules to reflect to the findings of the Board in this Decision and Order.	Exhibit 4, page 7	Page 113	Page 70
49	Hydro will be required to file revised account language for the Isolated Systems Supply Cost Variance Deferral Account to reflect that Hydro is required to file a detailed report with the annual application for disposition of the balance.	Exhibit 5, page 1	Page 116	Page 67
50	Hydro will be required to file revised account language for the Energy Supply Cost Variance Deferral Account to remove variances associated with the price of power purchases and to clearly set out the supply sources.	Exhibit 5, page 2	Page 119	Page 67
51	Hydro's proposal to defer annual customer energy conservation program costs commencing in 2015 in a CDM Cost Deferral Account, and the proposed recovery of the existing balance of deferred CDM costs as of December 31, 2014 plus the annual costs over a seven-year period through the CDM Cost Recovery Adjustment is accepted, effective January 1, 2016.	Exhibit 5, page 3	Page 120	Page 68
52	Hydro will be required to file revised account language for the Holyrood Conversion Rate Deferral Account to include a cost variance threshold of \pm \$500,000.	Exhibit 5, page 4	Page 122	Page 68
53	Hydro will be required to file with its next general rate application a report setting out the status of progress in meeting the goals and objectives set in the Customer Service Strategic Roadmap for the period 2015-2017, as well as identification of appropriate KPIs and benchmarks against which customer service should be measured and reported.	N/A	Page 123	N/A
54	Hydro will be required to provide a report by January 13, 2017 as to the status of the implementation of its Account Management Framework, including the designation of key account representatives for Industrial customers.	N/A	Page 126	N/A
55	Hydro's proposal to continue to provide functionally oriented KPIs based on the most recent test year cost of service study in its annual reporting to the Board is accepted.	N/A	Page 126	N/A
56	Hydro will be required to file for the approval of the Board its proposed 2013 average rate base, reflecting the findings of the Board in this Decision and Order.	Exhibit 2, page 2	Page 127	Page 32
57	The intervenors will be given the opportunity to apply for an award of cost, with supporting documentation, at the conclusion of this proceeding.	N/A	Page 128	N/A
58	Hydro will be required to file a proposal for the recovery of the 2014 and 2015 revenue deficiencies including the 2014 additional supply cost deferral, with supporting documentation, reflecting the findings of the Board in this Decision	Exhibit 3, page 5	Page 130	Page 42

#	Board Order No. P.U. 49(2016) Findings	Compliance Application	P.U. 49(2016)	GT Report
	and Order. Further if Hydro is seeking recovery for a 2016 revenue deficiency this should also be reflected in its proposal.			
59	Hydro will be required to file its next general rate application no later than March 31, 2017 for rates based on a 2018 test year.	N/A	Page 131	N/A

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Notes:

- 1) *Impacts of Settlement Agreement and Supplemental Settlement agreement are reflected in the Compliance Application.*
- 2) *Impact of prudence disallowances are reflected in the Compliance Application.*
- 3) *Hydro's common equity component capital structure in the Compliance Application does not exceed 45%.*
- 4) *The proposal in relation to an adjustment mechanism for its target return on equity was excluded from the Compliance Application.*
- 5) *No revision required in the Compliance Application as what was proposed in the Amended GRA was accepted.*
- 6) *On May 25, 2016 Hydro filed a Prudence Review – Compliance Application (“the Prudence Application”) in response to P.U. 13 (2016). As part of the GRA Order the Board has accepted Hydro's Prudence Application in accordance with P.U. 13 (2016). We have agreed the prudence adjustments presented in the Compliance Application to the Prudence Application.*

1 **Summary Impact on Revenue Requirements, Average Rate Base and Return**
 2 **on Rate Base**

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The impact of the GRA Order on Hydro's revenue requirements, average rate base, return on rate base, and rate of return on rate base are summarized in the table below (which is also presented by Hydro in the Compliance Application as Table 1 in Exhibit 1):

Table 1: Impact of GRA Order on Hydro's Revenue Requirement

(000's)	Amended GRA	GRA Compliance	Total Adjustments	Reference Page No.
<u>2013 Average Rate Base</u>				
2013 Average Rate Base	1,548,371	1,549,685	1,314	Page 32
<u>2014 for Revenue Deficiency</u>				
Revenue Requirement for 2014 Revenue Deficiency	562,855	555,045	(7,810)	Page 8
2014 Average Rate Base	1,692,567	1,629,088	(63,479)	Page 18
2014 Return on Rate Base	120,563	116,920	(3,643)	Page 18
2014 Rate of Return on Rate Base	7.12%	7.18%	0.06%	Page 18
<u>2015 Test Year for Rate Setting</u>				
2015 Test Year Revenue Requirement for Rate Setting	662,475	566,510	(95,965)	Page 10
2015 Test Year Average Rate Base	1,802,024	1,785,353	(16,671)	Page 25
2015 Test Year Return on Rate Base	122,810	117,994	(4,816)	Page 25
2015 Test Year Rate of Return on Rate Base	6.82%	6.61%	-0.21%	Page 25
<u>2015 Revenue Deficiency</u>				
Revenue Requirement for 2015 Revenue Deficiency		539,621		Page 12
2015 Average Rate Base		1,729,093		Page 18
2015 Return on Rate Base		115,330		Page 18
2015 Rate of Return on Rate Base		6.67%		Page 18
<u>2016 Revenue Deficiency</u>				
Revenue Requirement for 2016 Revenue Deficiency		544,383		Page 16
2015 Average Rate Base		1,802,235		Page 30
2015 Return on Rate Base		119,092		Page 30
2015 Rate of Return on Rate Base		6.61%		Page 30

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1 **Revenue Requirement**

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Our procedures with respect to the revisions of the revenue requirement for rate setting purposes for 2015 and for the revenue requirements for determining revenue deficiencies for 2014, 2015, and 2016 were directed towards reviewing the adjustments presented by the Company in its Compliance Application to ensure they were in compliance with the GRA Order. Where appropriate we also made enquiries and obtained additional documentation to support the adjustments.

9 **2014 Revenue Requirement for Revenue Deficiency**

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In P.U. 49 (2016) the Board directed Hydro to file a revised 2014 Test Year revenue requirement for purpose of determining the 2014 revenue deficiency based on the findings of the Board. The table below provides a summary of adjustments which are required to derive Hydro's revised 2014 Test Year revenue requirement for revenue deficiency purposes as a result of the GRA Order:

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Table 2: Summary of Revenue Requirement for 2014 Revenue Deficiency

	<u>2014 Revenue Def.</u>
(000's)	
Revenue Requirement per Amended GRA	<u>\$ 562,855</u>
	<u>Compliance Application</u>
	Prudency
(Decrease) Increase in 2014 Test Year Revenue Requirement	<u>Adj. Fuel Adj. Other Adj. Total</u>
Operating expenses	\$ (4,755) \$ - \$ (6,611) \$ (11,366) 1
Fuel	8,534 8,534 2
Amortization	6 (427) (421) 3
Accretion of asset retirement obligation	(126) (126) 4
Cost of service exclusions	(788) (788) 5
Return on rate base	(583) (3,060) (3,643) 6
Total decrease in Revenue Requirement	<u>\$ (6,120) 7 \$ - \$ (1,690) \$ (7,810)</u>
Revenue Requirement per Compliance Application	<u>\$ 555,045</u>

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1) Operating expenses has decreased by \$11.366 million as a result of a prudency adjustment of \$4.755 million included in the Prudency Application and \$6.611 million in adjustments in compliance with GRA Order which includes adjustments to the following:

- salaries and benefits of \$5.017 million;
- intercompany transactions of \$0.106 million;
- professional services of \$0.988 million; and,
- travel of \$0.500 million.

The salaries and benefits are adjusted for the following:

- disallowance of \$2.0 million in salary;
- vacancy allowance adjustment calculated at \$2.72 million based on 52 full time equivalents; and,
- removal of costs associated with the short-term incentive program of \$0.297 million as directed by the GRA order.

- 1 2) Fuel adjustments totalled an \$8.53 million increase. In the Compliance Application, Hydro has
2 proposed recovering the fuel supply deferral with the 2014 revenue deficiency. The Board approved
3 the creation of a 2014 fuel supply deferral account related to 2014 capacity-related supply costs in the
4 amount of \$9.65 million, with the recovery of this deferral to be addressed in a subsequent order of
5 the Board in P.U. 56 (2014). As a result of P.U. 13 (2016), the Board determined that approximately
6 \$1.42 million of those costs could not be recovered through customers, which effectively reduced the
7 amount of the deferral to approximately \$8.23 million. The deferral was originally included in the
8 amended GRA at \$10.0 million compared to Hydro's deferral application and ultimate approval by
9 the Board of \$9.65 million. To correct this discrepancy of \$0.3 million, Hydro has included this
10 adjustment in fuel in the Compliance Application.
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- 12 3) Amortization has decreased by \$0.421 million as a result of an adjustment of \$0.006 million relating
13 to the Prudency Application offset by \$0.427 million reflecting an adjustment pursuant to the terms
14 of the Settlement Agreement approved by the Board pertaining to a reduction in amortization
15 expense associated with asset retirement obligations.
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- 17 4) Accretion of asset retirement obligation has decreased by \$0.126 million as a result of the Settlement
18 Agreement terms approved by the Board pertaining to asset retirement obligations.
19
- 20 5) Cost of service exclusions increased by \$0.788 million which is a result of adjustments from the
21 Prudency Application.
22
- 23 6) Return on rate base decreased by \$3.6 million due to \$0.6 million adjustment resulting from the
24 Prudency Application and \$3.0 million with the GRA Order. Refer to Average Rate Base and Return
25 on Rate Base Section of our report for further analysis of change in the return on rate base.
26
- 27 7) As part of the GRA Order the Board has accepted Hydro's Prudency Application in accordance with
28 P.U. 13 (2016). We have agreed the prudence adjustments presented in the Compliance Application
29 to the Prudency Application.
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31 **Proposal for recovery of the 2014 additional supply costs**

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33 In the GRA Order the Board required Hydro to file a proposal for the recovery of the 2014 additional supply
34 costs that were not related to imprudence. Originally, Hydro planned to recoup these costs over a five year
35 period beginning in 2015. However, the Board had stated in the GRA Order that the additional supply costs
36 incurred in 2014 relate to provision of service in 2014. In the Compliance Application, Hydro proposed they
37 recover these costs via the 2014 revenue deficiency calculation.
38

39 **We have reviewed the 2014 Test Year revenue requirement for revenue deficiency included in the**
40 **Compliance Application and reviewed the calculation to ensure orders contained in the GRA Order**
41 **were appropriately reflected in the revised 2014 Test Year revenue requirement for revenue**
42 **deficiency.**
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2015 Revenue Requirement for Rate Setting

In P.U. 49 (2016) the Board directed Hydro to file a revised 2015 Test Year revenue requirement for rate setting purposes based on the findings of the Board. The table below provides a summary of adjustments which are required to derive Hydro's revised 2015 Test Year revenue requirement for rate setting purposes as a result of GRA Order:

Table 3: Summary of Revised 2015 Test Year Revenue Requirement for Rate Setting

		<u>2015 Rate Setting</u>			
		<u>\$ 662,475</u>			
		<u>Compliance Application</u>			
(Decrease) Increase in 2015 Test Year Revenue Requirement	Prudency				
	Adj.	Fuel Adj.	Other Adj.	Total	
Operating expenses	\$ (41)	\$ -	\$ (6,788)	\$ (6,829)	1
Fuel	(284)	(80,356)	(1,707)	(82,347)	2
Power purchases		(427)		(427)	3
Amortization	(135)		(427)	(562)	4
Accretion of asset retirement obligation			(130)	(130)	5
Cost of service exclusions	(854)			(854)	6
Return on rate base	(804)	(1,289)	(2,723)	(4,816)	7
Total decrease in Revenue Requirement	\$ (2,118)	\$ (82,072)	\$ (11,775)	\$ (95,965)	
Revenue Requirement per Compliance Application		<u>\$ 566,510</u>			

1) Operating expenses has decreased by \$6.829 million as a result of a prudency adjustment of \$41,000 included in the Prudency Application and \$6.788 million in adjustments in compliance with GRA Order which includes adjustments to the following:

- salaries and benefits of \$5.633 million;
- intercompany transactions of \$0.115 million;
- professional services of \$0.50 million; and,
- travel of \$0.540 million.

The salaries and benefits are adjusted for the following:

- a disallowance of \$4.0 million in salary;
- a vacancy allowance adjustment calculated at \$1.250 million based on 55 full time equivalents; and,
- removal of costs associated with the short-term incentive program of \$0.380 million as directed by the GRA Order.

2) Fuel adjustments totalled an \$82.347 million decrease. The adjustments are made up of decreases from the Prudency Application of \$0.284 million and \$82.063 million in adjustments in compliance with GRA Order which includes:

- No. 6 fuel price adjustment of \$75.877 million resulting from the No. 6 fuel price difference per barrel from \$93.32 in the Amended GRA to \$64.41 as ordered by the Board;
- Holyrood conversion factor adjustment of \$3.009 million resulting from the fuel conversion rate difference of 607 kWh/bbl in the Amended GRA to 618 kWh/bbl as ordered by the Board;

- 1 • isolated diesel fuel price adjustment of \$1.470 million resulting from adjustment to No. 2
2 fuel price change from \$1.10/litre in the Amended GRA to \$1.01/litre as ordered by the
3 Board; and,
4 • reversal of amortization of 2014 fuel supply deferral account of \$1.707 million resulting from
5 the reversal of the amortization of the fuel supply cost deferred which was initially included
6 in the Amended GRA but is now proposed by Hydro to be recovered with its 2014 revenue
7 deficiency.
8
- 9 3) Power purchases decreased by an amount of \$0.427 million to reflect the Board's approval of
10 Hydro's updated fuel forecasts, which was a decrease of \$0.1357/kWh to \$0.1181/kWh.
11
- 12 4) Amortization has decreased by \$0.562 million as a result of a prudence adjustment of \$0.135 million
13 and the remaining \$0.427 million reflects the terms of the Settlement Agreement approved by the
14 Board pertaining to a reduction in amortization expense associated with asset retirement obligations.
15
- 16 5) Accretion of asset retirement obligation has decreased by \$0.130 million as a result of the Settlement
17 Agreement terms approved by the Board pertaining to asset retirement obligations.
18
- 19 6) Cost of service exclusions increased by \$0.854 million which is a result of adjustments from the
20 Prudence Application.
21
- 22 7) Return on rate base decreased by \$4.8 million due to \$0.8 million decrease resulting from the
23 Prudence Application and \$4.0 million decrease resulting from the GRA Order (\$1.3 million relating
24 to fuel and \$2.7 million relating to other). Refer to Average rate base and Return on Rate base
25 Section of our report for further analysis of change in the return on rate base.
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- 27 8) As part of the GRA Order the Board has accepted Hydro's Prudence Application in accordance with
28 P.U. 13 (2016). We have agreed the prudence adjustments presented in the Compliance Application
29 to the Prudence Application. The prudence adjustment for 2015 revenue requirement for rate setting
30 above excludes a \$1.0 million reduction in operating expense related to professional fees but are
31 included in prudence adjustments for the 2015 revenue requirement for revenue deficiency which is
32 explained further in our report where we compare these revenue requirements.
33

34 **We have reviewed the 2015 Test Year revenue requirement for rate setting included in the**
35 **Compliance Application and reviewed the calculation to ensure orders contained in the GRA Order**
36 **were appropriately reflected in the revised 2015 Test Year revenue requirement for rate setting.**
37

2015 Revenue Requirement for Revenue Deficiency

In P.U. 49 (2016) the Board directed Hydro to file a revised 2015 Test Year revenue requirement for purpose of determining the 2015 revenue deficiency based on the findings of the Board. The table below provides a summary of adjustments which are required to derive Hydro's revised 2015 Test Year revenue requirement for revenue deficiency purposes as a result of GRA Order:

Table 4: Summary of Revenue Requirement for 2015 Revenue Deficiency

(000's)					2015 Revenue Def.
Revenue Requirement per Amended GRA					<u>\$ 662,475</u>
	<u>Compliance Application</u>				
	<u>Prudency</u>				
(Decrease) Increase in 2015 Test Year Revenue Requirement	Adj.	Fuel Adj.	Other Adj.	Total	
Operating expenses	\$ (1,041)		\$ (6,788)	\$ (7,829)	1
Fuel	(284)	(103,581)	(1,707)	(105,572)	2
Power purchases		(427)		(427)	3
Amortization	(135)		(427)	(562)	4
Accretion of asset retirement obligation			(130)	(130)	5
Cost of service exclusions	(854)			(854)	6
Return on rate base	(803)	(1,631)	(5,046)	(7,480)	7
Total decrease in Revenue Requirement	<u>\$ (3,117)</u>	<u>\$ (105,639)</u>	<u>\$ (14,098)</u>	<u>(122,854)</u>	
Revenue Requirement per Compliance Application					<u>\$ 539,621</u>

1) Operating expenses have decreased by \$7.829 million as a result of a prudency adjustment of \$1.041 million included in the Prudency Application and \$6.788 million in adjustments in compliance with GRA Order which includes adjustments to the following:

- salaries and benefits of \$5.633 million;
- intercompany transactions of \$0.115 million;
- professional services of \$0.54 million; and
- travel of \$0.5 million.

The salaries and benefits are adjusted for the following:

- a disallowance of \$4.0 million in salary;
- a vacancy allowance adjustment calculated at \$1.25 million based on 55 full time equivalents; and,
- removal of costs associated with the short-term incentive program of \$0.380 million as directed by the GRA Order.

2) Fuel adjustments totalled a \$105.572 million decrease. The adjustments are made up of decreases from the Prudency Application of \$0.284 million and \$105.288 million in adjustments in compliance with the GRA Order which includes:

- No. 6 fuel price adjustment of \$99.523 million resulting from the No. 6 fuel price difference per barrel from \$93.32 in the Amended GRA to \$55.40 (refer to Impact of RSP section of our report for further discussion on fuel price of \$55.40 used for revenue deficiency compared to \$64.41 as ordered by the Board);

- 1 • Holyrood conversion factor adjustment of \$2.588 million resulting from the fuel conversion
2 rate difference of 607 kWh/bbl in the Amended GRA to 618 kWh/bbl as ordered by the
3 Board;
- 4 • isolated diesel fuel price adjustment of \$1.470 million resulting from adjustment to No. 2
5 fuel price change from \$1.10/litre in the Amended GRA to \$1.01/litre as ordered by the
6 Board; and
- 7 • reversal of amortization of 2014 fuel supply deferral account of \$1.707 million resulting from
8 the reversal of the amortization of the fuel supply cost deferred which was initially included
9 in the Amended GRA but is now proposed by Hydro to be recovered with its 2014 revenue
10 deficiency.
- 11
- 12 3) Power purchases decreased by an amount of \$0.427 million to reflect the Board's approval of
13 Hydro's updated fuel forecasts, which was a decrease of \$0.1357/kWh to \$0.1181/kWh.
- 14
- 15 4) Amortization has decreased by \$0.562 million as a result of an adjustment of \$0.135 million relating
16 to the Prudency Application, and the \$0.427 million reflecting an adjustment pursuant to the terms of
17 the Settlement Agreement approved by the Board pertaining to a reduction in amortization expense
18 associated with asset retirement obligations.
- 19
- 20 5) Accretion of asset retirement obligation has decreased by \$0.130 million as a result of the Settlement
21 Agreement terms approved by the Board pertaining to asset retirement obligations.
- 22
- 23 6) Cost of service exclusions increased by \$0.854 million which is a result of adjustments from the
24 Prudency Application.
- 25
- 26 7) Return on rate base decreased by \$7.5 million due to \$0.8 million adjustment resulting from the
27 Prudency Application and \$6.7 million with the GRA Order (\$1.6 million relating to fuel and \$5.1
28 million relating to other). Refer to Average Rate Base and Return on Rate Base Section of our report
29 for further analysis of change in the return on rate base.
- 30
- 31 8) As part of the GRA Order the Board has accepted Hydro's Prudency Application in accordance with
32 P.U. 13 (2016). We have agreed the prudence adjustments presented in the Compliance Application
33 to the Prudency Application.
- 34

35 **We have reviewed the 2015 Test Year revenue requirement for revenue deficiency included in the**
36 **Compliance Application and reviewed the calculation to ensure orders contained in the GRA Order**
37 **were appropriately reflected in the revised 2015 Test Year revenue requirement for revenue**
38 **deficiency.**
39

2015 Test Year Revenue Requirement for Rate Setting compared to 2015 Revenue Requirement for Revenue Deficiency

The table below compares the revised 2015 test year revenue requirement to the revised 2015 test year requirement for revenue deficiency:

Table 5: Comparison of revised 2015 Test Year Revenue Requirement to the revised 2015 Test Year Requirement for Revenue Deficiency

(000's)

Description	2015 for Rate Setting	2015 Revenue Def.	Difference	
Operating expenses	\$ 131,350	\$ 130,350	\$ (1,000)	1
Other income and expenses	4,074	4,074	-	
Fuel	187,464	164,239	(23,225)	2
Power purchases	62,827	62,827	-	
Amortization	63,230	63,230	-	
Accretion of asset retirement obligation	748	748	-	
Cost of service exclusions	(1,177)	(1,177)	-	
Return on rate base	117,994	115,330	(2,664)	3
Total Revenue Requirement	\$ 566,510	\$ 539,621	\$ (26,889)	

