

Board of Commissioners of Public Utilities

Financial Consultants Report
Newfoundland and Labrador Hydro
Compliance Application

August 23, 2019



Table of Contents

Introduction and Scope	1
Summary of Board Findings	2
Summary Impact on Revenue Requirements, Average Rate Base and Return on Rate Base	7
Revenue Requirement	8
Average Rate Base and Return on Rate Base	13
Revenue Deficiency	19
Rate Stabilization Plan (RSP)	22
GRA Cost Recovery Rider	30
Account Definitions	32
Proposed Revenue from Rates	33
Restrictions, Qualifications and Independence	37



Introduction and Scope

On July 28, 2017 Newfoundland and Labrador Hydro ("the Company") ("Hydro") submitted a General Rate Application (the "2017 GRA") to the Board of Commissioners of Public Utilities ("the Board") for the approval of the 2018 and 2019 Test Years. On July 11, 2019, Hydro submitted an Application filed in compliance with Order No. P.U. 16 (2019) ("the Compliance Application") with respect to its 2017 GRA. The Compliance Application reflects the orders included in Order No. P.U. 16 (2019) that was issued by the Board on May 7, 2019 (the "GRA Order"). As part of the 2017 GRA there were Settlement Agreements on April 11, July 16, and September 6 of 2018 ("the Settlement Agreements") between Hydro and Newfoundland Power, Consumer Advocate, Industrial Customer Group, Labrador Interconnected Group and Iron Ore Company of Canada ("the Parties").

Grant Thornton LLP ("Grant Thornton") has undertaken a review of the Company's Compliance Application. The detailed scope of our financial review is as follows:

- Review the Compliance Application, including the exhibits thereto containing certain Finance Schedules, to assess whether the orders contained in Order No. P.U.16 (2019) are appropriately reflected in the Compliance Application;
- Review 2017 average rate base to ensure revisions are made in accordance with Order No. P.U. 16 (2019);
- Review that revisions to the 2018 test year revenue requirements, average rate base and rate of return on average rate base for purposes of determining the 2018 revenue deficiency are made in accordance with Order No. P.U. 16 (2019);
- Review that revisions to the 2019 test year revenue requirements, average rate base and rate of return on average rate base for rate setting purposes are made in accordance with Order No. P.U. 16 (2019);
- Review Hydro's proposed use of the updated 2019 Test Year supply cost forecast using the Expected Supply Scenario included in Exhibit 3;
- Review the restatement of Hydro's property, plant and equipment based on new depreciation methodology as agreed to in the Settlement Agreement;
- Review the calculations and recovery of the 2018 and 2019 revenue deficiencies including impact of Rate Stabilization Plan and allocation of the 2015-2017 Deferred Supply Costs:
- Review the calculation of the revenue deficiencies included in Exhibit 5 to ensure it is reconciled to the calculation of the revenue requirement in Exhibit 4 and to the revised test year cost of service;
- Verify that the Company's schedule of rates, tolls and charges as set out in Exhibit 7 of the Compliance
 Application incorporates the changes approved in Order No. P.U. 16 (2019), including a review of the
 calculation of the proposed RSP adjustment, CDM recovery adjustment and GRA cost recovery rider;
- Verify the calculation of the proposed rates necessary to meet the forecast revenue requirement in the 2019 test year as set out in the Compliance Application; and,
- Review the Account definitions included in Exhibit 8.



Summary of Board Findings

The Board made a number of decisions on proposals in, and matters arising from, Hydro's 2017 GRA. The following table is a summary of the Board's findings with reference to the Compliance Application, Order No. P.U. 16 (2019) and our report within:

#	Board Order No. P.U. 16 (2019) Findings	Compliance Application	Order No. P.U. 16(2019)	GT Report
1	The forecast capital structure proposed by Hydro for the 2018 and 2019 test years is accepted, subject to any adjustment required as a result of the Board's findings in this Decision and Order.	Exhibit 4, Page 12 and 23	Page 11	Page 16 and 18
2	The target return on equity to be used in calculating the allowed rate of return on rate base for the 2018 and 2019 test years shall be 8.5%.	Exhibit 4	Page 11	Page 16 and 18
3	The settlement proposals in relation to the automatic adjustment mechanism for Hydro's target return on equity to reflect any changes to Newfoundland Power's approved target return on equity for rate setting are accepted.	Exhibit 8, Appendix C	Page 12	Page 32
4	Hydro's proposed definition of the Return on Equity Rate Change Deferral Account is accepted.	Exhibit 8, Appendix C	Page 12	Page 32
5	The settlement proposal in relation to the use of the Expected Supply Scenario for establishing Hydro's 2018 and 2019 test year revenue requirement is accepted.	Exhibit 4, Page 7 Page 14		Page 9 and 11
6	The proposed 2018 test year customer load forecasts for the Island Interconnected system are accepted.	Exhibit 2, Table 1	Page 15	Page 33
7	Hydro will be required to revise the 2019 test year customer load forecast for the Island Interconnected system to reflect the load forecast approved in Order No. P.U. 2(2019).	Exhibit 2, Table 2	Page 15	Page 33
8	The settlement proposals to update the load forecast for the Labrador Interconnected system is accepted.	Exhibit 2, Tables 3 to 6	Page 15	Page 33
9	Hydro will be required to update its 2018 and 2019 test year forecasts for off-island purchases, providing full explanation for any changes since its last forecast update.	Exhibit 3, Tables 1 and 7	Page 17	Page 9 and 11
10	The 2018 and 2019 test year hydraulic and thermal production forecasts are accepted, subject to any adjustment arising from this Decision and Order.	Exhibit 3, Page 5	Page 18	Page 22 and 24
11	Hydro's proposal to use the approved 2015 test year fuel costs for the fuel supply costs to be included in the 2018 test year revenue requirement is accepted.	Exhibit 4, Page 8, Appendix B	Page 19	Page 9
12	The settlement proposal that the 2019 test year cost of No. 6 fuel be set based on the most current fuel rider forecast is accepted. The forecast 2019 diesel and gas turbine fuel costs should also reflect the most recent price forecast for those fuels.	Exhibit 3, Page 8 to 10	Page 19	Page 11 and 28
13	Hydro's proposal to use the approved 2015 test year Holyrood	Exhibit 4,	Page 20	Page 9



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#	Board Order No. P.U. 16 (2019) Findings	Compliance Application	Order No. P.U. 16(2019)	GT Report
	conversion factor for the 2018 test year revenue requirement is accepted.	ent is Appendix B		and 22
14	The settlement proposal to use a conversion factor of 583 kWh per barrel for No. 6 fuel at the Holyrood Thermal Generating Station in the 2019 test year is accepted.	rel for No. 6 fuel at the Holyrood Thermal Generating Station in Exhibit 4, Page		Page 11, 15 and 24
15	Hydro will be required to revise the 2018 and 2019 test year fuel costs to reflect the findings of the Board in this Decision and Order.	Exhibit 3, Page 3 to 15	Page 21	Page 9 and 11
16	The settlement proposal to reflect the capacity assistance agreements to be in effect for the 2018/19 winter season in the 2019 test year costs is accepted.	Exhibit 3, Page 4 and 11	Page 22	Note 2
17	Hydro will be required to revise the proposed power purchases costs in the 2018 and 2019 test years to reflect the findings of the Board in this Decision and Order.	Exhibit 3, Page 3 to 13	Page 22	Page 9 and 11
18	Hydro's proposal to recover external regulatory costs in the amount of \$1.7 million is accepted.	Note 1	Page 37	Note 1
19	The settlement proposals in relation to the proposed accounting treatment and methodology for calculation of employee future benefits, the number of vacancies, the deferral of the Business Systems Transformation Program costs and the recovery of the external regulatory costs are accepted.	Exhibit 4, Page 5 and 18	Page 37	Page 8 and 11
20	Hydro will be required to revise the proposed operating costs to be included in the 2018 and 2019 test year revenue requirements to reflect: i) a reduction of \$4.0 million in each of the 2018 and 2019 test years; and ii) the removal of the proposed performance contract payments in each of the 2018 and 2019 test years.	Exhibit 4, Page 5, 11, 18, and 22	Page 38	Page 8 and 11
21	The settlement proposals in relation to depreciation and the inventory allowance for the Holyrood Thermal Generating Station are accepted.	Exhibit 4, Page 6, 8 and 9 Page 40		Page 8, 9, 11 and 12
22	Hydro will be required to address the disposition of 2018 Cost Deferral Account and the issues related to depreciation identified by Grant Thornton.	Exhibit 5, Page 2. Exhibit 4, tables 7 and 16	Page 40	Page 9, 12 and15
23	The settlement proposals in relation to interest and the guarantee fee are accepted.	Exhibit 4, Pages 13 and 24	Page 43	Page 16 and 18
24	Hydro will be required to reduce the 2018 and 2019 test year revenue requirements to reflect the exclusion of the proposed amounts for a guarantee fee related to the 2017 and 2018 debt issuances to the Government of Newfoundland and Labrador.	Exhibit 4, Pages 13 and 24	Page 43	Page 16 and 18
25	Hydro will be required to file revised proposals for its 2018 and 2019	Exhibit 4	Page 43	Page 8