- 1) There is \$1.0 million less operating expenses included in the 2015 revenue requirement for purposes of revenue deficiency than the 2015 test year revenue requirement for rate setting purposes. The costs are appropriately excluded from 2015 revenue deficiency as they relate to professional fees disallowed by the Board in the prudency expenditure review relating to costs of regulatory studies and filings. According to Hydro \$0.854 million of these costs are attributable to the January 2014 outage investigation and \$0.146 million attributable to Phase Two of the Board's investigation. Hydro has included \$1.0 million in 2015 Test Year for rate setting purposes as it represents other anticipated studies and hearings related to the preparation of the 2018 General Rate Application which are required to be completed and do not relate to the disallowance from the Prudency Application, (e.g. a number of studies are required from settlement agreements such as a Cost of Service methodology study and a Marginal Cost study.)
- 2) There is a decrease of \$23.2 million in fuel costs in the revenue requirement for 2015 revenue deficiency compared to the 2015 test year for rate setting. This decrease is related to the use of \$64.41 per barrel for the fuel for rate setting, as approved by the Board in the GRA Order, and \$55.40 per barrel for calculation revenue deficiency. The use of the \$55.40 per Barrel is used in the revenue deficiency calculation as the RSP operated in 2015 based on the 2007 Test Year fuel price of \$55.40 per barrel and the fuel cost variances from the 2007 Test Year fuel purchase price of \$55.40 per barrel have been reflected in the retail customer rates changes. Newfoundland Power customer rates have been adjusted to reflect the actual fuel price in 2015 and 2016 through the fuel rider and the impact of fuel price variance in the RSP recovery factor, which is updated annually. Similarly, the current balance in the Island Industrial Customer RSP balance reflects the fuel price variances from \$55.40 per barrel for 2015 and 2016. Refer to Impact of RSP Section of our report for further analysis.
- 3) There is a decrease in return on rate base by \$2.7 million in the 2015 revenue deficiency compared to the 2015 test year as a result of average rate base adjustments. Refer to Average Rate Base and

1 Return on Rate Base Section of our report for further analysis of the return on rate base difference
2 between the 2015 test year compared to the 2015 revenue deficiency.
3

2016 Revenue Requirement for Revenue Deficiency

In P.U. 49 (2016) the Board directed that if Hydro is seeking recovery for a 2016 revenue deficiency to reflect it in the Compliance Application. The table below provides a summary of adjustments which Hydro proposed as the 2016 revenue requirement for revenue deficiency purposes as a result of GRA Order:

Table 6: Summary of Revenue Requirement for 2016 Revenue Deficiency

(000's)	<u>2016 Revenue Def.</u>
Revenue Requirement 2015 Test year for Rate Setting	<u>\$ 566,510</u>
(Decrease) Increase in 2016 Revenue Requirement	
Fuel	(23,225) 1
Return on rate base	<u>1,098 2</u>
Total decrease in Revenue Requirement	<u>(22,127)</u>
Revenue Requirement per Compliance Application	<u>\$ 544,383</u>

- 1) Fuel adjustments totalled a \$23.2 million decrease. This decrease is related to the use of \$64.41 per barrel for the fuel for rate setting, as approved by the Board in the GRA Order, and \$55.40 per barrel for calculation revenue deficiency. Refer to Impact of RSP Section of report for further discussion on fuel price of \$55.40 used for revenue deficiency compared to \$64.41 as ordered by the Board.
- 2) Return on rate base increased by \$1.1 million as a result of the return on the average rate base adjustments. Refer to Average Rate Base and Return on Rate Base Section of our report for further analysis of the return on rate base.

We have reviewed the 2016 Test Year revenue requirement for revenue deficiency included in the Compliance Application and reviewed the calculation to ensure orders contained in the GRA Order were appropriately reflected in the revised 2016 Test Year revenue requirement for revenue deficiency.

1 **Average Rate Base and Return on Rate Base**

2
3 The Company's re-calculation of its forecast average rate base and rate of return on rate base is included in
4 the following sections of the Compliance Application:

- 5 • 2013 Exhibit 2 – Computation of Revenue Requirements Page 5;
- 6 • 2014 test year (revenue deficiency): Exhibit 2, Appendix A – 2014 Finance Schedules Page A-2;
- 7 • 2015 test year (rate setting): Exhibit 2, Appendix B – 2015 Finance Schedules (Rate Setting) Page B-2;
- 8 • 2015 test year (2015 revenue deficiency): Exhibit 2, Appendix C – 2015 Finance Schedules (Revenue
9 Deficiency) Page C-2; and
- 10 • 2016 revenue deficiency: Exhibit 2, Appendix D – 2015 Finance Schedules (Revenue Deficiency)
11 Page D-2.

12
13 Our procedures with respect to the re-calculation of the average rate base were directed towards the
14 assessment of the impact on average rate base and return on average rate base of the GRA Order adjustments
15 presented by the company in its Compliance Application. Specifically, the procedures which we performed
16 included the following:

- 17 • agreed all carry-forward data to supporting documentation including the 2013 audited financial statements
18 and internal accounting records, where applicable;
- 19 • agreed Compliance Application data to supporting documentation to ensure it is internally consistent with
20 the pre-filed evidence;
- 21 • checked the clerical accuracy of the continuity of the rate base as forecast in the Compliance Application
22 for 2013, 2014 revised test year (2014 revenue deficiency), 2015 test year (rate setting), 2015 test year (2015
23 revenue deficiency), and 2016 revenue deficiency;
- 24 • recalculated the Compliance Application average rate base and return on average rate base for 2014 revised
25 test year (for purposes of calculating 2014 revenue deficiency), 2015 test year (for rate setting), 2015 test
26 year (for purposes of calculating 2015 revenue deficiency), and 2015 test year (for purposes of calculating
27 2016 revenue deficiency); and
- 28 • reviewed the methodology used in the calculation of the average rate base with reference to the Public
29 Utilities Act, the Hydro Corporation Act and Board.
30

31

1 **2014 and 2015 Revenue Deficiency Average Rate Base**

2 Details of the 2014 test year and 2015 test year average rate base as filed in the Amended GRA, GRA Order
 3 adjustments, and the 2014 test year and 2015 test year average rate bases for purposes of calculating revenue
 4 deficiencies, as filed in Hydro's Compliance Application, are presented in the following table:
 5

6 **Table 7: Average Rate Base, Return on Rate Base and Rate of Return on Average Rate Base 2014 &**
 7 **2015 Revenue Deficiency**
 8

(000's)	Test	Prudence	GRA	Compliance	Test	Prudence	Fuel	GRA	Compliance
	Year	Adjust.	Adjust.	Application	Year	Adjust.	Adjust.	Adjust.	Application
	2014	2014	2014	2014	2015	2015	2015	2015	2015
Plant investment	\$ 1,840,320	\$ (5,372)	\$ (248,717)	\$ 1,586,231	\$ 1,870,275	\$ (6,599)	\$ -	\$ -	\$ 1,863,676
Less:									
Accumulated depreciation	(193,532)	13	89,010	(104,509)	(203,834)	167	-	-	(203,667)
CIAC's	(16,550)	-	13,489	(3,061)	(17,936)	-	-	-	(17,936)
ARO's	(14,442)	-	(66)	(14,508)	(12,169)	-	-	-	(12,169)
Net capital assets	1,615,796	(5,359) (1)	(146,284) (1)	1,464,153	1,636,336	(6,432) (2)	-	-	1,629,904
Balance previous year	1,432,533	-	-	1,432,533	1,615,796	(5,359) (1)	-	(146,284) (1)	1,464,153
Average	1,524,165	(2,680)	(73,142)	1,448,343	1,626,066	(5,896)	-	(73,142)	1,547,029
Less: average net assets not in use	(2,941)	(5,273) (2)	-	(8,214)	(2,605)	(4,713) (2)	-	-	(7,318)
Cash working capital allowance	9,207	-	-	9,207	7,037	-	-	-	7,037
Fuel inventory	65,110	-	-	65,110	66,633	-	(24,469) (4)	-	42,164
Supplies inventory	25,823	-	-	25,823	27,402	-	-	-	27,402
Deferred charges	71,203	1,723 (2)	17,848 (3)	90,774	77,491	3,289 (2)	-	36,467 (5)	117,247
Less: deferred charges not in use	-	(1,955) (2)	-	(1,955)	-	(4,467) (2)	-	-	(4,467)
Average rate base	\$ 1,692,567	\$ (8,185)	\$ (55,294)	\$ 1,629,088	\$ 1,802,024	\$ (11,787)	\$ (24,469)	\$ (36,675)	\$ 1,729,093
Return on rate base:									
Unadjusted return on regulated equity	\$ 30,504	\$ (1,370) (6)	\$ (961) (6)	\$ 28,173	\$ 33,232	\$ (1,658) (7)	\$ (7,097) (7)	\$ (2,486) (7)	\$ 21,991
Cost of service exclusions	336	788 (6)	-	1,124	323	854 (7)	-	-	1,177
Net interest	89,723	-	(2,099) (6)	87,624	89,255	-	5,466 (7)	(2,560) (7)	92,161
Return on rate base	\$ 120,563	\$ (582)	\$ (3,061)	\$ 116,920	\$ 122,810	\$ (804)	\$ (1,631)	\$ (5,046)	\$ 115,329
Rate of return on average rate base	7.12%			7.18%	6.82%				6.67%

9
 10 As illustrated in the table average rate base for 2014 revenue deficiency has decreased by \$63,479,000
 11 from \$1,692,567,000 filed in the Amended GRA to \$1,629,088,000 in the Compliance Application.
 12 The average rate base for 2015 revenue deficiency has decreased by \$72,931,000 from \$1,802,024,000
 13 filed in the Amended GRA to \$1,729,093,000 in the Compliance Application. The following
 14 commentary discusses the various impacts on average rate base from Hydro's compliance with the
 15 GRA Order.
 16

17
 18 (1) The reduction in plant investment reflects adjustments made by Hydro to remove delayed in
 19 service assets which were recorded as in service plant additions for test year 2014 in the
 20 Amended GRA. Hydro's calculation of the test year 2014 average rate base included the
 21 Holyrood combustion turbine and other capital assets that were originally scheduled to go into
 22 service in 2014 but actually went into service in 2015. To address the impacts of delayed in
 23 service assets on 2014 revenue deficiency, Hydro proposed that the 2014 test year average rate

base be adjusted to reflect 2014 actual capital additions. On Page 82 and 83 of the GRA Order, the Board agreed with Hydro's proposed adjustment to the test year 2014 average rate base to reflect the 2014 actual plant additions. The Board further noted in the GRA Order that the 2014 average rate base be adjusted to reflect the prudence review adjustments filed in compliance with P.U. 13 (2016).

In response to the GRA Order, Hydro has decreased average net capital assets in test year 2014 by \$73,142,000 to adjust 2014 test year net capital assets to 2014 actual net capital assets. Hydro has also decreased average net capital assets in test year 2014 by \$2,680,000 to reflect 2014 test year prudence disallowances. As noted in the Compliance Application, the \$73,142,000 average adjustment is a net adjustment consisting of a \$147,408,000 decrease in assets in service (\$73,704,000 average adjustment) to reflect actual 2014 capital asset additions. This adjustment is offset by \$1,124,000 (\$562,000 average adjustment) to convert the test year 2014 prudence disallowance to the equivalent 2014 actual prudence disallowance. The following table illustrates Hydro's adjustments made from the Amended GRA 2014 test year to reflect 2014 actual net capital assets and prudence disallowances in the Compliance Application:

Table 8: 2014 Net Capital Asset Adjustments

(000's)	Test Year		Actual	
	2014	Adjust.	2014	
Net capital assets in service before prudence adjustments	\$ 1,615,796	(147,408)	\$ 1,468,388	Note 1
Less:				
Prudence adjustments	(5,359)	1,124	(4,235)	Note 2
Net capital assets	<u>\$ 1,610,437</u>	<u>\$ (146,284)</u>	<u>\$ 1,464,153</u>	

Note 1: Reflects actual 2014 net capital assets on Return 3 (Revision 1, April 24, 2015) as disclosed by Hydro in its 2014 Annual Return filing.

Note 2: Hydro has adjusted test year prudence review adjustments to the 2014 actual equivalents for the Sunnyside Terminal Station and the Western Avalon Tap Changer as follows:

(000's)	Test Year		Actual
	2014	Adjust.	2014
Sunnyside Terminal Station			
Plant investment	\$ (3,919)	708	\$ (3,211)
Accumulated depreciation	9	(5)	4
Net book value	<u>(3,910)</u>	<u>703</u>	<u>(3,207)</u>
Western Avalon T5 Tap Changer			
Plant investment	(1,453)	439	(1,014)
Accumulated depreciation	4	5	9
Net book value	<u>(1,449)</u>	<u>444</u>	<u>(1,005)</u>
Other rounding adjustments	-	(23)	(23)
Total net book value	<u>\$ (5,359)</u>	<u>\$ 1,124</u>	<u>\$ (4,235)</u>

For test year 2015 the assets have moved to in service. Hydro has carried forward 2014 adjustment to actual which as noted in the Compliance Application reflects a partial year in service for 2015 for a decrease of \$73,142,000 in the calculation of average rate base.

1 Based on our review we note the net capital assets in the Compliance Application reflect actual
2 2014 net capital assets as filed in the Company's annual returns and the actual 2014 equivalent
3 prudence review adjustments.
4

- 5 (2) As part of the GRA Order the Board has accepted Hydro's Prudency Application in accordance
6 with P.U. 13 (2016) and has ordered Hydro to reflect prudence disallowances in its revised
7 proposals included in the Compliance Application. Hydro has reflected GRA Order adjustments
8 related to prudence in its Compliance Application consistent with the amounts disclosed in their
9 Prudency Application.

10
11 The only exception we noted were conversions of certain 2014 test year figures to 2014 actuals to
12 reflect the impacts of adjusting delayed in service plant asset additions consistent with its
13 proposals described on Pages 82 and 83 of the GRA Order (presented in Note 1 above). In the
14 course of implementing its proposal to adjust plant assets to actual figures for 2014, Hydro has
15 reduced 2014 test year prudence compliance adjustments by \$1,124,000, from \$5,359,000 for test
16 year 2014, to \$4,235,000 to reflect the equivalent 2014 actual prudence adjustment (see Table 8).
17 The prudence adjustments presented in the Compliance Application are detailed in our report
18 *Board of Commissioners of Public Utilities Financial Consultants Report Newfoundland and Labrador Hydro*
19 *P.U. 13 (2016) Prudence Review – Compliance Application August 30, 2016.*
20

- 21 (3) Deferred charges have increased average rate base by \$17,848,000 in the Compliance Application
22 mainly due to deferral of the 2014 test year revenue deficiency. In the Amended GRA it was
23 forecast that the 2014 test year revenue deficiency of \$45,921,000 (average impact \$22,961,000)
24 would be excluded from average rate base and recovered through the Rate Stabilization Plan
25 (RSP). In P.U. 58 (2014) Hydro did not obtain Board approval to recover the 2014 revenue
26 deficiency through the RSP and the average impact remains as a deferred charge in average rate
27 base for 2014 in the Compliance Application. In addition the 2014 test year revenue deficiency
28 has decreased by \$1,690,000 (average impact \$845,000) to reflect the decisions of the GRA
29 Order. The remaining decrease in deferred charges consists of the removal of fuel supply
30 deferrals which Hydro proposed be deferred and amortized over 5 years in the Amended GRA.
31 In the GRA Order the Board has noted that the fuel supply deferral has no benefit beyond 2014
32 and requested Hydro to file a proposal for the recovery of these costs within the context of the
33 2014 revenue deficiency. In response to the GRA Order, Hydro has removed \$8,534,000
34 (average impact \$4,237,000) from rate base to reflect the decisions of the GRA Order and
35 proposed recovery within the 2014 revenue deficiency.
36

- 37 (4) Fuel inventory has decreased due to a revision in the forecast average price of No. 6 fuel. The
38 average fuel price for No. 6 fuel was forecast in the Amended GRA at \$93.32 per barrel. In the
39 Compliance Application Hydro has used revised No. 6 fuel oil average forecast of \$55.40 per
40 barrel for purposes of determining the 2015 revenue deficiency which the Company has noted
41 reflects the price used in the 2007 cost of service study. Based on our review we note this varies
42 from the 2015 forecast of \$64.41 approved on page 29 of the GRA Order (refer to Rate
43 Stabilization Plan section of report for detailed discussion on the variance). As a result of
44 applying the revised price of \$55.40 per barrel for No. 6 fuel, average fuel inventory has
45 decreased by \$24,469,000 in the Compliance Application.
46

- 47 (5) The increase in deferred charges for test year 2015 in the Compliance Application consist of the
48 carry forward of the revenue deficiency from 2014 test year of \$44,231,000, which was not
49 approved by the Board to be transferred to the RSP in 2014. This is offset by the removal of
50 average net fuel supply deferred charges of \$7,680,000 (2014 test year carry forward of
51 \$8,534,000 less amortization of \$854,000 filed in the Amended GRA). In addition, the GRA
52 Order also requested Hydro to revise its hearing cost deferral from \$1,000,000 to \$750,000 which
53 is to be amortized over three years. In compliance, Hydro removed \$250,000 of hearing costs
54 and \$83,333 of related amortization from amounts filed in the Amended GRA. The impact of

1 the GRA Order is a decrease in average net hearing costs of \$84,000 (\$125,000 less amortization
 2 of \$41,000) in the Compliance Application.
 3

4 (6) Return on average rate base has increased 6 basis points (\$3,643,000) from 7.12% (\$120,563,000)
 5 filed in the Amended GRA, to 7.18% (\$116,920,000) in the Compliance Application as illustrated
 6 in the following table:
 7

8 **Table 9: 2014 Return on Average Rate Base (Revenue Deficiency) from Amended GRA to**
 9 **Compliance Application**

(000's)		<u>Average Average Rate Base</u>	<u>Return on Average Rate Base (%)</u>
Rate base as filed in Amended GRA	A	\$ 1,692,567	7.12%
Prudence adjustments average rate base	B	(8,185)	
GRA Compliance adjustments to average rate base	C	<u>(55,294)</u>	
Revised average rate base Compliance Application	[D = A + B + C]	<u>\$ 1,629,088</u>	
Return on average rate base as filed in Amended GRA	E	<u>\$ 120,563</u>	
GRA Compliance prudence adjustments	F	(583)	
GRA compliance GRA adjustments	G	(961)	
GRA compliance debt guarantee adjustments	H	<u>(2,099)</u>	
Total Compliance Application adjustments	[I = F + G + H]	<u>(3,643)</u>	
Return on average rate base as filed in Compliance Application	[J = E+I]	<u>\$ 116,920</u>	7.18%
			[K = J/D]

10
 11
 12 The change in return on rate base is a function of reductions in average rate base of \$8,185,000
 13 for prudence adjustments and other GRA adjustments of \$55,294,000. These adjustments have
 14 increased return on rate base relative to the initial return on rate base of \$120,563,000 filed in the
 15 Amended GRA by approximately 28 basis points. These increases have been offset by a
 16 reduction in return on rate base of \$3,643,000, a decrease of 22 basis points, as a result of
 17 implementing the GRA Order consisting of the following: 1) a reduction for prudence
 18 compliance of \$582,000; 2) a reduction in regulated earnings of \$961,000; and, 3) a reduction in
 19 interest of \$2,099,000 related to the GRA Order to apportion debt guarantee fees 50/50 between
 20 Hydro and the Government.
 21

22 The prudence adjustments presented in the Compliance Application were reviewed and detailed
 23 in our report *Board of Commissioners of Public Utilities Financial Consultants Report Newfoundland and*
 24 *Labrador Hydro P.U. 13 (2016) Prudence Review – Compliance Application August 30, 2016.*
 25

26 As a result of the GRA Order, debt guarantee fees have been apportioned 50/50 to Hydro and
 27 the Government in the Compliance Application. Hydro's compliance with the GRA Order has
 28 reduced debt guarantee fees by \$2,099,000 from \$3,683,000, filed in the Amended GRA, to
 29 \$1,584,000 in the Compliance Application. In calculating the adjustment, Hydro has also
 30 adjusted certain debt issues from a 0.50% debt guarantee fee, used in the Amended GRA, to
 31 0.41% debt guarantee fee in the Compliance Application which has also been further added to
 32 the 50/50 adjustment. The reduction reflects Hydro's methodology used in response to

1 Undertaking 139 which requested Hydro to use a long term debt guarantee fee range of 0.35% to
 2 0.47%. In response, Hydro used the midpoint of 0.41% to reflect the range requested in the
 3 undertaking.
 4

5 The following table illustrates Hydro's adjustment of the debt guarantee fee in the Compliance
 6 Application:
 7

8 **Table 10: 2014 Debt Guarantee Fee Adjustment Amended GRA versus Compliance**
 9 **Application**
 10

Debt guarantee fee as filed in the Amended GRA	A \$ 3,683,000
Reduction in debt guarantee fee (Note 1)	B <u>(515,000)</u>
Guarantee fees before 50/50 split	[C = A + B] 3,168,000
50% reduction in guarantee fee	[D = C x 0.50%] <u>(1,584,000)</u>
Debt guarantee fee as filed in Compliance Application	[E = C + D] \$ <u>1,584,000</u>
Adjustment debt guarantee fee Compliance Application	[F = B + D] \$ <u>(2,099,000)</u>

Note 1: As part of the Compliance Application, Hydro has reduced the debt guarantee fee rate for certain debt issues from 0.50% in the Amended GRA, to 0.41% in the Compliance Application which reflects the mid point of the range of 0.35% to 0.47% requested to be incorporated in Undertaking 139.

11
 12 Hydro's 2014 revenue deficiency return on rate base of 7.18% incorporates a return on regulated
 13 equity of 8.8% as mandated in the GRA Order.
 14
 15

1 The 2015 test year return on average rate base has decreased by 15 basis points (\$7,481,000) from
 2 6.82% (\$122,810,000) filed in the Amended GRA, to 6.67% (\$115,329,000) in the Compliance
 3 Application as illustrated in the following table:
 4

5 **Table 11: 2015 Return on Average Rate Base (Revenue Deficiency) from Amended GRA**
 6 **to Compliance Application**
 7

(000's)		Average Rate Base	Return on Average Rate Base (%)
Rate base as filed Amended GRA	A	\$ 1,802,024	6.82%
Prudence adjustments to average rate base	B	(11,787)	
GRA compliance fuel adjustments to average rate base	C	(24,469)	
GRA compliance adjustments to average rate base	D	<u>(36,675)</u>	
Revised average rate base Compliance Application	[E = A + B + C + D]	<u>1,729,093</u>	
Return on average rate base Amended GRA	F	<u>122,810</u>	
GRA compliance prudence adjustments	G	(804)	
GRA compliance fuel adjustments	H	(7,097)	
GRA compliance RSP interest fuel adjustments	I	5,466	
GRA compliance GRA adjustments	J	(2,486)	
GRA compliance debt guarantee adjustments	K	<u>(2,560)</u>	
Total Compliance Application adjustments	[L = G + H + I + J + K]	<u>(7,481)</u>	
Return on average rate base Compliance Application	[M = F+L]	<u>\$ 115,329</u>	6.67%
			[N = M/E]

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The change in return on rate base is a function of reductions in average rate base for prudence adjustments of \$11,787,000, fuel inventory adjustment decreases of \$24,469,000 and other GRA adjustment decreases of \$36,675,000 which have increased return on rate base by 0.28% relative to the initial return on rate base of \$122,810,000 filed in the Amended GRA. These increases have been offset by a reduction in return on rate base of \$7,481,000, a decrease of 0.43%, as a result of implementing the GRA Order consisting of the following: 1) a reduction for prudence compliance of \$804,000; 2) a reduction in regulated earnings for reduced fuel costs and power purchases of \$7,097,000 offset by an increase in interest of \$5,466,000 for credits to RSP interest associated with a reduction in No. 6 fuel price from \$93.32 per barrel to \$55.40 per barrel; 4) a reduction in regulated earnings of \$2,486,000 and 5) a reduction in interest of \$2,560,000 related to the GRA Order to apportion debt guarantee fees between Hydro and the Government.

The prudence adjustments presented in the Compliance Application were reviewed and detailed in our report *Board of Commissioners of Public Utilities Financial Consultants Report Newfoundland and Labrador Hydro P.U. 13 (2016) Prudence Review – Compliance Application August 30, 2016*.

As a result of the GRA Order, the Board ordered debt guarantee fees be apportioned 50/50 to Hydro and the Government in the Compliance Application. The result of compliance with the GRA Order has reduced debt guarantee fees by \$2,560,000 from \$4,447,000, filed in the Amended GRA, to \$1,887,000 in the Compliance Application. Consistent with 2014, in calculating the adjustment Hydro has also adjusted certain debt issues from a 0.50% debt guarantee fee, used in the Amended GRA, to 0.41% debt guarantee fee in the Compliance Application which has also been further added to the 50/50 adjustment. The reduction reflects Hydro's methodology used in response to Undertaking 139 which requested Hydro use a long term debt guarantee fee range of 0.35% to 0.47%. In response, Hydro used the midpoint of 0.41% to reflect the range requested in the undertaking. The following table illustrates Hydro's adjustment of the debt guarantee fee in the Compliance Application:

Table 12: 2015 Debt Guarantee Fee Adjustment Amended GRA versus Compliance Application

Debt guarantee fee as filed in the Amended GRA	A	\$ 4,447,000
Reduction in debt guarantee fee (Note 1)	B	<u>(673,000)</u>
Guarantee fees before 50/50 split	[C = A + B]	3,774,000
50% reduction in guarantee fee	[D = C x 0.50%]	<u>(1,887,000)</u>
Debt guarantee fee as filed in Compliance Application	[E = C + D]	<u>\$ 1,887,000</u>
Adjustment debt guarantee fee Compliance Application	[F = B + D]	<u>\$ (2,560,000)</u>

Note 1: As part of the Compliance Application, Hydro has reduced the debt guarantee fee rate for certain debt issues from 0.50% in the Amended GRA, to 0.41% in the Compliance Application which reflects the mid point of the range of 0.35% to 0.47% requested to be incorporated in Undertaking 139.

Hydro's 2015 revenue deficiency return on rate base of 6.67% matches the Company's revised weighted average cost of capital of 6.67% which incorporates a return on regulated equity of 8.8% as mandated in the GRA Order.

1 **2015 Rate Setting Average Rate Base and Comparison to 2015 Revenue Deficiency**
 2 **Average Rate Base**

3
 4 2015 test year average rate base as filed in the Amended GRA, GRA Order adjustments, and the 2015 test
 5 year average rate bases for rate setting purposes, as filed in Hydro's Compliance Application, are presented in
 6 the following table which also highlights the variances compared to 2015 test year average rate base filed for
 7 revenue deficiency:
 8

9 **Table 13: 2015 Average Rate Base Rate Setting Comparison to 2015 Average Rate Base**
 10 **Revenue Deficiency**

	Test Year 2015	Prudence Adjust. 2015	Fuel Adjust. 2015	GRA Adjust. 2015	A Rate Setting Compliance Application 2015	B Revenue Deficiency Compliance Application 2015	[C = A - B] Variance Rate Setting vs. Revenue Deficiency 2015
Plant investment	\$ 1,870,275	\$ (6,599)	\$ -	\$ -	\$1,863,676	\$1,863,676	\$ -
Less:							
Accumulated depreciation	(203,834)	167	-	-	(203,667)	(203,667)	-
CIAC's	(17,936)	-	-	-	(17,936)	(17,936)	-
ARO's	(12,169)	-	-	-	(12,169)	(12,169)	-
Net capital assets	1,636,336	(6,432)	-	-	1,629,904	1,629,904	-
Balance previous year	1,615,796	(5,359)	-	-	1,610,437	1,464,153	146,284 (2)
Average	1,626,066	(5,896)	-	-	1,620,171	1,547,029	73,142
Less: average net assets not in use	(2,605)	(4,713)	-	-	(7,318)	(7,318)	-
	1,623,461	(10,609)	-	-	1,612,853	1,539,711	73,142
Cash working capital allowance	7,037	-	-	-	7,037	7,037	-
Fuel inventory	66,633	-	(19,235) (3)	-	47,398	42,164	5,234 (3)
Supplies inventory	27,402	-	-	-	27,402	27,402	-
Deferred charges	77,491	3,289	-	14,352 (4)	95,132	117,247	(22,115) (4)
Less: deferred charges not in use	-	(4,467)	-	-	(4,467)	(4,467)	-
Average rate base	<u>\$ 1,802,024</u>	<u>\$ (11,787) (1)</u>	<u>\$ (19,235)</u>	<u>\$ 14,352</u>	<u>\$1,785,353</u>	<u>\$1,729,093</u>	<u>\$ 56,259</u>
Return on rate base:							
Unadjusted return on regulated equity	\$ 33,232	\$ (1,658)	\$ (4,047) (5)	\$ (163) (5)	\$ 27,364	\$ 21,991	\$ 5,373
Cost of service exclusions	323	854	-	-	1,177	1,177	-
Net interest	89,255	-	2,758 (5)	(2,560) (5)	89,453	92,161	(2,708)
Return on rate base	<u>\$ 122,810</u>	<u>\$ (804) (5)</u>	<u>\$ (1,289)</u>	<u>\$ (2,723)</u>	<u>\$ 117,994</u>	<u>\$ 115,329</u>	<u>\$ 2,665 (5)</u>
Rate of return on average rate base	<u>6.82%</u>				<u>6.61%</u>	<u>6.67%</u>	<u>-0.06%</u>

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 14 As illustrated in the table average rate base for rate setting purposes has decreased by \$16,671,000
 15 from \$1,802,024,000 filed in the Amended GRA to \$1,785,353,000 in the Compliance Application.
 16 The following commentary discusses the various impacts on average rate base from Hydro's
 17 compliance with the GRA Order.

- 1 (1) As part of the GRA Order the Board has accepted Hydro's Prudency Application in accordance
2 with P.U. 13 (2016). As a result Hydro has excluded items totalling \$11,787,000 for rate setting
3 purposes in the Compliance Application. The prudence adjustments presented in the
4 Compliance Application are detailed in our report *Board of Commissioners of Public Utilities Financial*
5 *Consultants Report Newfoundland and Labrador Hydro P.U. 13 (2016) Prudence Review – Compliance*
6 *Application August 30, 2016.*
7
- 8 (2) The variance of \$146,284,000 results from a difference in the treatment of 2014 delayed in
9 service assets in average rate base for rate setting purposes compared to average rate base for
10 revenue deficiency. For rate setting purposes the Board has ordered that Hydro include the full
11 year impact of 2014 delayed in service assets in rate base as filed in the Amended GRA resulting
12 in no adjustment to 2015 test year net capital assets. For revenue deficiency purposes the Board
13 has ordered that 2014 delayed in service assets be excluded from average rate base. As a result,
14 2015 revenue deficiency average rate base incorporates the 2014 carry forward effects and
15 reflects a partial year in service for 2015, compared to a full year in service for rate setting
16 purposes.
17
- 18 (3) Fuel inventory has decreased due to a revision in the forecast average price of No. 6 fuel. The
19 average fuel price for No. 6 fuel was forecast in the Amended GRA at \$93.32 per barrel. In the
20 GRA Order the Board approved Hydro's revised forecasts for No. 6 fuel. For 2015 rate setting
21 purposes Hydro has used its 2016 average forecast for No. 6 fuel of \$64.41 per barrel to
22 calculate the fuel inventory in its average rate base. Using this revised price, average fuel
23 inventory has decreased by \$19,235,000 from \$66,633,000, in the Amended GRA, to
24 \$47,398,000 in the Compliance Application. The variance of \$5,234,000 in 2015 average rate
25 base for rate setting purposes, compared to average rate base for 2015 revenue deficiency, is due
26 to differences in the price of No. 6 fuel used in each respective rate base. For 2015 rate setting,
27 Hydro has used a forecast rate of \$64.41 per barrel, as mandated in the GRA Order, compared
28 to the 2015 revenue deficiency forecast rate of \$55.40 per barrel which Hydro notes is a price
29 based on its 2007 cost of service study.
30

1 (4) Deferred charges have increased 2015 average rate base for rate setting by \$14,352,000 as
 2 illustrated in the following table:
 3

4 **Table 14: Deferred Charges Average Rate Base 2015 Rate Setting versus 2015 Revenue**
 5 **Deficiency**
 6

	A	B	[C = B - A]
	Amended	Compliance	
	GRA	Application	Variance
2014 test year revenue deficiency deferral (Note 1)	\$ -	\$ 22,961,000	\$22,961,000
GRA Order adjustment 2014 test year revenue deficiency (Note 2)	-	(845,000)	(845,000)
2014 test year revenue deficiency deferral GRA Order	-	22,116,000	22,116,000
Fuel supply deferral (Note 3)	7,680,000	-	(7,680,000)
Hearing Costs (Note 4)	500,000	375,000	(125,000)
Hearing cost amortization (Note 4)	(166,000)	(125,000)	41,000
Average deferred charges	<u>\$ 8,014,000</u>	<u>\$ 22,366,000</u>	<u>\$ 14,352,000</u>

Note 1: In the Amended GRA it was forecast that the 2014 test year revenue deficiency of \$45,921,000 would be excluded from average rate and recovered through the Rate Stabilization Plan (RSP). In P.U. 58 (2014) Hydro did not obtain Board approval to recover the 2014 revenue deficiency through the RSP and the average impact remains as a deferred charge in average rate base for 2014 in the Compliance Application. For rate setting purposes Hydro has assumed a nil balance in the 2015 deferral account effectively transferring the balance to the RSP in 2015 for rate setting purposes (average impact: [(2014) - \$45,921,000 + (2015) \$Nil]/2 = \$22,961,000).

Note 2: 2014 test year revenue deficiency has been decreased by \$1,690,000 (average impact \$845,000) to reflect the decisions of the GRA Order.

Note 3: Hydro proposed fuel supply deferrals be deferred and amortized over 5 years in the Amended GRA. In the GRA Order the Board has noted that the fuel supply deferral has no benefit beyond 2014 and requested Hydro to file a proposal for the recovery of these costs within the context of the 2014 revenue deficiency. In response to the GRA Order, Hydro has removed Amended GRA average net fuel supply deferred charges and prudency disallowances of \$7,680,000 (2014 test year carry forward of \$8,534,000 less amortization of \$854,000) from rate base to reflect the decisions of the GRA Order and proposed recovery within 2014 revenue deficiency.

Note 4: The GRA Order requested Hydro to revise its hearing cost deferral from \$1,000,000 to \$750,000 which is to be amortized over three years. In compliance, Hydro removed \$250,000 of hearing costs and \$83,333 of related amortization from amounts filed in the Amended GRA. The impact of the GRA Order is a decrease in average net hearing costs of \$84,000 (\$125,000 less amortization of \$41,000) in the Compliance Application.

7
 8
 9 The variance in 2015 average rate base for rate setting compared to 2015 rate base for revenue
 10 deficiency is due to the treatment of the carry forward of the deferral of the 2014 revenue deficiency.
 11 For rate setting purposes, Hydro included the carry forward of the 2014 revenue deficiency deferral
 12 for only a half year to calculate average rate base for rate setting, compared to 2015 revenue
 13 deficiency rate base where the 2014 revenue deficiency deferral has been carried into 2015 for the full
 14 year in calculation of average rate base.
 15

The following table illustrates the treatment of the 2014 revenue deficiency deferral in average rate base for 2015 rate setting versus 2015 revenue deficiency:

Table 15: Deferred Charges Average Rate Base 2015 Rate Setting versus 2015 Revenue Deficiency

	Rate Setting			Revenue Deficiency		
	2013	2014	2015	2013	2014	2015
Revenue deficiency Amended GRA	\$ -	\$ 45,921,000	\$ -	\$ -	\$ 45,921,000	\$ 45,921,000
Other GRA compliance revenue deficiency	-	(1,690,000)	-	-	(1,690,000)	(1,690,000)
Total rate base	-	44,231,000	-	-	44,231,000	44,231,000
Average rate base	\$ -	\$ 22,116,000	\$ 22,116,000	\$ -	\$ 22,116,000	\$ 44,231,000
			A			B
Variance rate setting vs. revenue deficiency					[C = A - B]	<u>\$ (22,115,000)</u>

- (5) Return on average rate base has decreased by 21 basis points (\$4,816,000) from 6.82% (\$122,810,000) as filed in the Amended GRA to 6.61% (\$117,994,000) in the Compliance Application as illustrated in the following table:

Table 16: 2015 Return on Average Rate Base (Rate Setting) Amended GRA versus Compliance Application

(000's)		Average Rate Base	Return on Average Rate Base (%)
Rate base as filed Amended GRA	A	\$ 1,802,024	6.82%
Prudence adjustments to average rate base	B	(11,787)	
GRA compliance fuel adjustments to average rate base	C	(19,235)	
GRA compliance adjustments to average rate base	D	14,352	
Revised average rate base Compliance Application	[E = A + B + C + D]	<u>\$ 1,785,354</u>	
Return on average rate base Amended GRA	F	<u>\$ 122,810</u>	
GRA compliance prudence adjustments	G	(804)	
GRA compliance fuel adjustments	H	(4,047)	
GRA compliance RSP interest fuel adjustments	I	2,758	
GRA compliance GRA adjustments	J	(163)	
GRA compliance debt guarantee adjustments	K	(2,560)	
Total Compliance Application adjustments	[L = G + H + I + J + K]	<u>(4,816)</u>	
Return on average rate base Compliance Application	[M = F+L]	<u>\$ 117,994</u>	6.61%
			[N = M/E]

The change in return on rate base is a function of reductions in average rate base for prudence adjustments of \$11,787,000, fuel inventory adjustment decreases of \$19,235,000 and other GRA adjustment increases of \$14,352,000 which have increased return on rate base by 0.06% relative to the initial return on rate base of \$122,810,000 filed in the Amended

1 GRA. These increases have been offset by a reduction in return on rate base of \$4,816,000, a
 2 decrease of 0.27%, as a result of implementing the GRA Order consisting of the following
 3 adjustments: 1) a reduction for prudence compliance of \$804,000; 2) a reduction in regulated
 4 earnings for reduced fuel costs and power purchases of \$4,047,000 offset by an increase in
 5 interest of \$2,758,000 for credits to RSP interest associated with a reduction in No. 6 fuel
 6 price from \$93.32 per barrel to \$64.41 per barrel; 4) a reduction in regulated earnings of
 7 \$163,000 and 5) a reduction in interest of \$2,560,000 related to the GRA Order to apportion
 8 debt guarantee fees between Hydro and the Government.
 9

10 The prudence adjustments presented in the Compliance Application were reviewed and
 11 detailed in our report *Board of Commissioners of Public Utilities Financial Consultants Report*
 12 *Newfoundland and Labrador Hydro P.U. 13 (2016) Prudence Review – Compliance Application August*
 13 *30, 2016.*
 14

15 Hydro's 2015 return on rate base for rate setting purposes matches the Company's revised
 16 weighted average cost of capital of 6.61% which incorporates a return on regulated equity of
 17 8.5% as mandated in the GRA Order.
 18

19 The increase in return on rate base of \$2,665,000 from rate setting compared to revenue
 20 deficiency, as described by Hydro in the Compliance Application, is a function of the change
 21 in rate base from rate setting to revenue deficiency of \$56,260,000 multiplied by a rate setting
 22 return on rate base of 6.61%. This increase is offset by the change in return on rate base of
 23 6 basis points from rate setting at 6.61% to revenue deficiency at 6.67% applied to the
 24 revenue deficiency average rate base of \$1,729,093,000.
 25

26 The following table illustrates the calculation of change in return on average rate base from
 27 2015 revenue deficiency to 2015 rate setting:
 28

29 **Table 17: 2015 Return on Average Rate Base Rate Setting versus 2015 Return on**
 30 **Average Rate Based Revenue Deficiency**

(000's)	Average Rate Base	% Return on Average Rate Base
Revised average rate base 2015 revenue deficiency	A \$ 1,729,093	6.67% C
GRA compliance fuel adjustments to average rate base	5,234	
GRA compliance adjustments to average rate base	51,026	
Total rate base adjustments	B 56,260	
Revised average rate base 2015 rate setting	<u>\$ 1,785,353</u>	6.61% D
Return on rate base impact rate setting vs. revenue deficiency [E = B x D + (D - C) x A]	<u>\$ 2,665</u>	

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1 **2016 Revenue Deficiency Average Rate Base and Comparison to 2015 Rate Setting**
 2 **Average Rate Base**

3
 4 The 2016 average rate base for revenue deficiency purposes, as filed in Hydro's Compliance Application, is
 5 presented in the following table which also highlights the variances compared to 2015 test year average rate
 6 base filed for rate setting:
 7

8 **Table 18: 2016 Average Rate Base Revenue Deficiency and Comparison to 2015 Average Rate**
 9 **Base Rate Setting**

	A	B	[C = A - B]
	Revenue	Rate	Variance
	Deficiency	Setting	Rate Setting
	Compliance	Compliance	vs. Revenue
	Application	Application	Deficiency
(000's)	2016	2015	2016
Plant investment	\$1,863,676	\$1,863,676	\$ -
Less:			
Accumulated depreciation	(203,667)	(203,667)	-
CIAC's	(17,936)	(17,936)	-
ARO's	(12,169)	(12,169)	-
Net capital assets	1,629,904	1,629,904	-
Balance previous year	1,610,437	1,610,437	-
Average	1,620,171	1,620,171	-
Less: average net			
assets not in use	(7,318)	(7,318)	-
	1,612,853	1,612,853	-
Cash working			
capital allowance	7,037	7,037	-
Fuel inventory	42,164	47,398	(5,234) (1)
Supplies inventory	27,402	27,402	-
Deferred charges	117,247	95,132	22,115 (2)
Less: deferred charges			
not in use	(4,467)	(4,467)	-
Average rate base	<u>\$1,802,235</u>	<u>\$1,785,353</u>	<u>\$ 16,881</u>
Return on rate base:			
Unadjusted return			
on regulated equity	\$ 31,220	\$ 27,364	\$ 3,856
Cost of service exduions	1,177	1,177	-
Net interest	86,695	89,453	(2,758)
Return on rate base	<u>\$ 119,092</u>	<u>\$ 117,994</u>	<u>\$ 1,098 (3)</u>
Rate of return on			
average rate base	<u>6.61%</u>	<u>6.61%</u>	<u>0.00%</u>

10
 11
 12 Comparing 2015 rate setting to 2016 revenue deficiency, average rate base has increased \$16,681,000.
 13 The following commentary discusses the various impacts on average rate base from Hydro's
 14 compliance with the GRA Order.
 15

16 (1) Fuel inventory has decreased by \$5,234,000 primarily due to a fuel price of \$64.41 per barrel used
 17 for 2015 rate setting purposes versus a 2015 forecast fuel price of \$55.40 per barrel used in the

2016 revenue deficiency average rate base. As a result of the GRA Order the Board accepted Hydro's 2015 forecast fuel price which Hydro has used for calculation of the 2015 revenue requirement which Hydro incorporated for rate setting purposes. However we note for 2016 revenue deficiency purposes the \$55.40 per barrel fuel price is based on the 2007 cost of service study.