#	Board Order No. P.U. 16 (2019) Findings	Compliance Application	Order No. P.U. 16(2019)	GT Report
	test year revenue requirements to reflect the findings of the Board in this Decision and Order.			and 11
26	The settlement proposal in relation to the continued use of the currently approved methodology to determine rate base, including beginning-of-year and end-of-year averaging for capital assets in service, is accepted.	e, including		Note 1
27	The settlement proposal in relation to the continued use of the currently approved working capital methodology is accepted.	Note 1	Page 44	Note 1
28	The forecast average rate base for the 2018 test year will be updated to reflect subsequent Board orders and the 2018 capital expenditures as outlined in the 2018 Capital Expenditures and Carryover Report, excluding the Muskrat Falls to Happy Valley Interconnection project.	bsequent Board orders and the 2018 capital s as outlined in the 2018 Capital Expenditures and Report, excluding the Muskrat Falls to Happy Valley		Page 15
29	The forecast average rate base for the 2019 will be updated to reflect subsequent Board orders and the most current 2019 capital expenditure forecast.	Exhibit 4, Page Page 4		Page 17
30	The settlement proposal to approve the proposed definition of the Excess Earnings Account is accepted.	Exhibit 8, Appendix B	Page 45	Page 32
31	Hydro will be required to file a revised 2018 and 2019 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.	Exhibit 4, Pages 12, 13, 23 and 24	Page 46	Page 15
32	The settlement proposals in relation to cost of service are accepted.	Exhibits 13 and 14	Page 47	Note 3
33	The settlement proposals in relation to i) Newfoundland Power's rate design, ii) the continuation of the current Labrador Industrial Transmission Rate, and iii) billing credit to IOC are accepted.	Exhibit 7	Page 48	Page 33
34	Hydro's final rates for 2019 should reflect the sale of the Corner Brook Frequency Converter to Corner Brook Pulp and Paper Limited.	Exhibit 7, Page 3	Page 49	Page 33
35	The settlement proposals in relation to the proposed changes to Hydro's Rules and Regulations, including the proposed change to the RSP Rules, are accepted.	Exhibit 15	Page 49	Page 29 and 33
36	The settlement proposal to defer consideration of whether information on the rural deficit should be included on customers' bills is accepted.	Exhibit 5, Page 5. Exhibit 13, Page 3	Page 49	N/A