- (2) The variance in average rate base for 2016 revenue deficiency compared to 2015 rate base for rate setting is due to the treatment of the carry forward of the deferral of the 2014 revenue deficiency of \$45,921,000. For rate setting purposes, Hydro included carry forward of the 2014 revenue deficiency deferral for only a half year purposes calculating average rate base for rate setting, compared to 2016 revenue deficiency rate base where the 2014 revenue deficiency deferral has been carried into 2016 revenue deficiency for the full year in calculation of average rate base, consistent with the methodology used for 2015 revenue deficiency average rate base.

The following table illustrates the treatment of the 2014 revenue deficiency deferral in average rate base for 2016 revenue deficiency versus 2015 rate setting:

Table 19: Deferred Charges Average Rate Base 2015 Rate Setting versus 2016 Revenue Deficiency

	Rate Setting			Revenue Deficiency		
	2013	2014	2015	2013	2014	2016
Revenue deficiency Amended GRA	\$ -	\$ 45,921,000	\$ -	\$ -	\$ 45,921,000	\$ 45,921,000
Other GRA compliance revenue deficiency	-	(1,690,000)	-	-	(1,690,000)	(1,690,000)
Total rate base	-	44,231,000	-	-	44,231,000	44,231,000
Average rate base	\$ -	\$ 22,116,000	\$ 22,116,000	\$ -	\$ 22,116,000	\$ 44,231,000
			A			B
Variance rate setting vs. revenue deficiency					[C = B - A]	<u>\$ 22,115,000</u>

- (3) The return on rate base has increased by \$1,098,000 as a function of the increase in rate base of \$16,681,000 at the 2016 weighted average cost of 6.61%. For 2016 Hydro's 2016 return on rate base for revenue deficiency purposes matches the Company's revised weighted average cost of capital of 6.61% incorporates a return on regulated equity of 8.5% as mandated in the GRA Order and is consistent with that used in 2015 rate setting.

2013 Average Rate Base

The Board has requested that Hydro file its proposed 2013 average rate base for approval based on the findings of the GRA Order. In response, Hydro has filed a 2013 average rate base of \$1,549,685,000 in the Compliance Application. The average rate base includes average expenditures for Black Tickle fire restoration of \$695,000, which the Board excluded in P.U. 27 (2014) pending the receipt of further evidence from Hydro. In P.U. 13 (2016) the Board determined the expenditures related to Black Tickle fire restoration were prudent and Hydro has included these expenditures in 2013 average rate base in the Compliance Application.

In P.U. 42 (2013) the Board stated that Hydro shall not recover certain expenditures for the Labrador City Terminal Station until further review and order of the Board. In response, Hydro excluded expenditures of \$2,060,000 from average rate base in the Amended GRA. In P.U. 13 (2016) the Board concluded that the final costs for the Labrador Terminal City Terminal station should be accepted and Hydro has included these expenditures in 2013 average rate base in the Compliance Application. The following table summarizes Hydro's changes in 2013 average rate base from the Amended GRA to the Compliance Application:

Table 20: 2013 Average Rate Base

(000's)	<u>2013</u>
Average rate base Amended GRA	\$ 1,548,371
Exclusions P.U. 27 (2014)	
Black Tickle Fire Restoration	(695)
Charlottetown Diesel Plant	<u>(746)</u>
Revised average rate base PUB-NLH-389	1,546,930
Allowances GRA Order	
Labrador City Terminal Station	2,060
Black Tickle Fire Restoration	<u>695</u>
Average rate base GRA Order	<u>\$ 1,549,685</u>

Based on our review procedures performed we note the following average rate bases incorporate the findings of the GRA Order as filed in Hydro's Compliance Application:

Table 21: Summary of Average Rate Base and Return on Rate Base Compliance Application

(000's)	<u>Average Rate Base</u>	<u>Return on Average Rate Base</u>	<u>Return on Average Rate Base %</u>
2013	<u>\$ 1,549,685</u>		
2014 Revenue Deficiency	<u>\$ 1,629,088</u>	<u>\$ 116,920</u>	<u>7.18%</u>
2015 Rate Setting	<u>\$ 1,785,353</u>	<u>\$ 117,994</u>	<u>6.61%</u>
2015 Revenue Deficiency	<u>\$ 1,729,093</u>	<u>\$ 115,330</u>	<u>6.67%</u>
2016 Revenue Deficiency	<u>\$ 1,802,235</u>	<u>\$ 119,092</u>	<u>6.61%</u>

1 **Revenue Deficiency**

2
3 In order to determine the total revenue deficiency for each year, Hydro compared revenues based on forecast
4 loads for each Test Year with revised revenue requirements reflecting the GRA Order. Cost of Service
5 studies, which reflect the Board's decisions in the GRA Order, are used in determining the revenue deficiency
6 by customer class.

7
8 Our procedures with respect to the revenue deficiencies calculated for 2014, 2015, and 2016 and for the first
9 3 months of 2017 included the following:

- 10
11 1. Reviewed and agreed the revenue that results from using the existing rates to the revised Test Year
12 Cost of Service filed by the Company in the Compliance Application. Where appropriate we also
13 made enquiries and obtained additional documentation to support the existing revenue amounts by
14 customer class included in the Cost of Service;
- 15
16 2. Reviewed and agreed the allocated revenue requirement by customer class to the Test Year Cost of
17 Service filed by the Company in the Compliance Application; and
- 18
19 3. Verified and ensured the calculation of the revenue deficiency included in Exhibit 3 reconciled to the
20 calculation of the revenue requirements in Exhibit 2 and to the Test Year Cost of Service. Where
21 appropriate, we obtain additional documentation and support for the reconciling items.

22
23 Currently, interim rates are in place for Newfoundland Power, the Island Industrial Customers and Hydro
24 Rural customers. For these customer classes, Hydro allocated the revenue deficiencies for each of 2014, 2015,
25 2016, and for the first quarter of 2017. Rates for Hydro's rural customers on the Labrador Interconnected
26 System are final; these rates were approved as final in Order No. P.U. 33(2010). In the GRA Order the Board
27 stated the interim Labrador Industrial Transmission Rate will be approved on a final basis for existing
28 customers. According to Hydro as the rates for customers on the Labrador Interconnected system are final,
29 Hydro does not feel it can propose a recovery (refund) of revenue deficiencies (excess) from these customers
30 and as such has excluded it in the proposed revenue deficiencies. As a result, any revenue deficiency or excess
31 from Labrador Interconnected system over this period is absorbed as part of Hydro's profit or loss.

1 Below is a summary of the revenue deficiencies proposed by Hydro for the period of 2014 – 2017:
 2

3 **Table 22: Summary of Revenue (Deficiencies) Excess by Customer Group 2014 to 2017**
 4

(000's)	2014	2015	2016	2017	Total
Customer Group					
Newfoundland Power	\$ (35,462)	\$ 9,611	\$ 31,604	\$ (5,050)	\$ 703
Island Industrial Customers	(3,260)	(413)	2,076	(34)	(1,631)
Subtotal revenue deficiencies to be recovered	(38,722)	9,198	33,680	(5,084)	(928)
Labrador Interconnected	610	(117)	75	-	568
Labrador Industrial Transmission Customers	-	332	179	-	511
Subtotal reconciling items to revenue deficiencies	610	215	254	-	1,079
Total	\$ (38,112)	\$ 9,413	\$ 33,934	\$ (5,084)	\$ 151

5
 6

7 As discussed above Hydro has not proposed a recovery (refund) of any revenue deficiency (excess) for
 8 customers on the Labrador Interconnected system as the rates are considered final. As illustrated in the
 9 above table Hydro has calculated that there is a revenue excess of \$1,079,000 for Labrador Interconnected
 10 system customers for the period from 2014 to 2016; no calculation was provided by Hydro for 2017 as Hydro
 11 is not proposing recovery from Labrador Interconnected system customers. The Board may need to consider
 12 if Hydro's position to exclude Labrador Interconnected system customers from Hydro's proposed revenue
 13 deficiencies (or excess) calculations is appropriate.

14
 15
 16

The revenue deficiencies for each year will be addressed in the following section of our report.

1 **2014 Revenue Deficiency**

2
 3 The Board had directed Hydro to revise 2014 Test Year revenue requirements for 2014 revenue deficiency.
 4 Below is a reconciliation that illustrates the total revenue requirement from the finance schedule to the Cost
 5 of Service study:

6
 7 **Table 23: Reconciliation to the Revenue Requirement (\$ millions)**

8

Total Revenue Requirement per Finance Schedules	\$ 555.0
Less Expense Credits	(2.5)
Add IOCC Cost Recovery	1.9
Add RSP adjustments	82.1
Total Revenue Requirement per Cost of Service	\$ 636.5

9
 10
 11 While the 2014 fuel cost variance between the 2007 Test Year No. 6 fuel price of \$55.40 per barrel did not
 12 impact Hydro's total revenue deficiency in 2014, Hydro considered it reasonable to include the higher 2014
 13 forecast fuel cost of \$109.59 per barrel in determining the allocation of the 2014 revenue deficiency due to the
 14 fuel cost impact on the rural deficit and its allocation between Newfoundland Power and the customers on
 15 the Labrador Interconnected system. The additional \$82.1 million in RSP adjustments resulted from higher
 16 forecast Island Interconnected fuel costs in 2014. As a result, Hydro considered it reasonable to reflect these
 17 costs in the 2014 Test Year Cost of Service study to better reflect the costs of providing service in allocating
 18 the 2014 revenue deficiency among customers. For purposes of the 2014 Test Year Cost of Service study, this
 19 amount would have been recorded as a fuel cost in order to show the cost net of the RSP activity. The
 20 offsetting recovery would be reflected in the 2014 Test Year Cost of Service Study as revenues from
 21 Newfoundland Power, Industrial Customers and Hydro Rural customers.

22
 23 In order to determine the 2014 revenue deficiency for Newfoundland Power the Rural Deficit needs to be
 24 allocated to Newfoundland Power and Labrador Interconnected customers. The Island Industrial customers
 25 are not allocated a portion of the Rural Deficit. This is in accordance with Order in Council OC2003-347
 26 which directs that the Rural Deficit is to be paid by Newfoundland Power customers and Hydro's Labrador
 27 Interconnected customers and explicitly excludes Island Industrial Customers.

28
 29 The following table is a summary of 2014 existing revenues based on test year loads compared to 2014 revised
 30 test year costs by customer group before the Rural Deficit allocation from the revised 2014 Test Year Cost of
 31 Service:

32
 33 **Table 24: 2014 Revenues versus Costs**

34

(000's)	2014		
	Existing Revenues (A)	2014 TY Costs (B)	Difference (A)-(B)
Customer Group			
Newfoundland Power	\$ 483,433	\$ 460,577	\$ 22,856
Island Industrial Customers	26,833	30,093	(3,260)
Labrador Interconnected	19,730	16,971	2,759
Other Hydro Rural	66,455	126,922	(60,467)
Labrador Industrial Transmission	1,932	1,932	-
Total	\$ 598,383	\$ 636,495	\$ (38,112)

1 The table below presents the 2014 revenue deficiency to be recovered by customer group after the Rural
 2 Deficit allocation:

3
 4
 5

Table 25: 2014 Revenue Deficiency Allocation

(000's)	2014 TY		
	2014 Existing Revenues (A)	Costs (B) Revenue Deficiency	Difference (A)-(B)
Customer Group			
Newfoundland Power	\$ 483,433	\$ 518,895	\$ (35,462)
Island Industrial Customers	26,833	30,093	(3,260)
Lab Interconnected	19,730	19,120	610
Total	\$ 529,996	\$ 568,108	\$ (38,112)

6
 7
 8

9 The amounts are equal to the difference between the 2014 existing revenues using test year loads and the
 10 revised 2014 Test Year costs with the Rural Deficit allocated based on the revenue requirement methodology
 11 as approved in the GRA order.

12
 13
 14
 15
 16

13 There is a revenue deficiency of \$35.4 million for Newfoundland Power and \$3.3 million for Island Industrial
 14 Customers. There is an approximate \$0.6 million revenue surplus for Labrador Interconnected Customer
 15 group.

17
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 29
 30

17 We did identify a discrepancy in the return on rate base used in the 2014 cost of service study which used
 18 7.108% versus 7.18%. When Hydro incurs depreciation expense on assets that are used to provide service but
 19 are not recoverable in rates, i.e. not in operation (“NIO”) assets, it offsets this cost in calculating its revenue
 20 requirement by adding back an adjustment for “cost of service exclusions” to Hydro’s return on rate base.
 21 An example of NIO assets would be assets that have been excluded from rate base as part of the GRA Order
 22 to accept the Prudency Application. In the 2014 Costs of Service Study, Hydro inadvertently included the
 23 depreciation expense for NIO assets (\$1.2 million) in its assigned costs and offset it with an adjustment to its
 24 return on rate base in order to match the total revenue requirement. This created a mismatch in return on
 25 rate base between the Cost of Service and the finance schedules of 7.108% versus 7.18%. Hydro has
 26 prepared a revised 2014 Cost of Service Study in response to our query and the impact is a net decrease to the
 27 Newfoundland Power revenue requirement of \$60,000 and an offsetting increase to the rural Labrador
 28 Interconnected revenue requirement of appropriately the same. Total revenue requirement does not change.

1 **2015 Revenue Deficiency**

2

3 Below is a reconciliation that illustrates the total revenue requirement from the finance schedule to the Cost
 4 of Service study:

5

6 **Table 26: Reconciliation to the Revenue Requirement (\$ millions)**

7

Total Revenue Requirement per Finance Schedules	\$ 539.6
Add IOCC Cost Recovery	1.4
Less Expense Credits	(2.5)
Total Revenue Requirement per cost of service	\$ 538.5

8

9

10 The following table is a summary of 2015 existing revenues using test year loads compared to 2015 revised
 11 test year costs before the Rural Deficit allocation from the 2015 Test Year Cost of Service for revenue
 12 deficiency purposes:

13

14 **Table 27: 2015 Revenues versus Costs**

15

(000's)

Customer Group	2015 Existing		Difference	
	Revenues (A)	2015 TY Cost (B)	(A)-(B)	
Newfoundland Power	\$ 429,323	\$ 364,016	\$ 65,307	
Island Industrial Customers	32,182	32,595	(413)	
Labrador Interconnected	20,093	17,528	2,565	
Other Hydro Rural	60,879	119,257	(58,378)	
Labrador Industrial Transmission Customers	5,410	5,078	332	
Total	\$ 547,887	\$ 538,474	\$ 9,413	

16

17

18 The table below presents the 2015 revenue deficiency to be recovered by customer group after the Rural
 19 Deficit allocation:

20

21 **Table 28: 2015 Revenue Deficiency Allocation**

22

(000's)

Customer Group	2015 Existing		2015 TY Costs		Difference (A)-(B)
	Revenues (A)	Revenue Deficiency (B)	Revenue Deficiency (B)		
Newfoundland Power	\$ 429,323	\$ 419,712	\$ 9,611		
Island Industrial Customers	32,182	32,595	(413)		
Labrador Interconnected	20,093	20,210	(117)		
Labrador Industrial Transmission Customers	5,410	5,078	332		
Total	\$ 487,008	\$ 477,595	\$ 9,413		

23

1 The amounts are equal to the difference between the 2015 existing revenues and the revised 2015 Test Year
2 costs with the Rural Deficit allocated based on the revenue requirement methodology as approved in the
3 GRA order.

4

5 As a result of the allocation of the revenue deficiency, Newfoundland Power incurred excess revenue of \$9.6
6 million and \$0.3 million for Labrador Industrial Transmission. There was an approximate \$0.4 million
7 revenue deficiency for the Island Industrial Customers and \$0.1 million for Labrador Interconnected. There
8 was an overall revenue excess for the 2015 year of \$9.4 million.

9

1 **2016 Revenue Deficiency**
 2

3 To determine revenue deficiency for 2016, Hydro compared its revenues for 2016 based on approved interim
 4 rates applied to the 2015 Test Year load forecast with the 2015 Test Year revenue requirement for rates-
 5 setting reflecting the GRA Order, but adjusted to use \$55.40 per barrel price of No. 6 fuel.
 6

7 Below is a reconciliation that illustrates the total revenue requirement from the finance schedule to the Cost
 8 of Service study:
 9

10 **Table 29: Reconciliation to the Revenue Requirement (\$ millions)**
 11

Total Revenue Requirement per Finance Schedules	\$ 544.3
Less Expense Credits	(2.5)
Add IOCC Cost Recovery	1.4
Total Revenue Requirement per cost of service	\$ 543.2

12
 13
 14 The table below is a summary of 2016 revenues under interim rates in effect for 2016 based on the 2015 Test
 15 Year load forecast compared to the 2015 Test Year Cost of Service for rates setting by customer group:
 16

17 **Table 30: 2016 Revenues versus 2015 Test Year Costs based on 2015 Test Year Load Forecast**
 18

(000's)	2016 Existing Revenues (A)	2015 TY Cost (B)	Difference (A)-(B)
Customer Group			
Newfoundland Power	\$ 448,560	\$ 367,659	\$ 80,901
Island Industrial Customers	34,892	32,816	2,076
Labrador Interconnected	20,093	17,651	2,442
Other Hydro Rural	68,217	119,881	(51,664)
Labrador Industrial Transmission Customers	5,410	5,231	179
Total	\$ 577,172	\$ 543,238	\$ 33,934

19
 20
 21 The following table presents the 2016 revenues at interim rates and 2015 Test Year costs, including the
 22 allocation of the Rural Deficit:
 23

24 **Table 31: 2016 Revenues versus 2015 Test Year Costs based on 2015 Test Year Load**
 25

(000's)	2016 Existing Revenues (A)	2015 TY Costs Revenue Def. (B)	Excess (A)-(B)
Customer Group			
Newfoundland Power	\$ 448,560	\$ 416,956	\$ 31,604
Island Industrial Customers	34,892	32,816	2,076
Labrador Interconnected	20,093	20,018	75
Labrador Industrial Transmission Customers	5,410	5,231	179
Total	\$ 508,955	\$ 475,021	\$ 33,934

1 The amounts are equal to the difference between the 2016 Test Year revenues from rates and the revised
2 2015 Test Year costs with the Rural Deficit allocated based on the revenue requirement methodology as
3 approved in the GRA order.

4
5 There was excess revenue of \$31.6 million for Newfoundland Power, \$2.1 million for Island Industrial
6 Customers, \$0.1 million for Labrador Interconnected and \$0.2 million for Labrador Industrial Transmission
7 Customers. This accounted for an overall revenue excess of \$33.9 million.

8
9 **Based on completion of our procedures we did not note any discrepancies in the calculations of the**
10 **revenue deficiencies for 2014, 2015 and 2016 included in the Compliance Application except in**
11 **relation to the impact on customers' 2014 revenue requirement for the discrepancy on the return on**
12 **rate base included in the Cost of Service study discussed on page 36.**
13

2017 Revenue Deficiency

To determine the revenue deficiency for the first three months in 2017, Hydro compared the forecast revenues for the first quarter by applying the proposed base rates in the Compliance Application and the existing interim rates that will be in effect for the first quarter 2017 by the 2015 test year loads.

The revenue requirements for revenue deficiency purposes for 2015 and 2016 were calculated using a No. 6 fuel price at \$55.40. Test Year revenue requirement for determining revenue deficiency in 2017 however, has been calculated using a fuel price of \$64.41, i.e. at Compliance Application proposed base rates. The increased revenue as a result of this fuel price change results in the revenue surplus in 2016 becoming a revenue deficiency in 2017.

According to Hydro with new rates coming to effect in 2017, the RSP will be updated to reflect the 2015 Test Year value including the \$64.41 per barrel of No. 6 Test Year fuel price for all of 2017. Therefore, it would be appropriate for Hydro to compare revenues at interim rates against revenue requirement for rate-setting using the 2015 Test Year fuel price of \$64.41. This approach ensures that the 2017 RSP operates on a single Test Year fuel price as opposed to one portion of 2017 at \$55.40 and another at \$64.41.

The table below provides an estimate of the revenue deficiency for the first quarter of 2017.

Table 32: 2017 Revenue Deficiency Summary

Customer Group	TY Load (A)	Compliance Base Rate (B)	Interim Base Rate (C)	Rate Difference (B-C)	Difference A * (B-C) (^{'000})	As filed in Compliance Application	
						(^{'000})	Diff. (^{'000})
<u>NF Power</u>							
Demand (kW)	3,780,512	\$ 4.75	4.32	0.43000	\$ 1,626	\$ 1,626	\$ -
Energy (kWhs)	750,000,000	0.02319	0.03506	(0.01187)	(8,903)	(8,438)	(465)
1st Block	750,000,000	0.02319	0.03506	(0.01187)	(8,903)	(8,438)	(465)
2nd Block	1,299,200,000	0.10422	0.09509	0.00913	11,862	11,862	-
					\$ 4,585	\$ 5,050	\$ (465)
<u>Island Industrial Customers</u>							
Demand (kW)	250,500.00	7.99	8.38	(0.39000)	\$ (98)	\$ (95)	\$ (3)
Energy (kWhs)	146,100,000	0.03971	0.04069	(0.00098)	(143)	(110)	(34)
Firm	146,100,000	0.03971	0.04069	(0.00098)	(143)	(110)	(34)
Specifically Assigned charges (\$)		409,958	171,078		239	239	-
					\$ (2)	\$ 34	\$ (36)
Totals					\$ 4,583	\$ 5,084	\$ (501)

We agreed the load to 2015 test year support provided by Hydro and the interim rates used to compile the revenue deficiency. However, Hydro used incorrect compliance base rates in their calculation of the 2017 revenue deficiency included in the Compliance Application. When the correct compliance base rates are used we noted the above overstatement of \$465,000 and \$36,000 for Newfoundland Power and Island Industrial Customers, respectively.

It is our understanding that rate change may not be effective until July 1, 2017. If this is the case a revised calculation of the 2017 revenue deficiency will be required. The Board should direct Hydro to correct the above error in its revised 2017 revenue deficiency.

1 **Proposal for recovery of Revenue Deficiencies**

2

3

The Board directed Hydro to file a proposal of the recovery for the revenue deficiencies to reflect the findings of the GRA Order. Included in the Compliance Application are calculations of revenue deficiencies for years 2014, 2015, 2016 and for the 1st quarter of 2017 as discussed above in the report. The GRA Order required Hydro to provide revised calculations of revenue deficiencies and a proposed plan for the recovery of the revenue deficiencies.

7

8

9

In the Compliance Application Hydro has proposed to:

10

11

12

13

14

15

16

17

18

- transfer the \$703,000 balance owing to Newfoundland Power to their RSP current balance as of December 31, 2016. This amount will become part of the overall balance that will be addressed when the annual RSP recovery adjustment rates are calculated for July 1, 2017 implementation
- transfer the \$1,631,000 owing from the Island Industrial Customer to the Island Industrial Customer segregated load variation component of the RSP. The balance in this component of the RSP owing to the Industrial customers as of December 31, 2016 is \$3.1 million.

1 **Rate Stabilization Plan**

2

3 The Rate Stabilization Plan (“RSP”) or (“the Plan”) was established for Hydro effective January 1, 1986. The
4 original objective of the RSP was to provide rate stability to customers by providing a mechanism to manage
5 volatility in Hydro’s revenue requirements due to events beyond their immediate control. When the RSP was
6 implemented it provided for adjustments to recover differences between the forecast test year costs used to
7 set rates and the actual costs attributable to:

- 8 - differences in the price of No.6 Fuel;
- 9 - variations in hydraulic production; and
- 10 - variations in load.

11 The RSP has continued to operate using the 2007 Test Year inputs that were approved by the Board in P.U. 7
12 (2007). In P.U. 49 (2016) the Board approved a 2015 Test Year for Hydro, and as a result Hydro had to
13 restate the RSP for 2015 and 2016 based on the 2015 Test Year inputs. In its Compliance Application, Hydro
14 has included the schedules of the 2015 and 2016 RSP using the 2007 Test Year and the 2015 Test Year in
15 Exhibits 6 to 9.

16 On page 107 of P.U. 49 (2016), the Board approved Hydro’s proposal to continue the existing load variation
17 component of the RSP, and on page 108, the Board approved Hydro’s proposed modification to the RSP
18 rules to allocate the year to date net load variations in the RSP load variation component between
19 Newfoundland Power and the Industrial customers based on energy ratios. This rule change is effective as of
20 September 1, 2013. On page 112, of the Order, the Board also approved several other amendments that
21 Hydro requested to the RSP rules.

22 This section of the report includes the following:

23

- 24 • Review of the 2014 Test Year RSP included in the Hydro’s Amended GRA Application
25 compared to the actual 2014 RSP and the RSP impact of calculating the 2014 revenue deficiency;
- 26 • Review of the RSP schedules in Exhibits 6 to 9 based on the changes approved as a result of P.U.
27 49 (2016), including the RSP impact of calculating the 2015 and 2016 revenue deficiencies
28 discussed in Exhibit 3 of the Compliance Application;
- 29 • Review of the revised RSP rules included in the Compliance Application; and
- 30 • Review of the proposed changes to various RSP rates included in Exhibit 4 of the Compliance
31 Application, such as fuel riders, RSP recovery adjustments, and RSP Surplus adjustments.

32

33 This section of the report also makes reference to several other Board Orders issued since the filing of
34 Hydro’s Amended GRA Application that impacted the operation of the RSP.

35

36 We did note on page 2 of Exhibits 6 to 9 the “year-to-date Due (to) from Customer” for the “year-to-date
37 customer load Utility” is not correct. The amount only includes the activity for January and February. We
38 also noted on page 2 of Exhibits 7 and 9, the Rural rates section was not updated for the December activity.
39 This page represents a summary of the Plan Highlights, these errors do not impact the activity within the

1 Plan, as it includes twelve months of activity. Also, the information included in footnote #2 on page 8 of
 2 Exhibit 7 is incorrect, however the correct inputs were used in calculating the adjustments in Column F.
 3 Hydro is aware of these errors and will refile the pages with the correct information.

4 **Rate Stabilization Plan – 2014 Test Year and Actual**

5
 6 Included in the Finance section of Hydro's Amended GRA filing, Schedule 1 (page 7 of 11), the RSP balance
 7 at the end of December 2014 was forecast to be a balance owing to ratepayers of \$197,028,000. The
 8 breakdown of the components included in the Plan as indicated in Schedule 1 (page 7 of 11) are included in
 9 the table below:

10 **Table 33: RSP Balance 2014 Test Year versus Actual**

11

(000's) Component	2014 Test Year	2014 Actual	Difference
Hydraulic Balance	\$ 11,505	\$ 43,358	\$ (31,853)
Utility balance	25,730	39,004	(13,274)
Industrial balance	(8,347)	(6,775)	(1,572)
Utility Segregated Load Variation	(721)	(520)	(201)
Industrial Segregated Load Variation	33,816	35,980	(2,164)
Utility RSP Surplus	124,014	124,014	-
Industrial RSP Surplus	<u>11,031</u>	<u>10,893</u>	<u>138</u>
Total balance owing	<u>\$ 197,028</u>	<u>\$ 245,954</u>	<u>\$ (48,926)</u>

12

13

14 The various inputs included in the Plan for the 2014 test year are based on the 2007 test year cost of service.
 15 The Plan also included the actual results for the period January 1, 2014 to May 31, 2014. The period from
 16 June 1, 2014 to December 31, 2014 was based on forecast hydrology, fuel prices and load. However, the RSP
 17 adjustment rate for Newfoundland Power ("the utility") was based on Board approved rates for the entire
 18 year.

19 Hydro also included an adjustment of \$45,921,000 in the Hydraulic Production Variation Account of the RSP
 20 as of December 31, 2014. This adjustment relates to the Application filed by Hydro on November 28, 2014,
 21 for approval, among other items, to establish a deferral account and transfer the 2014 forecast revenue
 22 deficiency of \$45.9 million to the deferral account. Hydro also proposed to use the credit balance in the RSP
 23 Hydraulic Production Variation Account at December 31, 2014 to provide recovery of the 2014 revenue
 24 deficiency.

1 On December 24, 2014, the Board issued P.U. 58 (2014). In this Order, the Board did approve the deferral
2 of the \$45.9 million, however the Board did not approve the proposed use of the credit balance in the RSP
3 Hydraulic Variation Account balance to provide recovery of the \$45.9 million forecast revenue deficiency.

4 On February 16, 2015, Hydro filed the actual results for the RSP as of December 31, 2014. The RSP as of
5 December 31, 2014 has a balance of \$245,954,000 owing to ratepayers. The breakdown of the components
6 included in the Plan are included in Table 33 above.

7 As shown in Table 33, the balance in the actual 2014 RSP is \$48.9 million higher than the RSP balance of
8 \$197,028,000 included in the amended GRA for the 2014 test year. This increase is a result of a number of
9 factors:

- 10 - The most significant factor contributing to the increased balance is the Board's denial of the use of
11 the credit balance in the Hydraulic Variation Account to recover the \$45.9 million forecast revenue
12 deficiency noted above. This increase has been partially offset by the decrease in the actual net
13 hydraulic production as of December 31, 2014 of 38,064,633 kWh in comparison to the 2014 test
14 year. These factors resulted in an increase of \$42,336,000 in the Hydraulic Variation component of
15 the Plan (before the annual 25% allocation) in comparison to the 2014 test year.
- 16 - The actual quantity of No. 6 fuel used in 2014 was 83,329 barrels lower than the amount included in
17 the 2014 test year and the actual average No. 6 fuel cost was \$1.05/bbl. lower than the 2014 test year
18 cost (\$109.59/bbl. vs. \$108.54/bbl.). This resulted in a decrease of \$6,729,000 in the Fuel Variation
19 component of the Plan in comparison to the 2014 test year. As a result of this decrease, the balances
20 owing to the Utility customer increased and the amount owing from the Industrial customers
21 decreased in comparison to the 2014 test year.
- 22 - The actual sales in 2014 to the Utility customer were 110,759,219 kWh lower than the forecast sales
23 included in the 2014 test year. This resulted in an increase in the load variation owing to the Utility
24 customer of \$202,910 in comparison to the 2014 test year.
- 25 - The actual sales in 2014 to the Industrial customers were 41,549,659 kWh lower than the forecast
26 sales included in the 2014 test year. This resulted in an increase in the load variation owing to the
27 Industrial customers of \$2,124,804 in comparison to the 2014 test year.
- 28 - The remaining difference is due to the amount recovered from the Utility customer via the RSP
29 adjustment being lower as a result of lower sales in comparison to the 2014 test year and the change
30 in finance charges as a result of the changing balances.

31 Order No. P.U. 49 (2016) did not include any orders that would change the operation of the Plan during
32 2014. Hydro's 2014 Test Year forecast reflected the operation of the RSP using the 2007 test year and that
33 the RSP balances at the end of 2014 would be disposed of through the normal operation of the RSP.

34 In the 2013 Amended GRA, (Section 4 – page 4.38), Hydro proposed some changes to the RSP for 2015, one
35 of the proposals was to recover the December 31, 2014 Industrial Customer RSP balance over a two-year
36 amortization period starting January 1, 2015. However, subsequent to filing the 2013 Amended GRA, on
37 January 28, 2015 Hydro filed an application for the approval of, among other things, customer electricity rates
38 for 2015 on an interim basis. On May 8, 2015, the Board issued P.U. 14 (2015) in response to this

1 application. Included in this Order, the Board approved effective July 1, 2015, changes to the RSP rules to
2 allow a transfer from the Industrial Customer RSP Surplus component to fund the full amount of the
3 December 31, 2014 Industrial Customer Current RSP balance. Therefore, based on this Order, the 2014
4 balance of \$6.775 million was fully recovered from the Industrial Customer RSP Surplus component and the
5 two year recovery was no longer required.

6 **2014 Revenue Deficiency – RSP Impact**

7
8 In its Amended GRA, Hydro's 2014 forecast net income was based on the 2014 Test Year forecast. This
9 included 2014 forecast No. 6 fuel costs of \$255.8 million, which were offset by \$81.8 million as a result of the
10 forecast operation of the RSP using the 2007 Test Year. The 2014 Actual No.6 fuel was \$244.3 million, which
11 was offset by \$76.2 million as a result of the actual operation of the RSP using the 2007 Test Year.
12 According to Hydro, the \$11.5 million difference is primarily due to load, price and power purchase variances.

13 In the GRA Order (page 80), the Board stated that:

14 *No adjustment was proposed to reflect actual fuel costs or the actual operation of the RSP for 2014. The Board*
15 *believes that, for the purpose of the calculation of the 2014 revenue deficiency, the forecast No. 6 fuel costs should*
16 *be adjusted to reflect the actual operation of the RSP in 2014 and the pass through of No. 6 fuel costs. The No.*
17 *6 fuel costs included in the 2014 test year for purposes of calculating the 2014 revenue deficiency should be*
18 *adjusted to reflect the actual 2014 No. 6 fuel price, the actual thermal energy generated at Holyrood and the*
19 *forecast Holyrood conversion factor of 588 kWh/bbl.*

20 The Board also noted the following on page 81 of the Order:

21 *In light of the complexities of the operation of the RSP the Board acknowledges that there may be other*
22 *considerations arising with this approach that may need to be addressed. The Board therefore will direct Hydro to*
23 *revise its proposals consistent with the Board's findings.*

24 In its Compliance Application, Hydro did not include proposals to update its 2014 revenue deficiency
25 calculation to reflect actual 2014 No. 6 fuel costs or the actual operation of RSP. It is Hydro's position that
26 revising the 2014 Test Year to reflect actual No. 6 fuel costs in 2014, within the context of the RSP, would
27 result in a misrepresentation of the revenue deficiency as this cost difference has already been dealt with
28 through the 2014 RSP balance disposition in 2015.

29 As indicated by Hydro in Exhibit 3, page 4 of the Compliance Application, Hydro's net income for 2014 was
30 determined based on fuel costs reflecting the 2007 test year fuel cost and the 2007 load forecast used in the
31 RSP. These differences do not impact Hydro's forecast net income in 2014 because the difference between
32 the actual No. 6 fuel cost in 2014 and the forecast fuel cost in the 2014 test year has already been reflected in
33 the December 31, 2014 RSP balances.

34 The RSP adjustments (fuel rider and recovery adjustment) for Newfoundland Power were calculated in
35 accordance with the RSP rules and applied effective July 1, 2015. The calculation of the recovery adjustment
36 takes into account the balance in the RSP for Newfoundland Power as of March 31, 2015 therefore the
37 balance of \$39 million owing to Newfoundland Power as of December 31, 2014 was factored into the
38 recovery rate calculated.

39 Also, as previously noted the Industrial Customers RSP balance of \$6.775 million that was owing to Hydro as
40 of December 31, 2014 has been recovered as a result of P.U. 14 (2015). This Order allowed the \$6.775

1 balance to be recovered from the Industrial Customer RSP surplus component. Therefore, the RSP balance
 2 from the 2014 fuel cost variances has also been recovered from the Island Industrial customers.

3 Hydro provided the table below that shows the RSP activity for the 2014 Test Year and 2014 actual relative to
 4 the 2007 Test Year:

5 **Table 34 - RSP Activity - 2014 Test Year versus 2014 Actual**

6

	2014 TY Forecast	2014 Actual	Difference
No. 6 Fuel	255,840,808	244,340,859	11,499,949
RSP Activity:			
Fuel Price			
Variation	126,383,400	119,653,888	6,729,512
NP Load Variation	(93,543)	(296,454)	202,911
IC Load Variation	(23,291,344)	(25,416,210)	2,124,866
Hydraulic			
Variation	(21,460,521)	(18,010,509)	(3,450,012)
Lab Int. Write-off	254,674	229,903	24,771
Total RSP Activity	81,792,666	76,160,618	5,632,048
Adjusted Fuel Cost	174,048,142	168,180,241	5,867,901

7
 8 Hydro has noted that there is no impact on the 2014 revenue deficiency related to fuel conversion factors as
 9 the Board approved 588 kWh per barrel, which Hydro used in its forecast 2014 Test Year.

10
 11 The remainder of the No. 6 fuel cost variance between the 2014 Test Year and 2014 actual (i.e., between the
 12 \$5.6 million sheltered through the RSP and the \$11.5 million identified in P.U.49(2016)) is primarily a result
 13 of variances in No. 6 fuel cost that are not dealt with through the RSP. According to Hydro, this difference
 14 reflects No. 6 fuel costs that changed as a result of variances from forecast in power purchases and
 15 transmission losses costs. For example, if power purchased from Exploits was lower than the amount
 16 included in the 2014 Test Year, then more thermal energy would have been required from Holyrood.

17 According to Hydro, reflecting 2014 actual No. 6 fuel costs in the calculation of the 2014 revenue deficiency
 18 would misrepresent the revenue deficiency, as the variance in the No. 6 fuel cost between 2014 Test Year and
 19 actual (within the context of the RSP) were captured in the 2014 RSP closing balances on Hydro's 2014
 20 balance sheet, which were then used to establish Newfoundland Power's RSP adjustments for 2015 and the
 21 recovery from Island Industrial Customers through a transfer from the RSP Surplus in 2015.

1 **Rate Stabilization Plan – 2015 Actual (Using 2007 Test Year)**

2
3 Hydro filed the actual results for the RSP as of December 31, 2015 using the 2007 Test Year inputs in Exhibit
4 6 of the Compliance Application. The RSP as of December 31, 2015 had a balance of \$324,548,481 owing to
5 ratepayers. The breakdown of the components included in the Plan is as follows:

6 **Table 35: RSP Balance 2015 Actual Using 2007 Test Year**

7	8 <u>Component</u>	9 <u>(\$000s)</u>
9	Hydraulic balance	\$ 56,458
10	Utility balance	70,887
11	Industrial balance	(474)
12	Utility Segregated Load Variation	2,473
13	Industrial Segregated Load Variation	58,724
14	Utility RSP Surplus	133,350
15	Industrial RSP Surplus	<u>3,130</u>
16	Total balance owing	<u>\$ 324,548</u>

17 The 2015 RSP operated during the 2015 fiscal year using the 2007 test year inputs. Some of the highlights
18 and changes that occurred during the operation of the 2015 RSP are as follows:

- 19 - Actual net hydraulic production was 4,828.2 GWh as compared to the 2007 Test Year input of 4,472
20 GWh.
- 21 - The actual average No. 6 fuel cost for 2015 was \$67.21 per barrel as compared to the 2007 Test Year
22 input of \$55.40 per barrel.
- 23 - The actual customer load for Newfoundland Power was 6,072.1 GWh as compared to the 2007 Test
24 Year input of 4,925.8 GWh and the actual customer load for Industrial customers was 498 GWh as
25 compared to 894.3 GWh.
- 26 - On January 28, 2015, Hydro filed an application that requested customer electricity rates for 2015 on
27 an interim basis. On May 28, 2015, the Board issued P.U. 14 (2015) in response to this application
28 and approved the following, effective July 1, 2015:
- 29 ○ an interim base rate increase of 8% for Newfoundland Power;
 - 30 ○ an interim base rate increase for Government Diesel customers of 50% of the proposed
31 increase; and
 - 32 ○ in relation to Island Industrial Customers;
 - 33 a) an interim base rate increase of 10.0%;

- 1 b) an interim RSP rate adjustment which will result in an effective 2.7% rate increase
2 for all Island Industrial customers,
- 3 c) a transfer from the Industrial Customer RSP Surplus to fund the difference between
4 the approved 10.0% base rate increase and the effective 2.7% increase; and
- 5 d) a transfer from the Industrial Customer RSP Surplus to fund the full amount of the
6 2014 year-end Industrial Customer RSP balance.

7 The increase in the interim base rates only impacted the rates used in the calculation of the RSP load variation
8 component. In July, 2015, the firm energy rate for Newfoundland Power increased to \$0.09509/kWh from
9 \$0.08805/kWh and the firming up charge for secondary energy increased to \$0.00908/kWh from
10 \$0.00841/kWh. The energy rate for Industrial customers increased to \$0.04044/kWh from \$0.03676/kWh.

11 As a result of this change in the RSP rule, the Industrial RSP Surplus was drawn down using RSP Adjustment
12 rates for all Industrial Customers so that the effective interim rate increase for the Island Industrial customers
13 was 2.7%. This drawdown was effective July 1, 2015 and as per P.U. 21 (2015), the RSP adjustment rates
14 were (0.49) cents per kWh and (0.269) cents per kWh. This drawdown is disclosed on page 13 of Exhibit 6.

15 As previously noted, the December 31, 2014 Industrial Customer balance of \$6.775 million was transferred to
16 the Industrial RSP Surplus account. This transfer was recorded in January 2015, as per page 13 of Exhibit 6.

17 The RSP adjustment rate for Newfoundland Power was approved in P.U.17 (2015) as (0.183) cents per kWh
18 effective July 1, 2015 to June 30, 2016. This rate is a combination of a fuel rider of 0.532 cents per kWh and a
19 RSP recovery adjustment of (0.715) cents per kWh. The fuel rider was calculated based on a forecast fuel
20 price of \$73.35 per barrel as of March 2015, in accordance with the RSP rules.

Rate Stabilization Plan – 2015 Actual (Using 2015 Test Year)

Hydro filed the actual results for the RSP as of December 31, 2015 using the 2015 Test Year inputs (except for fuel price) in Exhibit 7 of the Compliance Application. Based on Exhibit 7, the RSP as of December 31, 2015 using 2015 Test Year inputs, has a balance of \$287,075,204 owing to ratepayers. The breakdown of the components included in the Plan is as follows:

Table 36: RSP Balance 2015 Actual Using 2015 Test Year

<u>Component</u>	<u>(\$000s)</u>
Hydraulic balance	\$ 47,862
Utility balance	60,639
Industrial balance	(703)
Utility Segregated Load Variation	41,417
Industrial Segregated Load Variation	2,521
Utility RSP Surplus	132,285
Industrial RSP Surplus	<u>3,054</u>
Total balance owing	<u>\$ 287,075</u>

The RSP report included in Exhibit 7 of the Compliance Application is prepared using the 2015 Test Year inputs that were approved by the Board in P.U. 49(2016) with the exception of the fuel price. The 2015 Test Year inputs included in the RSP in Exhibit 7 are as follows:

- the hydraulic production is 4,603.6 GWh
- the Holyrood No. 6 fuel conversion factor is 618 kWh/bbl
- Firm energy sales to Newfoundland Power is 5,924,100,000 kWh
- Firm energy sales to the Industrial Customers is 621,400,000 kWh
- The interest rate used within the Plan is based on the 2015 WACC of 6.67%

The average No. 6 fuel price used in Exhibit 7 is \$55.40/bbl, the 2007 test year price. Hydro's explanation for using the 2007 Test Year price of fuel instead of the 2015 Test Year price of \$64.41/bbl included in the Board order will be discussed on page 53 in the report.