		Compliance	Order	GT
#	Board Order No. P.U. 16 (2019) Findings	Compliance Application	No. P.U. 16(2019)	Report
37	Hydro will be required to file revised RSP rules to clarify that No. 6 fuel costs in Canadian dollars reflect foreign exchange gains and losses.	Exhibit 15, RSP - 3	Page 50	Page 29
38	The balances in the Energy Supply Cost Variance Deferral Account, the Holyrood Conversion Rate Deferral Account and the Isolated Systems Supply Cost Variance Deferral Account for 2015, 2016 and 2017 will be approved.	Exhibit 5, Page 10	Page 52	Page 30 and 31
39	The settlement proposals in relation to the allocation and recovery of the 2015, 2016 and 2017 balances in the Energy Supply Cost Variance Deferral Account, the Holyrood Conversion Rate Deferral Account and the Isolated Systems Supply Cost Variance Deferral Account are accepted.	Exhibit 5	Page 53	Page 30 and 31
40	The settlement proposals in relation to the amortization of any revenue deficiency or excess for 2018 are accepted, and the same approach to be used for the amortization of any revenue deficiency or excess for 2019 up to the date of the implementation of final rates.	Exhibit 5	Page 55	Page 30 and 31
41	Hydro will be required to file an update of the projected revenue deficiencies or excesses for the 2018 and 2019 test years, setting out the allocations for each customer class and the associated rate impacts.	Exhibit 5	Page 55	Page 30 and 31
42	Hydro's proposal to include the additional 2018 supply costs associated with lower off-island purchases in the 2018 revenue deficiency is accepted.	Exhibit 3	Page 56	Page 9 and 11
43	Hydro's proposed Revised Energy Supply Cost Variance Deferral Account is accepted with effective date of January 1, 2019.	Exhibit 8, Appendix A	Page 56	Page 32
44	Hydro's proposal to use the 2015 test year inputs for the operation of the RSP and the supply cost deferral accounts for 2018 is accepted.	Exhibit 9 and 10. Exhibit 3, Pages 2 to 6	Page 56	Page 14 and 22
45	Hydro will be required to provide an update on the implementation of its Account Management Framework by September 30, 2019.	N/A	Page 57	N/A
46	Hydro will be required to provide an update on the results of its tracking of actual operating and maintenance costs related to specifically assigned assets as part of its next general rate application.	N/A	Page 59	N/A
47	Hydro will be required to file an update on the deferral account directed in Order No. P.U. 7 (2018) to track the difference in specifically assigned charges under the existing and proposed methodology to allocate operating and maintenance expenses.	Exhibit 7, Page 6	Page 59	N/A



#	Board Order No. P.U. 16 (2019) Findings	Compliance Application	Order No. P.U. 16(2019)	GT Report
48	The Industrial Customer Group are entitled to an award of costs in an amount to be determined following the filing of a detailed claim for costs at the conclusion of this proceeding.	N/A	Page 60	N/A
49	Hydro will be required to file its next general rate application no later than September 30, 2020 for rates based on a 2021 test year.	N/A	Page 61	N/A

Notes:

- 1) No revision required in the Compliance Application as what was proposed in the 2017 GRA was accepted.
- 2) We reviewed that the accepted costs have been appropriately reflected within the Compliance Application.
- 3) Cost of Service was updated for accepted settlement proposals.



Summary Impact on Revenue Requirements, Average Rate Base and Return on Rate Base

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 2 in Exhibit 1):

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

(a'000)	2017 GRA	GRA Compliance	Total Adjustments	Reference Page No.
2017 Forecast Average Rate Base				
2017 Forecast Average Rate Base	2,075,503	2,093,796	18,293	Page 14
2018 Test Year for Revenue Deficiency				
Revenue Requirement	673,056	572,214	(100,842)	Page 8
Average Rate Base	2,263,109	2,249,910	(13,199)	Page 15
Return on Rate Base	129,632	123,744	(5,888)	Page 15
Rate of Return on Rate Base (%)	5.73	5.50	(0.23)	Page 15
2019 Test Year for Rate Setting				
Revenue Requirement	692,766	643,041	(49,725)	Page 11
Average Rate Base	2,364,465	2,317,270	(47,195)	Page 15
Return on Rate Base	134,420	125,778	(8,642)	Page 15
Rate of Return on Rate Base (%)	5.68	5.43	(0.25)	Page 15



Revenue Requirement

Our procedures with respect to the revisions of the revenue requirement for rate setting purposes for 2019 and for the revenue requirement for determining revenue deficiency for 2018 included 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.