The updated 2015 RSP using the 2015 Test Year information also includes the change in the allocation of the variances attributed to the Rural customers and the allocation of the Rural Rate Alteration. The allocation of these items are based on the same allocation percentages as the Rural Deficit. In P.U. 49(2016), the Board approved Hydro's proposal to use the revenue requirement method to allocate the rural deficit between Newfoundland Power and the Labrador Interconnected system as of January 1, 2014. Based on the 2015 Test Year Cost of Service for Rate Setting (Exhibit 13 – Schedule 1.2.1, page 2 of 2), the Rural Deficit allocation for 2015 Test Year is 95.6% allocated to Newfoundland Power and 4.4% allocated to the Labrador Interconnected.

1 The impacts of P.U.14 (2015), P.U. 17 (2015) and P.U. 21 (2015), as described in the section noted above -
 2 “RSP 2015 Actual Using 2007 Test Year”, operated in the same manner in Exhibit 7.

3 The 2015 RSP in Exhibit 7 also includes the impact of the Board’s approval of the change in the allocation of
 4 the load variation component of the RSP. In P.U 49 (2016), page 108, the Board said that:

5 *Hydro’s proposed modification of the RSP rules to reflect an energy allocation approach is accepted, such that the allocation of the*
 6 *year-to-date net load variations in the RSP load variation component between Newfoundland Power and the Industrial customers*
 7 *effective September 1, 2013 will be based on energy ratios.*

8 Based on calculations provided by Hydro to determine the allocation of the load variation based on energy
 9 ratios as approved in the Order, Hydro did the following:

- 10 - The segregated load variation of \$44,236,190 that accumulated from September 1, 2013 to December
 11 31, 2015 was allocated monthly among Newfoundland Power, Industrial customers and Rural
 12 customers based on monthly energy sales, similar to the allocation of the fuel variance.
- 13 - The portion of the load that was allocated to Rural customers (\$3,097,099) was then reallocated to
 14 Newfoundland Power and the Labrador Interconnected based on the same percentages that the
 15 Rural Deficit is allocated. Up to December 31, 2014 it was allocated based on 89.10% to
 16 Newfoundland Power and 10.9% to Labrador Interconnected and the allocation for the 2015 activity
 17 was based on 95.65% to Newfoundland Power and 4.35% to Labrador Interconnected. The
 18 Labrador Interconnected portion (\$298,245) was written off to net income.
- 19 - The activity in the segregated load variation for 2015 was calculated using the 2015 Test Year
 20 approved weighted average cost of capital of 6.67% for revenue deficiency to calculate the financing
 21 costs for 2015.

22 The table below provides the balances that had accumulated up to December 31, 2015 prior to the Board’s
 23 approval of allocating the segregated load variation balance based on energy ratios, and the balance
 24 accumulated in this account for the customer groups after the load variation was allocated based on energy
 25 ratios.

26 **Table 37: Allocation of Segregated Load Variations**

27

	Before Using Energy Ratios	After Using Energy Ratios	Allocation of Rural Customers	Total as of 31-Dec-15
Newfoundland Power	\$ 589,067	\$ (38,617,686)	\$ (2,798,854)	\$ (41,416,540)
Industrial customers	(44,825,257)	(2,521,405)	-	(2,521,405)
Rural Customers		(3,097,099)	3,097,099	-
Labrador Interconnected	-	-	(298,245)	(298,245)
Write off of Lab Int.				298,245
	<u>\$ (44,236,190)</u>	<u>\$ (44,236,190)</u>	<u>\$ -</u>	<u>\$ (43,937,945) (1)</u>

28 (1) - See Exhibit 7, Page 11 of Compliance Application

1 The other significant change between Exhibit 6 – 2015 RSP using 2007 Test Year and Exhibit 7- 2015 RSP
2 using 2015 Test Year is the change in the Rural Rate Alteration (RRA).

3 Column C on page 8 of Exhibit 6 indicates that there was a total balance of \$3,671,767 credited to
4 Newfoundland Power's balance in 2015 however Column C on page 8 of Exhibit 7 indicates there was a total
5 balance of \$2,137,122 that was charged to Newfoundland Power, a change of \$5,808,889

6 The RRA normalizes Hydro's rural revenues for adjustments as a result of Newfoundland Power rate
7 changes. Many of Hydro's rural customer's rates are linked to Newfoundland Power rates and rate changes.
8 The RRA ensures that Hydro neither benefits nor is harmed when Newfoundland Power rate changes occur
9 between test years. Such changes include those that arise from Newfoundland Power GRA's as well as annual
10 RSP related rate changes.

11
12 When the RSP was operating under the 2007 Test Year, this meant that the RRA was calculated as the
13 difference between rates customers were actually paying and those set as a result of the 2007 Test Year. Since
14 2007, Newfoundland Power has had several GRA's with rate increases which were passed on to Hydro's rural
15 customers. Additionally, for the period covering July 2014 through July 2015, a RSP fuel rider was in effect
16 for a much higher fuel price, \$105.60 per barrel in comparison to the \$55.40 from the 2007 Test Year.
17 Furthermore, rate changes to Labrador interconnected customers for 2007 to 2011 to merge Labrador East
18 and Labrador West rates were also credited to the RRA during this time.

19
20 As a result of these changes, Hydro was recovering substantially more from its rural customers relative to the
21 2007 Test Year hence the large credit balances in the RRA in the first six months of the 2015 RSP using the
22 2007 Test Year. All of these increases were given back to Newfoundland Power's customers through the RRA
23 as they fund the Rural Deficit.

24
25 For the second six months of 2015, new interim rates were approved at the same time as a RSP adjustment.
26 The interim rate change was an increase for Hydro rural customers excluding Labrador Interconnected.
27 According to Hydro, they considered the new interim rates to be new base rates and discontinued the RRA
28 credits that had continued since 2007. Section B, Rule 1.3 of the RSP rules does not make any reference that
29 when interim base rates are implemented that these rates would be considered the new cost of service rate.
30 However, at this point in time the rate that Newfoundland Power charged its customers as a result of the
31 interim rate increase from Hydro would be the same base rate that Hydro would be billing its rural customers.
32 Therefore, we would consider Hydro's assumption to be appropriate. The Board will need to consider if
33 Hydro's assumption that the interim base rates that were effective July 1, 2015 were the new base rates (cost
34 of service rate) for the purposes of calculating the RRA component of the RSP.

35 Because Newfoundland Power also implemented a new RSP adjustment rate on July 1, 2015, which
36 represented a rate decrease, at the same time as the interim rates were implemented, a new RRA adjustment
37 started July 1, 2015 to recover the reduced billings as a result of the RSP rate decrease.

38 The allocation of the Rural Deficit also changed for the 2015 Test Year, and the RRA is also allocated to
39 Newfoundland Power on the same basis that the Rural Deficit is allocated. The RSP using the 2007 Test
40 Year would allocate the RRA to Newfoundland Power using 89.10% whereas the RSP using the 2015 Test
41 Year would allocate the RRA to Newfoundland Power using 95.65%.

1 According to Hydro, the RSP rules require the RSP adjustments relating to the RRA to discontinue when a
2 new test year is implemented, as there would be no difference between the cost of service rate and the existing
3 rate at this time (RSP rule 1.3). When Hydro restated the 2015 RSP using the 2015 Test Year, they
4 considered the 2007 test year base rates to be the rate at the beginning of 2015 because this was also the rate
5 used in the Cost of Service for the 2015 revenue deficiency calculation (Exhibit 11). In this Exhibit, the rural
6 revenues for the first six months were calculated using the 2007 Test Year base rates and as a result no RRA
7 was required until Newfoundland Power's rate changed on July 1, 2015. Therefore on page 8 of Exhibit 7,
8 which represents the 2015 RSP using the 2015 Test Year, there is no RRA from the beginning of Hydro's test
9 year until a rate change occurred from Newfoundland Power, as the rates charged to rural customers would
10 exactly match the test year until Newfoundland Power implemented a rate change. As noted above, a rate
11 change did occur on July 1, 2015 when Newfoundland Power implemented its RSP rate.

12 **Comparison of the 2015 RSP Using 2007 Test Year and 2015 Test Year**

13

14 As shown on Table 1, page 7 of Exhibit 3 of the Application, the difference between the RSP balance for
15 2015 using the 2007 Test Year (\$324.5 million) and updated using the 2015 test year (\$287 million) results in
16 a decrease of \$37.5 million in the overall RSP balance as of December 31, 2015. The effect of this update is
17 that Hydro's fuel cost in their 2015 financial statements was \$37.5 million higher using the 2007 Test Year
18 inputs and there was a \$37.5 million higher RSP balance on their balance sheet that Hydro owed to
19 customers.

20

21 As Hydro indicated in the Compliance Application, the \$37.5 million difference will reverse in their 2017
22 financial statements when the 2015 RSP is updated using the approved 2015 Test Year inputs (with the
23 exception of the fuel price).

24

25 **Fuel Price Used in the RSP for 2015 and 2016**

26

27 In P.U. 49 (2016), the Board directed Hydro to file a revised 2015 Test Year revenue requirement for the
28 purpose of determining the 2015 revenue deficiency and they also directed Hydro to use a 2015 Test Year
29 No. 6 fuel price of \$64.41 per barrel.

30

31 As previously noted, when Hydro recalculated the RSP for 2015 and 2016 using the inputs approved by the
32 Board in P.U. 49 (2016), they did not use the 2015 Test Year price of \$64.41 per barrel of No. 6 fuel instead
33 they continued to use the 2007 Test Year price of \$55.40 per barrel.

34 During 2015 and 2016 the RSP operated based on the 2007 Test Year fuel price of \$55.40 per barrel. As a
35 result of the operation of the RSP during this time period, the fuel cost variances from the 2007 Test Year
36 fuel purchase price (\$55.40 per barrel) have been reflected in the customer rate changes that occurred on July
37 1, 2015 and July 1, 2016 for Newfoundland Power.

38 Newfoundland Power customer rates were adjusted to reflect an updated forecast fuel price in 2015 and 2016
39 through the fuel rider and the impact of fuel price variance in the RSP recovery factor, which is updated
40 annually with the new rates effective July 1st. Similarly, the current balance in the Industrial Customer RSP
41 balance reflects the fuel price variances from \$55.40 per barrel for 2015 and 2016.

42

43 Based on discussions with Hydro, in order to determine the 2015 and 2016 revenue deficiencies, Hydro
44 determined how much revenue was collected from customers under interim rates that the Board approved in
45 P.U. 14 (2015), and compared that to what should have been collected under the approved 2015 Test Year.
46 Any difference between these revenues would reflect an over or under collection of revenue from customers.

1 As explained by Hydro, the fuel price variances from the 2007 Test Year fuel price of \$55.40 per barrel for
2 2015 and 2016 have already been dealt with through the operation of the RSP and therefore do not impact
3 the determination of revenue requirement from base rates for 2015 and 2016.
4

5 According to Hydro, if the calculation of the 2015 or 2016 revenue requirement for revenue deficiency was
6 updated using a No. 6 fuel price of \$64.41 per barrel compared to the 2007 Test Year price of \$55.40, the
7 total revenue requirement would increase by approximately \$23.2 million for each year (2,577,657 barrels x
8 \$9.01(\$64.41-\$55.40). This would effectively reflect a fuel cost variance in revenue requirement which would
9 have already been dealt with through the operation of the RSP. Therefore, calculating Hydro's revenue
10 deficiency for 2015 and 2016 using \$64.41 per barrel would result in an overstatement of revenue deficiency
11 to be recovered from customers.
12

13 Increasing No. 6 fuel expense to \$64.41 has no impact on net income if the RSP normalizes the price of fuel
14 to this same level. However, the RSP did not normalize price to \$64.41 in 2015 and 2016, it was normalized
15 to \$55.40. As such, the corresponding offset in fuel expense did not occur and therefore, Hydro's revenue
16 requirement would be overstated by \$23.2 million.
17

Hydro provided Table 38 below to illustrate this issue.

Table 38: 2015 Net Income Projections using \$55 and \$64 per barrel No. 6 fuel

**Newfoundland and Labrador Hydro
 Statement of Income and Retained Earnings
 (\$000s)**

	<u>2015 Deficiency</u> \$55 Fuel	<u>2015 Deficiency</u> \$64 Fuel	<u>Variance</u>
Revenue			
Energy sales	537,111	560,336	23,225
Revenue deficiency	-	-	-
Other revenue	2,508	2,508	-
Total revenue	<u>539,619</u>	<u>562,844</u>	<u>23,225</u>
Expenses			
Operating expenses	130,350	130,350	-
Other Income and expense	4,074	4,074	-
Fuels	164,239	164,239	-
Power purchases	62,827	62,827	-
Amortization	63,230	63,230	-
Accretion of asset retirement obligation	748	748	-
Interest	92,161	92,161	-
Total expenses	<u>517,628</u>	<u>517,628</u>	<u>-</u>
Net income	<u>21,990</u>	<u>→ 45,215</u>	<u>→ 23,225</u>

Table 38 shows that Hydro's revenue requirement increases by \$23.2 million using the \$64.41 per barrel fuel price for 2015. However, Hydro's fuel cost is not impacted for 2015 as the RSP operated relative to the \$55.40 fuel price. The result increases Hydro's net income in the 2015 Test Year projections for determining revenue deficiency.

Based on discussions with Hydro, they noted that in order to correct this overstatement of revenue requirement, Hydro would have to either: (i) use the \$55.40 per dollar fuel price in determining revenue requirement for revenue deficiency; or (ii) create a fictitious offsetting RSP rider to apply for 2015 and 2016 to offset the increased revenue requirement reflecting the \$64.41 per barrel No. 6 fuel cost.

Hydro explained that in order to fully reflect \$64.41 per barrel on a historical basis in the RSP, they would be required to retroactively determine what rates should have been in place for 2015 and 2016 using the new fuel price. Hydro is of the opinion that this approach would not be consistent with rate-setting on a prospective basis so in order to achieve the desired result in reflecting the 2015 Test Year in the RSP update, Hydro updated the RSP to reflect the 2015 Test Year forecast for all components except fuel price.

Hydro did attempt a calculation to offset the increased revenue requirement of \$23.2 million per year with an offsetting credit accumulating in the RSP of \$9 per barrel (\$64.41-\$55.40), however they encountered an issue due to how the RSP operates. The RSP operates using actual customer loads whereas the Test Year revenue requirement is based on forecast customer loads. As a result, there would not be an equal matching of "RSP savings" as compared to the additional fuel costs reflected in the revenue requirements (\$23.2 million). According to Exhibits 7 and 9, the cumulative sales for 2015 and 2016 for Newfoundland Power and Industrial Customers were approximately 180 GWh lower than the 2015 Test Year forecast. As outlined in the table below, this difference would result in \$2.6 million lower fuel cost savings being provided through the RSP than recovered as a result of using the \$64.41 per barrel in determining the revenue requirement for revenue deficiency purposes.

Table 39: Calculation of RSP Impact Using \$64.41 versus \$55.40

	<u>2015 Test Year Load</u> (kwh)	<u>Actual Load</u> (kwh)	<u>Difference</u> (kwh)
2015 Utility	5,924,100,000	6,067,843,775	
Industrial Customer	621,400,000	497,961,116	
	<u>6,545,500,000</u>	<u>6,565,804,891</u>	(20,304,891)
2016 Utility	5,924,100,000	5,839,064,949	
Industrial Customer	621,400,000	505,383,547	
	<u>6,545,500,000</u>	<u>6,344,448,496</u>	<u>201,051,504</u>
			<u><u>180,746,613</u></u>
	<u>Cost per barrel</u>	<u>kwh/ bbl</u>	<u>Cost per kwh</u>
	\$64.41	618	\$0.104
	\$55.40	618	\$0.090
			\$0.0146
			*
			<u>180,746,613</u>
		Difference of Fuel Cost Savings	<u>\$2,638,901</u>

As a result of the issue described above, Hydro is of the opinion that using the 2007 Test Year fuel price of \$55.40 per barrel is the best approach to calculate the revenue deficiency for 2015 and 2016 and therefore the price also required to be used in the operation of the RSP for 2015 and 2016.

It is important to note that Hydro has used the 2015 Test Year price of \$64.41 per barrel for rate setting purposes and they will also use the approved \$64.41 price for the operation of the RSP beginning in 2017.

1 **Rate Stabilization Plan – 2016 Actual (Using 2007 Test Year)**

2 Hydro filed the actual results for the RSP as of December 31, 2016 using the 2007 Test Year inputs in Exhibit
3 8 of the Compliance Application. The RSP as of December 31, 2016 had a balance of \$343,629,655 owing to
4 ratepayers. The breakdown of the components included in the Plan is as follows:

5 **Table 40: RSP Balance 2016 Actual Using 2007 Test Year**

6

7 <u>Component</u>	<u>(\$000s)</u>
8 Hydraulic balance	\$ 37,018
9 Utility balance	68,977
10 Industrial balance	2,578
11 Utility Segregated Load Variation	9,328
12 Industrial Segregated Load Variation	81,949
13 Utility RSP Surplus	143,391
14 Industrial RSP Surplus	<u>389</u>
15 Total balance owing	<u>\$ 343,630</u>

16 The 2016 RSP operated during the year using the 2007 test year inputs, some of the highlights and changes
17 that occurred during the operation of the 2016 RSP are as follows:

- 18 - Actual net hydraulic production was 4,382.0 GWh as compared to the 2007 Test Year input of 4,472
19 GWh.
- 20 - The actual average No. 6 fuel cost for 2016 was \$46.40 per barrel as compared to the 2007 Test Year
21 input of \$55.40 per barrel.
- 22 - The actual customer load for Newfoundland Power was 5,844.7 GWh as compared to the 2007 Test
23 Year input of 4,925.8 GWh and the actual customer load for Industrial customers was 505.4 GWh as
24 compared to 894.3 GWh.
- 25 - On December 8, 2015, the Board issued P.U. 35 (2015). This Order approved a 3.7% increase in
26 interim base rates for the Island Industrial customers, with an offsetting RSP Surplus adjustment so
27 that there would be no increase in the rates paid by these customers. This Order was effective
28 January 1, 2016. The drawdown of the Industrial customers RSP surplus balance effective January 1,
29 2016 as a result of this Order are (\$1.52)/kW and (0.294) cents per kWh. This drawdown is also
30 disclosed on page 13 of Exhibit 8.
- 31 - As a result of P.U. 35 (2015), the increase in the interim base rates impacted the rates used in the
32 calculation of the RSP load variation component for the Industrial customers. On January 1, 2016,
33 the energy rate for Industrial customers increased to \$0.04069/kWh from \$0.04044/kWh.

1 - The RSP adjustment rate for Newfoundland Power was approved in P.U. 21 (2016) as (1.236) cents
 2 per kWh effective July 1, 2016 to June 30, 2017. This rate is a combination of a fuel rider of (0.023)
 3 cents per kWh and a RSP recovery adjustment of (1.213) cents per kWh. The fuel rider was
 4 calculated based on a forecast fuel price of \$54.60 per barrel as of March 2016, in accordance with
 5 the RSP rules.

6 **Rate Stabilization Plan – 2016 Actual (Using 2015 Test Year)**

7
 8 Hydro filed the actual results for the RSP as of December 31, 2016 using the 2015 Test Year inputs (except
 9 for fuel price) as Exhibit 9 of the Compliance Application. Based on Exhibit 9, the RSP as of December 31,
 10 2016 using 2015 Test Year inputs, has a balance of \$267,187,765 owing to ratepayers. The breakdown of the
 11 components included in the Plan is as follows:

12 **Table 41: RSP Balance 2016 Actual Using 2015 Test Year**

13	14 <u>Component</u>	14 <u>(\$000s)</u>
15	Hydraulic balance	\$ 21,407
16	Utility balance	50,665
17	Industrial balance	1,818
18	Utility Segregated Load Variation	48,868
19	Industrial Segregated Load Variation	3,110
20	Utility RSP Surplus	141,029
21	Industrial RSP Surplus	<u>291</u>
22	Total balance owing	<u>\$ 267,188</u>

23 Based on our review of Exhibit 9, the 2015 Test Year inputs that were approved by the Board were included
 24 in the Plan which were consistent to the 2015 RSP Using the 2015 Test Year in Exhibit 7 except for the Test
 25 Year weight average cost of capital.

26 The Test Year weighted average cost of capital changed from 6.67% used in the 2015 RSP to 6.61% in the
 27 2016 RSP. This difference is because, as per P.U. 49 (2016), page 131, the Board approved two different
 28 ROE's for 2015 and 2016, therefore Hydro has two different approved weighted average costs of capital. The
 29 calculations of the 6.67% and the 6.61% are included in Exhibit 2. The 6.67% weighted average cost of capital
 30 is the 2015 Test Year rate for revenue deficiency and the 6.61% used in 2016 is the 2015 Test Year rate for
 31 rate setting.

32 The rates used for the drawdown of the Industrial customers RSP surplus approved in P.U. 35 (2015) and the
 33 RSP adjustment rate for Newfoundland Power approved in P.U. 21 (2016) were applied consistently in this
 34 update.

35 The 2016 RSP using the 2015 Test Year in Exhibit 9 also includes the impact of the Board's approval of the
 36 change in the allocation of the load variation component of the RSP based on energy ratios.

1 Based on calculations provided by Hydro to determine the allocation of the load variation based on energy
 2 ratios as approved in the Order, Hydro did the following:

- 3 - The segregated load variation of \$8,063,940 that accumulated from January 1, 2016 to December 31,
 4 2016 (using a finance charge of 6.61%) was allocated monthly among Newfoundland Power,
 5 Industrial customers and Rural customers based on monthly energy sales, similar to the allocation of
 6 the fuel variance.
- 7 - The portion of the load that was allocated to Rural customers (\$552,314) was then reallocated to
 8 Newfoundland Power and the Labrador Interconnected based on the same percentages that the
 9 Rural Deficit is allocated in the 2015 Test Year, 95.65% to Newfoundland Power and 4.35% to
 10 Labrador Interconnected. The Labrador Interconnected portion (\$24,026) was written off to net
 11 income.
- 12 - The activity in the segregated load variation for 2016 was calculated using the 2015 test year approved
 13 weighted average cost of capital of 6.61% for the financing costs for 2016.

14 The table below shows the allocation of the activity that accumulated during the 2016 fiscal year prior to the
 15 Board's approval of allocating the segregated load variation balance based on energy ratios, and the re-
 16 allocation of the 2016 activity. The table also shows the overall balances for the customers groups as of
 17 December 31, 2016 after the load variation from September 1, 2013 to December 31, 2016 was allocated
 18 based on energy ratios.

19 **Table 42: Allocation of Segregated Load Variations September 1, 2013 to December 31, 2016**
 20

	Before Using Energy Ratios	After Using Energy Ratios	Allocation of Rural Customers	Activity for 2016	Allocation from Sept.1/13 to Dec. 31/15 ⁽¹⁾	Segregated Load Variation as of Dec. 31/16
Newfoundland Power	\$ 726,287	\$ (6,923,511)	\$ (528,288)	\$ (7,451,799)	\$ (41,416,540)	\$ (48,868,339)
Industrial Customers	(8,790,227)	(588,115)	0	(588,115)	(2,521,405)	(3,109,520)
Rural Customers		(552,314)	552,314	0	0	-
Labrador Interconnected	0	0	(24,026)	(24,026)	(298,245)	(322,271)
Write off of Lab Int.				24,026	298,245	322,271
	<u>\$ (8,063,940)</u>	<u>\$ (8,063,940)</u>	<u>\$ -</u>	<u>\$ (8,039,914)</u>	<u>\$ (43,937,945)</u>	<u>\$ (51,977,859) ⁽²⁾</u>

(1) - See Table 37 on page 51 of report

(2) - See Exhibit 9, Page 11 of Compliance Application

21
 22
 23 In P.U. 29 (2013), the Board ordered that the load variation from Newfoundland Power and the Industrial
 24 customers as of September 2013 be held in a separate account until its disposition. The balance in the
 25 segregated load variation component of the RSP has now been reallocated between the customer groups
 26 based on energy ratios.

27
 28 In the Compliance Application, Hydro has proposed that a portion of the Industrial customer's balance of
 29 \$3.1 million be used to recover the portion of the revenue deficiency allocated to this customer group.

30
 31 **Comparison of the 2016 RSP Using 2007 Test Year and 2015 Test Year**
 32

33 Table 2, page 8 of Exhibit 3 of the Application, shows the comparison of the activity flowing through the
 34 RSP in the 2016 fiscal year using the 2007 Test Year inputs and the 2015 Test Year inputs. The Table shows

1 a change in the balance of \$39 million. The activity going through the RSP during the 2016 fiscal year, using
2 the 2007 Test Year, resulted in a balance owing to customers of \$19.081 million and when the RSP was
3 updated using the 2015 test year there was a balance owing from customers of \$19.887 million. The effect of
4 this update is that Hydro's fuel cost in their 2016 financial statements was \$39 million higher using the 2007
5 Test Year inputs and there was an additional \$39 million in the RSP balance on their balance sheet that Hydro
6 owed to customers.

7
8 As shown in Table 3, page 9 of Exhibit 3, when the overall RSP balance as of December 31, 2016 using the
9 2007 Test Year (\$343.6 million) is compared to the balance at December 31, 2016 using the 2015 Test Year
10 (\$267.2 million), the difference is an overall decrease of \$76.4 million in the 2016 RSP balance as of
11 December 31, 2016 using the 2015 Test Year.

12
13 As Hydro indicated in the Compliance Application, when the 2015 and 2016 RSP is updated in 2017 to reflect
14 the 2015 Test Year, the impact that Hydro has experienced on its net income in 2015 and 2016 will reverse in
15 its 2017 financial statements, and therefore no amount related to the operation of the RSP using the 2007
16 Test Year is required to be reflected in the 2015 and 2016 revenue deficiency to be recovered from customers.

17
18 **Based on our review of the information included in Exhibits 6 to 9 of the Compliance Application,**
19 **we agree with Hydro's conclusion that the 2015 and 2016 revenue deficiency calculations does not**
20 **require any amounts to be recovered from customers as a result of the operation of the RSP using the**
21 **2007 Test Year inputs during 2015 and 2016.**

22 **RSP Rule Changes**

23
24
25 In P.U. 49 (2016), the Board approved the following amendments to the RSP rules:

26
27 (i) changes to reflect an energy allocation approach such that the allocation of year-to-date net load variations
28 in the RSP load variation component will be based on energy ratios effective September 1, 2013;

29
30 (ii) removal of Section D(2.2), by which the Island Industrial Customer RSP was suspended effective January
31 1, 2014;

32
33 (iii) removal of Section 1.3(b), as well as references to the December 6, 2006 Government directive, as there is
34 no further Rural Labrador Interconnected Automatic Rate Adjustment; and

35
36 (iv) removal of Section E – Historical Plan Balance, as it no longer exists.

37
38 In P.U. 54 (2016), the Board also approved revisions to the Rate Stabilization Plan rules to become effective
39 with the implementation of new rates arising from Hydro's GRA application. These revisions provided for
40 revised wording of the RSP rules for use in the calculation of the fuel rider and a revision to the RSP Surplus
41 section of the rules to reflect the approval of Hydro's Customer Refund Plan in Order No. P.U. 36 (2016).

42
43 The proposed revision that impacted the calculation of the fuel rider related to Section C of the rules that
44 outlined the calculation of the fuel price projection. The previous rule made a reference that the forecast fuel
45 prices were to be reduced by the "test year contract discount", however Hydro executed a new fuel contract
46 effective September 23, 2015, and this new contract price included a "premium" instead of a "discount". The
47 proposed revision includes a reference to Hydro's average fuel contract "premium or discount".

1 **Hydro's proposed revised RSP Rules are included in Exhibit 14 of the Compliance Application. We**
2 **have reviewed Hydro's proposed revisions and can confirm that the rules are in accordance with the**
3 **above amendments approved in P.U. 49 (2016) and P.U. 54 (2016).**

4
5 **Proposed RSP Rates**

6
7 In Exhibit 4 of the Compliance Application, Hydro provides the calculations of the proposed RSP Fuel Rider
8 for Newfoundland Power and Industrial customers, and the RSP Recovery Adjustment rate and RSP Surplus
9 Adjustments for Industrial customers.

10 **RSP Fuel Rider effective April 1, 2017**

11
12 In Section D of the RSP rules, it states that:

13 *When a new Test Year base rates come into effect, if a fuel rider forecast (either March or September) is more current than the test*
14 *year fuel forecast, a fuel rider will be implemented at the same time as the changes in base rates reflecting the more current fuel*
15 *forecast and the new test year values.*

16 *Otherwise, the fuel rider portion of the RSP Adjustment will be set to zero upon implementation of the new Test Year Cost of*
17 *Service rates, until the time for the next fuel price projection.*

18 In P.U. 49 (2016), the Board approved the use of \$64.41 fuel price which Hydro has indicated reflects the fuel
19 price forecast that they filed with the Board on October 28, 2015. However, a more recent fuel forecast for
20 September 2016 was filed on October 14, 2016. This forecast reflected a forecast fuel price of \$67.65.
21 Therefore, in accordance with the rule stated above, Hydro has calculated a fuel rider to be implemented with
22 the proposed base rates effective April 1, 2017 for Newfoundland Power and the Island Industrial customers.

23 Hydro has included the calculation of the proposed fuel rider in Exhibit 4 – Appendix A. Based on the
24 information in this Appendix, the fuel rider rate for Newfoundland Power is 0.162 cents per kWh and 0.150
25 cents per kWh for Industrial customers. In this calculation Hydro has used the Cdn\$/US\$ Noon Exchange
26 rate of 1.3267, which agrees to the monthly average of the Bank of Canada Cdn\$/US\$ Noon Exchange rate
27 for the month of September 2015. This calculation results in a forecast fuel price of \$68.50.

28 The fuel forecast that was filed on October 14, 2016 used the Cdn\$/US\$ Noon Exchange rate of 1.3109,
29 which agrees to the monthly average of the Bank of Canada Cdn\$/US\$ Noon Exchange rate for the month
30 of September 2016.

31 On page 8 (lines 1-5), Exhibit 4, Hydro notes that the conversion rate that they used in the calculation of the
32 fuel rider was 1.3267 which was the currency conversion rate used in determining the approved Test Year fuel
33 cost of \$64.41. In its calculation, Hydro has considered the conversion rate that was used to calculate the 2015
34 test year fuel price as a “test year value” noted in the rule above.

35 The Board may need to consider if this is the appropriate interpretation of this rule. This rule could also be
36 interpreted that the “more current fuel forecast” would be \$67.65, calculated using the Cdn\$/US\$ Noon
37 Exchange rate for the month of September 2016, and the reference “new test year values” is the 2015 test
38 year fuel price of \$64.41. The difference in these two fuel prices would be used in the calculation of the fuel
39 rider. This interpretation of the rule would calculate a fuel rider rate of 0.128 cents per kWh for
40 Newfoundland Power and 0.119 cents per kWh for Industrial customers.

1 **We have reviewed the calculation of the fuel rider included in Exhibit 4 – Appendix A and based on**
2 **Hydro's interpretation of the rule, we can confirm that the fuel rider rate of 0.162 cents per kWh for**
3 **Newfoundland Power and 0.150 cents per kWh for Industrial customers is calculated in accordance**
4 **with the RSP rules, however we cannot conclude that Hydro's interpretation of the rule is correct.**
5 **The Board may need to provide clarification on the interpretation of this rule.**

6 On February 20, 2017, Hydro filed an application with the Board requesting that the Board approve the filing
7 of its next general rate application on or before July 31, 2017, reflecting 2018 and 2019 test years, instead of
8 March 31, 2017 as per P.U. 49(2016). Also included in the February 20, 2017 application, Hydro also
9 discussed the fact that customers could experience two rate changes in a short period of time, one relating to
10 the 2013 GRA and this Compliance Application, and again on July 1, 2017 to reflect the annual update to the
11 RSP adjustments for Newfoundland Power. Hydro recognized that this could cause confusion for customers
12 and that it would be preferable to have one rate change occur on July 1, 2017 to reflect both rate changes. If
13 the Board approves Hydro's request, the fuel rider included in the Compliance Application will have to be
14 updated in accordance with Section D of the RSP rules, as a new fuel price forecast for March 2017 will be
15 filed with the Board in April 2017.

16 **RSP Recovery Adjustment Rate effective April 1, 2017**

17
18 Hydro has not updated the RSP recovery adjustment in its proposed rates for April 1, 2017 for
19 Newfoundland Power. The RSP rate will be updated in Hydro's annual RSP adjustment on July 1, 2017.

20 However, the approved amendments to the RSP Rules as discussed previously, approved the removal of
21 Section D (2.2), by which the Island Industrial Customer RSP adjustment rate was suspended. Hydro has
22 determined that the removal of this section requires an RSP adjustment to be implemented for 2017 to
23 provide disposition of the current year balance as of December 31, 2016.

24 Hydro has provided the calculation of the RSP recovery adjustment rate in Appendix D, Exhibit 4. The rate
25 of (0.373) cents per kWh calculated in this Appendix is based on the rate being effective as of January 1, 2017,
26 however the Compliance Application has it effective April 1, 2017. Therefore, in theory, the Industrial
27 Customer's RSP balance as of December 31, 2016 (updated for the 2015 test year) will not be fully refunded
28 to customers by the end of December 31, 2017. Any remaining balance will be carried forward in the
29 calculation of the RSP recovery adjustment rate effective January 1, 2018.

30 Based on discussions with Hydro, there are other options with regards to the implementation to this rate.
31 The rate in Appendix D could be calculated based on the forecast balance as of March 31, 2017 and having
32 the balance fully recovered by December 31, 2017, however this would require a change in the RSP rules.

33 Another option would be to leave the implementation of the RSP adjustment rate until January 1, 2018.
34 However, based on discussions with Hydro, since the RSP recovery adjustment rate calculated in Appendix D
35 is actually a rate decrease, it would be favourable for the Industrial customers for this rate to be effective
36 when the new base rates come into effect particularly considering that the RSP Surplus adjustment rates that
37 are currently in place to offset the 10% rate increase in the interim rates will be discontinued when the new
38 base rates come into effect.

1 As noted in the previous section, if the Board delays the implementation of the new base rates to July 1, 2017,
2 the RSP Recovery Adjustment Rate for the Island Industrial customers would also most likely be delayed until
3 this time.

4 **Island Industrial customers – RSP Surplus Adjustments**

5
6 P.U. 49 (2016) required Hydro to file a proposal for the finalization of Island Industrial Customer rates. In the
7 fall of 2013, the Board approved initial changes to Island Industrial Customer rates in compliance with Orders
8 in Council OC2013-089 and OC2013-090, as amended, which provided direction to the Board and to Hydro,
9 respectively, with regard to the phasing-in of rate changes to Hydro's Island Industrial Customers.

10 In P.U. 21 (2015), the Board approved a 10% increase in Island Industrial Customers base rates (excluding
11 specifically assigned charges) and the implementation of RSP Surplus adjustments that resulted in a 2.7%
12 increase in rates for each individual Island Industrial Customers effective July 1, 2015. In P.U. 21 (2015), the
13 Board also approved an RSP Adjustment of (1.141) cents per kWh to apply to Teck Resources.

14 In P.U. 35 (2015), the Board approved an additional 3.7% base rate increase to Island Industrial Customers
15 effective January 1, 2016. The average 3.7% increase in base rate revenue from the Island Industrial
16 Customers had no customer billing impact as the increase in base rate demand and energy charges were fully
17 offset by revised RSP Surplus adjustments. The Board also approved RSP Surplus adjustments of (\$1.52)/kW
18 and (0.294) cents per kWh .

19 On August 25, 2016, the Board responded to correspondence received from Hydro on August 10, 2016 with
20 respect to the Island Industrial customer rates and the modification of the RSP Surplus Adjustments. Hydro
21 explained that in its view no action was required on September 1, 2016 and proposed that that the phase-in of
22 Island Industrial customer rates be finalized when new base rates are implemented in its general rate
23 application. According to Hydro, the credit balance in the Industrial Customer RSP Surplus was adequate to
24 continue the existing rates until January 2017.

25 In its correspondence on August 25, 2016, the Board noted that it was satisfied based on the information that
26 Hydro provided that the existing rates approved by the Board on an interim basis are reasonable in the
27 circumstances and that it is was not necessary to modify the RSP Surplus Adjustment approved by P.U. 35
28 (2015) at that time. However, the Board also noted that if circumstances change before the Board issues the
29 order establishing the final rates for Hydro's GRA, then an application may be filed with the Board to revise
30 rates for these customers.

31 According to Exhibit 9, page 13 of the Compliance Applications, the Industrial Customers RSP Surplus
32 balance at the end of 2016 (updated for the 2015 Test Year) is a credit balance of \$291,188 (balance owing to
33 customers). In Exhibit 4, page 9-10, Hydro explains that the continuation of the RSP Surplus credits for
34 Industrial Customers until the end of March 2017 will result in a RSP surplus balance of approximately
35 \$500,000 owing to Hydro. Exhibit 4, Appendix C provides the calculation of the forecast drawdown of the
36 RSP surplus for Island Industrial Customers.

37 Hydro explains that based on the normal operation of the RSP, this amount would be reflected in the Island
38 Industrial Customers RSP balance at December 31, 2017 for setting the RSP recovery adjustment rate
39 effective January 1, 2018. Hydro also notes that the other option would be update the RSP recovery
40 adjustment rate for 2017 to reflect the outstanding balance as of March 31, 2017. However, according to

1 Hydro, this would increase the proposed rate increase for Island Industrial customers by an additional 1.6%
2 (\$500,000 divided by \$31.2 million, 2015 Test Year revenue under existing rates) and it would require a
3 change from the current RSP rules with respect to the calculation of the RSP recovery adjustment rate.

4 Another option that the Board could consider is whether it would be appropriate to recover this balance or a
5 portion of it from the Industrial customers Segregated Load variation balance of \$3.1 million. Hydro is
6 proposing in this Compliance Application, that this balance also be used to recover the \$1.6 million of
7 revenue deficiency allocated to the Industrial customer group.

8 However, as previously discussed, if the Board approves the effective date of the new rates to July 1, 2017,
9 and the RSP Surplus Adjustments continue to be applied to the Industrial Customers RSP Surplus balance,
10 the balance owing to Hydro from the Industrial customers will continue to grow from the estimated March
11 31, 2017 balance of \$500,000. Based on the correspondence from the Board on August 25, 2016, it noted
12 that if circumstances change before the Board issues the order establishing the final rates for Hydro's GRA,
13 then an application may be filed with the Board to revise rates for these customers.

14 **Summary**

15

16 As a result of our review of the impacts in the operation of the RSP in accordance with P.U. 49(2016), we
17 have summarized the issues that the Board will need to consider before issuing an Order relating to Hydro's
18 Compliance Application:

19 **2014 Revenue Deficiency**

20

21 In P.U. 49(2016), the Board stated the following

22 *The Board believes that, for the purpose of the calculation of the 2014 revenue deficiency, the forecast No. 6 fuel*
23 *costs should be adjusted to reflect the actual operation of the RSP in 2014 and the pass through of No. 6 fuel*
24 *costs. The No. 6 fuel costs included in the 2014 test year for purposes of calculating the 2014 revenue deficiency*
25 *should be adjusted to reflect the actual 2014 No. 6 fuel price, the actual thermal energy generated at Holyrood and*
26 *the forecast Holyrood conversion factor of 588 kWh/bbl.*

27 In its Compliance Application, Hydro did not include proposals to update its 2014 revenue deficiency
28 calculation to reflect actual 2014 No. 6 fuel costs or the actual operation of RSP. It is Hydro's position that
29 revising the 2014 Test Year to reflect actual No. 6 fuel costs in 2014, within the context of the RSP, would
30 result in a misrepresentation of the revenue deficiency as this cost difference has already been dealt with
31 through the 2014 RSP balance disposition in 2015.

32 **Rural Rate Alteration Component of the 2015 RSP**

33 When the Board approved the interim base rates, effective July 1, 2015, Hydro considered the new interim
34 rates to be new base rates and discontinued the RRA credits that had continued since 2007. Section B, rule
35 1.3 of the RSP rules do not make any reference indicating that when interim base rates are implemented these
36 rates would be considered the new cost of service rate. However, at this point in time the rate that
37 Newfoundland Power charged its customers as a result of the interim rate increase from Hydro would be the
38 same base rate that Hydro would be billing its rural customers. Therefore, we consider Hydro's assumption
39 to be appropriate. The Board will need to consider if Hydro's assumption that the interim base rates that

1 were effective July 1, 2015 were the new base rates (cost of service rate) for the purposes of calculating the
2 RRA component of the RSP.

3 **2015 RSP - Using the 2007 Test Year cost of \$55.40 per barrel verses the 2015 Test Year cost of \$64.41**

4 In P.U. 49(2016), the Board directed Hydro to file a revised 2015 Test Year revenue requirement for the
5 purpose of determining the 2015 revenue deficiency and they also directed Hydro to use a 2015 Test Year
6 No. 6 fuel price of \$64.41 per barrel.

7 However, when Hydro recalculated the RSP for 2015 and 2016 using the inputs approved by the Board in
8 P.U. 49(2016), they did not use the 2015 Test Year price of \$64.41 per barrel of No. 6 fuel instead they
9 continued to use the 2007 Test Year price of \$55.40 per barrel.

10 As explained by Hydro, the fuel price variances from the 2007 Test Year fuel price of \$55.40 per barrel for
11 2015 and 2016 have already been dealt with through the operation of the RSP and therefore do not impact
12 the determination of revenue requirement from base rates for 2015 and 2016.

13 According to Hydro, if the calculation of the 2015 or 2016 revenue requirement for revenue deficiency was
14 updated using a No. 6 fuel price of \$64.41 per barrel compared to the 2007 Test Year price of \$55.40, the
15 total revenue requirement would increase by approximately \$23.2 million for each year (2,577,657 barrels x
16 \$9.01(\$64.41-\$55.40). This would effectively reflect a fuel cost variance in revenue requirement which would
17 have already been dealt with through the operation of the RSP. Therefore, calculating the revenue deficiency
18 for 2015 and 2016 using \$64.41 per barrel would result in an overstatement of revenue deficiency to be
19 recovered from customers.

20 **RSP Fuel Rider effective April 1, 2017**

21 The Board will need to consider if Hydro has interpreted the Rule 1.3 in Section B of the RSP rules correctly.
22 Should the current forecast fuel price be calculated using the Cdn\$/US\$ Noon Exchange rate of 1.3267, as of
23 September 2015 or should it use 1.3109, the Cdn\$/US\$ Noon Exchange rate for the month of September
24 2016.

25 Hydro has included the calculation of the proposed fuel rider in Exhibit 4 – Appendix A. In this calculation
26 Hydro has used the Cdn\$/US\$ Noon Exchange rate of 1.3267, which agrees to the monthly average of the
27 Bank of Canada Cdn\$/US\$ Noon Exchange rate for the month of September 2015. This calculation results
28 in a forecast fuel price of \$68.50.

29 The fuel forecast that was filed on October 14, 2016 used the Cdn\$/US\$ Noon Exchange rate of 1.3109,
30 which agrees to the monthly average of the Bank of Canada Cdn\$/US\$ Noon Exchange rate for the month
31 of September 2016.

32 The currency conversion rate used in determining the approved Test Year fuel cost of \$64.41 was 1.3267. In
33 its calculation, Hydro has considered the conversion rate that was used to calculate the 2015 test year fuel
34 price as a “test year value” noted in the rule above.

35 The Board may need to consider if this is the appropriate interpretation of this rule. This rule could also be
36 interpreted that the “more current fuel forecast” would be \$67.65, calculated using the Cdn\$/US\$ Noon

1 Exchange rate for the month of September 2016, and the reference “new test year values” is the 2015 test
2 year fuel price of \$64.41. The difference in these two fuel prices would be used in the calculation of the fuel
3 rider. This interpretation of the rule would calculate a fuel rider rate of 0.128 cents per kWh for
4 Newfoundland Power and 0.119 cents per kWh for Industrial customers, as compared to 0.162 cents per
5 kWh for Newfoundland Power and 0.150 cents per kWh for Industrial customers proposed by Hydro.

6 **RSP Recovery Adjustment Rate effective April 1, 2017**

7 Hydro has determined that the removal of Section D (2.2) requires an RSP adjustment for Industrial
8 customers to be implemented for 2017 to provide disposition of the current year balance as of December 31,
9 2016.

10 Hydro has calculated the RSP recovery adjustments based on the Industrial Customer RSP current year
11 balance as of December 31, 2016 and is proposing that the rate be effective April 1, 2017.

12 Based on discussions with Hydro, there are other options that could be considered. The rate could be
13 calculated based on the forecast balance as of March 31, 2017 and having the balance fully recovered by
14 December 31, 2017, however this would require a change in the RSP rules.

15 Another option noted by Hydro, would be to leave the implementation of the RSP adjustment rate until
16 January 1, 2018. However, based on discussions with Hydro, since the RSP recovery adjustment rate
17 calculated in Appendix D is actually a rate decrease, it would be favourable for the Industrial customers for
18 this rate to be effective when the new base rates come into effect particularly considering that the RSP
19 Surplus adjustment rates that are currently in place to offset the 10% rate increase in the interim rates will be
20 discontinued when the new base rates come into effect.

21 **Island Industrial customers – RSP Surplus Adjustments**

22 Hydro has indicated that as of March 31, 2017, the Industrial Customers RSP Surplus balance will be depleted
23 by the RSP Surplus adjustments and they have forecast a balance at March 31, 2017 of approximately
24 \$500,000 owing to Hydro.

25 The Board did provide correspondence to Hydro on August 25, 2016, that indicated if the RSP Surplus
26 balance was not sufficient to absorb the current RSP surplus adjustments before the Board issues the order
27 establishing the final rates for Hydro's GRA, then an application may be filed with the Board to revise rates
28 for these customers.

29 Depending on the timing for the implementation of the final rates, the Board will need to consider if Hydro
30 should file an application to revise rates for the Industrial customers or allow the balance to continue to
31 increase and determine the recovery of this balance in a future order.

1 **Deferral and Recovery Mechanisms**

2
3 In the GRA Order the Board approved a number of proposed new deferral accounts to defer variances from
4 forecast of certain supply related costs, conservation and demand related costs, and fuel costs. However as
5 part of the GRA Order the Board directed Hydro to file revised language to reflect the Board findings. The
6 four particular accounts are the following:
7

- 8 • the Isolated Systems Supply Cost Variance Deferral Account;
- 9 • the Energy Supply Cost Variance Deferral Account;
- 10 • the Conservation and Demand Management Cost Deferral Account; and
- 11 • the Holyrood Conversion Rate Deferral Account.

12 **Reporting date changes proposed in revised definitions in Compliance Application**

13
14
15 In the Compliance Application Hydro is proposing that the Isolated Systems Supply Cost Variance deferral
16 account report filing date be changed from March 1 to March 31, which aligns with the proposed filing date
17 of the Rural Deficit Report each year. The Energy Supply Cost Variance and Holyrood Conversion Rate
18 deferral accounts are proposing the identical revision to allow for consistent filing dates among all approved
19 deferral accounts.
20

21 **Isolated Systems Supply Cost Variance**

22
23 This deferral account would provide Hydro with the deferral of variances associated with supply produced
24 and purchased on Hydro's isolated systems. The Board has accepted Hydro's evidence that there is significant
25 volatility in the price of diesel fuel on its isolated systems which is beyond Hydro's control and the risk is
26 material. In the GRA Order, the Board ordered that Hydro change the definition so that when the
27 application is filed for the Isolated Systems Supply cost variance it will (1) detail the proposed method of
28 collection or refund and from which customer class(s) and (2) include a detailed report on the efforts made by
29 Hydro during the year to minimize costs on the Isolated systems.
30

31 **We did note in our review that Hydro used the term "proceeding year" to describe the requirement**
32 **to describe Hydro's efforts to minimize costs. For clarity purposes we recommend that the wording**
33 **is changed to "during the year" so that it is clear that the reporting for Hydro's effort is for the**
34 **reporting year rather than prospectively. Otherwise, the revised definition filed in the Compliance**
35 **Application in Exhibit 5 addresses Board's findings.**
36

37 **Energy Supply Cost Variance**

38
39 The proposed Energy Supply Cost Variance Deferral Account would capture annual energy supply cost
40 variations on the Island Interconnected system. The proposed deferral account would provide for deferral of
41 variances associated with Island Interconnected system diesel and gas turbine production, and power
42 purchases related to hydraulic generation, wind generation, and Corner Brook Pulp and Paper cogeneration.
43 The deferral account definition was updated in the Compliance Application to clearly set out the supply
44 sources for thermal and power purchases.
45

46 The Board accepted that variances in both **volume and price** associated with thermal generation sources can
47 be significant, material in relation to Hydro's earnings, and outside of Hydro's control. For power purchases
48 the volatility of volume was accepted by the Board, but disagreed that price volatility was out of Hydro's
49 control, given that it is established by contract in one case with a related party. Therefore, the Board stated
50 that Hydro should not provide deferral and recovery of variances in the price of the power purchases. Hydro
51 has appropriately updated the definition in the Compliance Application to provide for only variances in
52 volume and not price for power purchases.

1 In our review of the revised definition we did note that the formula to determine Energy Supply
2 Costs is incorrect in relation to the fuel cost or savings resulting from the variance in generation at
3 Holyrood Thermal generating facility in that the Energy Supply Costs is being added back but
4 instead should be subtracted. Therefore, the formula should be modified by one of the following:

- 5
- 6 1) Modify the formula so that fuel costs or saving (indicated as C in the definition) is subtracted
7 from A and B instead of added; or
- 8 2) Modify the "F" portion of the formula for "C" so it is reflected as test year less actual, instead
9 of actual less test year as presented in the Compliance Application in Exhibit 5, Appendix B.

10 Conservation and Demand Management Cost

11 In a Settlement Agreement, which the Board accepted, it was agreed that:

- 12
- 13 1) Hydro's proposal to defer and amortize annual customer energy conservation program costs,
14 commencing in 2015, over discrete seven-year period in a Conservation and Demand Management
15 (CDM) Cost Deferral Account; and
- 16 2) Hydro's proposed CDM recovery adjustment should be approved to provide for recovery of costs
17 charged annually to the CDM Cost Deferral Account.

18 Hydro has revised the definition of the Conservation and Demand Management Cost deferral account for the
19 following:

- 20
- 21 • included the 2015 Conservation and Demand Management costs,
- 22 • has proposed a revision from March 31 included in the Amended GRA to December 31 to be
23 consistent with the use of year-end balance in the calculation of the CDM Recovery
24 Adjustment; and,
- 25 • has included proposed language where recovery of annual amortizations of cost in this account will
26 be provided through an annual application to the Board.

27 Holyrood Conversion Rate

28 In the GRA Order the Board ordered Hydro to include a cost variance threshold of plus/minus \$500,000
29 within this particular deferral account. Hydro has appropriately updated the definition to include the cost
30 variance threshold of plus/minus \$500,000 in the Compliance Application.

1 Excess Earning Definition

2
3 In the GRA Order the Board ordered Hydro to file an excess earnings account definition to reflect a range of
4 rate of return on rate base of +/- 20 basis points.

5
6 A definition of excess earnings has been provided by Hydro in the Compliance Application in Exhibit 2,
7 Appendix E. The proposed definition is as follows:

8
9 *The account will be credited with excess earnings in the event the following formula is greater than zero:*

10
11 *A - (B X C) Where:*

12
13 *A = Actual return on rate base, calculated as net interest expense, plus net income, plus cost of service exclusions;*

14
15 *B = Actual average rate base, December 31; and*

16
17 *C = Upper limit of return on rate base, defined as Test Year Return on Rate Base + 20 basis points.*

18
19 *The disposition of any balance in the account to be determined by the Board.*

20
21 *The upper limit return on rate base for the 2014, 2015, 2016 and subsequent years are presented in the following*
22 *table:*

	2014	2015	2016 & Subsequent Years
<i>Approved Return on Rate Base</i>	7.18%	6.67%	6.61%
<i>Upper Limit Range</i>	0.20%	0.20%	0.20%
<i>Upper Limit Return on Rate Base</i>	7.38%	6.87%	6.81%

23
24
25 Newfoundland Power has an excess earnings account as follows:

26
27 *This account shall be credited with any earnings in excess of the upper limit of the allowed range of return on rate base*
28 *as determined by the Board. The established range of return on rate base is 36 basis points. For any year, all earnings*
29 *in excess of 18 basis points above the approved rate of return on rate base for that year shall, unless otherwise order by*
30 *the Board, be credited to this account. Disposition of any balance in this account shall be as determined by the Board.*

31
32
33 **In our review of Hydro's proposed definition of excess earnings we noted that the approved return**
34 **on rate base, upper limit range and upper limit return on rate base agree to the Compliance**
35 **Application. We also noted that the proposed definition will achieve the desired result of isolating**
36 **Hydro's earnings in excess of the upper limit of the allowed range of return on rate base into a**
37 **separate account for disposition to be determined by the Board and that the calculation is consistent**
38 **with Newfoundland Power's excess earning account calculation except in relation to different upper**
39 **limit ranges approved for each utility.**

1 **Proposed Revenue from Rates**

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7

The Company is proposing that the Board approve rates, tolls and charges effective for service provided on and after April 1, 2017, to provide an average increase by customer as follows:

Table 43: Customer Class Average % Increase in Rates

Customer Class	Total Average % Increase
Utility Rate	2.3%
Island Industrial	7.1%
Hydro Rural	
1) Rural Island Interconnected & L'Anse au Loup	1.5%
2) Isolated Systems	9.4%
3) Labrador Interconnected	1.0%

8
9

We have reviewed the Company's proposed rates effective April 1, 2017. Specifically, the procedures we have performed include the following:

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1. A recalculation of the revenue that results from using the revised rates, ensuring that it agrees with the revenue requirement submitted by the Company;
2. Agreement of the factors used in the revenue calculations (number of customers, energy and demand usage, etc.) to those presented by the Company;
3. Agreement of the rates used in the revenue calculations to those in the proposed Revised Schedule of Rates, Tolls and Charges;
4. A recalculation of the percentage increase in revenue by rate class and the percentage increase in individual rates, tolls and charges;
5. Agreement of Hydro's proposal to adjust average system losses in the calculation of energy charge to Industrial customers for non-firm service is 3.47% is applied;
6. Recalculation of the Industrial customer rates following the findings of the GRA Order;
7. Agreement of implemented rate increases for Hydro Rural non-Government Domestic and General Service customers on isolated systems are in accordance with Government directive;
8. A recalculation of specifically assigned charges to Industrial customers on the Island Interconnected applying the existing methodology; and
9. Agreement of the changes made in Hydro's Rules and Regulations to the GRA Order.

1 The following table compares December 31, 2016 rates to April 1, 2017 proposed rates by customer:
 2

3 **Table 44: Existing and Proposed Rates, Tolls & Charges**
 4

Board of Commissioners of Public Utilities					
NL Hydro - Verification of Revised Rates					
Comparison of Existing and Proposed Rates, Tolls & Charges					
	Existing Rates	Proposed Rates	CHANGE (\$)	CHANGE (%)	
Labrador Interconnected Rate Classes					
Domestic - Rate # 1.1					
Basic Customer Charge (Per Month)	\$ 7.15	\$ 7.21	\$ 0.06	0.84%	
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.03280	\$ 0.03305	\$ 0.00025	0.76%	
General Service - Rate # 2.1					
Basic Customer Charge (Per Month)					
Unmetered	\$ 10.45	\$ 6.53	\$ (3.92)	-37.51%	
Single phase	\$ 10.45	\$ 10.53	\$ 0.08	0.77%	
Three phase	\$ 10.45	\$ 16.53	\$ 6.08	58.18%	
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.05240	\$ 0.05172	\$ (0.00068)	-1.30%	
General Service - Rate # 2.2					
Basic Customer Charge (Per Month)					
Unmetered	\$ -	\$ 6.53	\$ 6.53	-	
Single phase	\$ -	\$ 10.53	\$ 10.53	-	
Three phase	\$ -	\$ 16.53	\$ 16.53	-	
Demand Charge (\$/kW Per Month)	\$ 2.20	\$ 1.80	\$ (0.40)	-18.18%	
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.02433	\$ 0.02452	\$ 0.00019	0.78%	
General Service - Rate # 2.3					
Demand Charge (\$/kW Per Month)	\$ 2.00	\$ 2.02	\$ 0.02	1.00%	
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.02103	\$ 0.02119	\$ 0.00016	0.76%	
General Service - Rate # 2.4					
Demand Charge (\$/kW Per Month)	\$ 1.75	\$ 1.76	\$ 0.01	0.57%	
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.01733	\$ 0.01746	\$ 0.00013	0.75%	
Street Lights 4.1L					
250W Mercury Vapour (Per Month)	\$ 13.50	\$ 15.67	\$ 2.17	16.07%	
100W High Pressure Sodium (Per Month)	\$ 10.00	\$ 11.60	\$ 1.60	16.00%	
150W High Pressure Sodium (Per Month)	\$ 13.50	\$ 15.67	\$ 2.17	16.07%	
250W High Pressure Sodium (Per Month)	\$ 17.80	\$ 20.66	\$ 2.86	16.07%	
400W High Pressure Sodium (Per Month)	\$ 23.00	\$ 26.69	\$ 3.69	16.04%	
Wood Poles (Per Month)	\$ 3.40	\$ 3.95	\$ 0.55	16.18%	
Street Lights 4.12L					
100W High Pressure Sodium (Per Month)	\$ 4.10	\$ 4.76	\$ 0.66	16.10%	

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1 Table 44: Existing and Proposed Rates, Tolls & Charges (Cont'd)

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Board of Commissioners of Public Utilities				
NL Hydro - Verification of Revised Rates				
Comparison of Existing and Proposed Rates, Tolls & Charges				
	Existing Rates	Proposed Rates	CHANGE (\$)	CHANGE (%)
Diesel - Government Departments				
Rate 1.2G Domestic Diesel				
Basic Customer Charge (Per Month)	\$ 43.90	\$ 55.69	\$ 11.79	26.86%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.83567	\$ 0.89164	\$ 0.05597	6.70%
Rate 2.1G General Service Diesel (0-10 kW)				
Basic Customer Charge (Per Month)	\$ 48.54	\$ 59.76	\$ 11.22	23.11%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.75486	\$ 0.81367	\$ 0.05881	7.79%
Rate 2.2G General Service Diesel (Over 10kW)				
Basic Customer Charge (Per Month)	\$ 71.98	\$ 73.76	\$ 1.78	2.47%
Demand Charge (\$/kW Per Month)	\$ 58.22	\$ 59.83	\$ 1.61	2.77%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$ 0.53741	\$ 0.60033	\$ 0.06292	11.71%
Street and Area Lighting Diesel 4.1G				
250W Mercury Vapour (Per Month)	\$ 72.74	\$ 85.29	\$ 12.55	17.25%
100W High Pressure Sodium (Per Month)	\$ 58.92	\$ 57.28	\$ (1.64)	-2.78%
150W High Pressure Sodium (Per Month)	\$ 72.74	\$ 85.29	\$ 12.55	17.25%
Utility				
Monthly Demand Charge (\$/kW)	\$ 4.32	\$ 4.75	\$ 0.43	9.95%
Monthly Energy Charges (\$/kWh)				
First 250 GWh	\$ 0.03506	\$ 0.02319	\$ (0.01187)	-33.86%
Excess of 250 GWh	\$ 0.09509	\$ 0.10422	\$ 0.00913	9.60%
Firming-up Charge (\$/kWh)	\$ 0.00908	\$ 0.02882	\$ 0.01974	217.40%
RSP Adjustments (\$/kWh)				
Current Plan	\$ (0.01213)	\$ (0.01213)	\$ -	0.00%
Fuel Rider	\$ (0.00023)	\$ 0.00162	\$ 0.00185	-804.35%

3

Table 44: Existing and Proposed Rates, Tolls & Charges (Cont'd)

Board of Commissioners of Public Utilities NL Hydro - Verification of Revised Rates Comparison of Existing and Proposed Rates, Tolls & Charges					
	Existing Rates	Proposed Rates	CHANGE (\$)	CHANGE (%)	
Industrial - Firm					
Demand Charge					
Monthly Demand Charge (\$/kW)	\$ 8.38	\$ 7.99	\$ (0.39)	-4.65%	
RSP Surplus Demand Credit	\$ (1.52)	\$ -	\$ 1.52	-100.00%	
Energy Charge					
Monthly Energy Charge (\$/kW)	\$ 0.04069	\$ 0.03971	\$ (0.00098)	-2.41%	
RSP Adjustment	\$ -	\$ (0.00373)	\$ (0.00373)	-	
RSP Fuel Rider	\$ -	\$ 0.00150	\$ 0.00150	-	
RSP Surplus Energy Credit	\$ (0.00294)	\$ -	\$ 0.00294	-100.00%	
Annual Charges					
Corner Brook Pulp and Paper Limited	\$ 347,167	\$ 870,898	\$ 523,731	150.86%	
North Atlantic Refining Limited	\$ 150,976	\$ 89,293	\$ (61,683)	-40.86%	
Teck Resources Limited	\$ 186,169	\$ 199,399	\$ 13,230	7.11%	
Vale	\$ -	\$ 480,243	\$ 480,243	-	
Industrial - Wheeling					
Energy Charge	\$ 0.00384	\$ 0.00423	\$ 0.00039	10.16%	
Labrador Industrial - Transmission					
Demand Charge	\$ 1.25	\$ 1.19	\$ (0.06)	-4.80%	

Based on our procedures, we find that the 2015 revenue requirement for rate setting proposed by the Company is calculated based upon the revised Schedule of Rates, Tolls and Charges effective April 1, 2017 and the factors proposed in this Application.

1 **Restrictions, qualifications and independence**

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3 **Purpose**

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5 This report was prepared for the Board of Commissioners of Public Utilities in Newfoundland
6 and Labrador. The purpose of our engagement was to review the Compliance Application
7 submitted by Hydro related to Board order P.U. 49 (2016).
8

9 **Restrictions and Limitations**

10
11 This report is not intended for general circulation or publication nor is it to be reproduced or
12 used for any purpose other than that outlined herein without our prior written permission in
13 each specific instance. Notwithstanding the above, we understand that our report may be
14 disclosed as a part of a public hearing process. We have given the Board our consent to use
15 our report for this purpose.
16

17 Our scope of work is as set out in our engagement letter, which is referenced throughout this
18 report. The procedures undertaken in the course of our review do not constitute an audit of
19 Hydro's financial information and consequently, we do not express an opinion on the financial
20 information provided by Hydro.
21

22 In preparing this report, we have relied upon information provided by Hydro. We
23 acknowledge that the Board is bound by the Freedom of Information and Protection of
24 Privacy Act and agree that the Board may use its sole discretion in any determination of
25 whether and, if so, in what form, this Report may be required to be released under this Act.
26

27 We reserve the right, but will be under no obligation, to review and/or revise the contents of
28 this report in light of information which becomes known to us after the date of this report.