2018 Revenue Requirement for Revenue Deficiency

In Order No. P.U. 16 (2019) the Board directed Hydro to file a revised 2018 Test Year revenue requirement for purpose of determining the 2018 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 2018 Test Year revenue requirement for revenue deficiency purposes as a result of the GRA Order:

Table 2: Summary of Revenue Requirement for 2018 Revenue Deficiency

(000's)	_	8 Revenue eficiency	
Revenue Requirement per 2017 GRA	\$	673,056	
(Decrease) Increase in 2018 Test Year Revenue Requirement	Adj	Total justments	
Operating expenses	\$	(7,870)	1
Other income and expenses		(1,430)	2
Fuel expense		(76,845)	3
Power purchases		(2,075)	4
Power purchases off-island		5,371	5
Depreciation		(10,468)	6
Other adjustments		(1,638)	7
Return on rate base		(5,887)	8
Total decrease in Revenue Requirement	\$	(100,842)	
Revenue Requirement per Compliance Application	\$	572,214	

- Operating expenses have decreased by \$7.9 million as a result of adjustments in compliance with GRA Order which includes adjustments to the following:
 - Increase in vacancy allowance of \$1.4 million reflecting the increase from 40 full-time equivalents ("FTE") to 55 FTEs as per the Settlement Agreement;
 - Deferred Business System Transformation (BST) costs totaling \$2.5 million removed from the 2018 Test Year Revenue Requirements as agreed upon in the Settlement Agreement; and,
 - GRA Order Disallowance of \$4.0 million as a result of a reduction in its 2018 Test Year Operating Expenses.
- 2) Other income and expenses decreased by \$1.4 million as a result of adjustments in compliance with GRA Order which includes adjustments to the following:
 - Reduction in Holyrood Inventory Allowance of \$2.1 million reflecting the withdrawal of Hydro's proposal to record inventory allowance; and
 - Adjustments for 2018 actual Capital Activity of \$0.7 million in accordance with the GRA Order. The \$0.7 million pertains to Hydro recording a loss on disposal in relation to the CBPP Frequency Converter as it did not qualify for deferral under the depreciation methodology. Hydro has eliminated the loss on disposal of \$0.7 million in its Cost of Service Exclusions Adjustments, resulting in no revenue requirement impact as discussed further below.



- 3) Fuel adjustments decreased by \$76.8 million. The adjustments in compliance with the GRA Order are made up of the following reflecting the Expected Supply Scenario:
 - A decrease in No. 6 Fuel Expense of \$65.2 million encompassing a reduction related to change in fuel price from \$86.41/bbl to \$64.22/bbl (weighted average cost based on 2015 Test Year fuel prices) for a decrease of \$52.8 million, changes in production at Holyrood Thermal Generating Station to reflect the inclusion of off-island purchases (\$11.8 million decrease) and the change in conversion factor from 616 kWh to 618 kWh per barrel (\$0.7 million decrease). Appendix B, Exhibit 4 provides the computation of these changes;
 - A decrease in Gas Turbine and Diesel Fuel expense totaling \$10.9 million, which is related to decrease consumption of 29.9 GWh from these units (\$8.7 million) and decrease in gas turbine and diesel fuel prices (\$2.2 million); and,
 - A decrease in RSP adjustments totaling \$0.7 million accounting for the difference in hydraulic production in the 2018 Test Year of 4,601 GWh approved by the Board for use in Order No. P.U. 16 (2019) compared to 2015 Test Year of 4,604 GWh, for which the 2018 RSP is operated.
- 4) Power purchases decreased by \$2.1 million. This decrease is related to the following:
 - \$1.8 million decrease as a result of Hydro's update to reflect actual off-island power purchases and cost of power purchases;
 - \$0.4 million decrease as a result of the power purchases contracts being tied to diesel fuel prices;
 and
 - \$0.1 million increase as a result of the cost of serving the additional data centre load which is reflected in the GRA order.
- 5) Off-island power purchases were increased by \$5.4 million to reflect Hydro's actual cost of off-island purchases during 2018.
- 6) Depreciation has decreased by \$10.5 million as a result of adjustments to Hydro's 2018 Test Year Depreciation Expense summarized in the following table:

Table 2A: Depreciation Expense Adjustments

(000's)	Adjustments 2018	
Settlement Agreement Adjustments		
Grant Thornton Adjustments	\$	(1,291)
Depreciation Methodology Adjustments		(8,877)
Settlement Agreement Adjustments Subtotal		(10,168)
Adjustment for Capital Activity		(300)
Total Depreciation Expense Adjustments	\$	(10,468)

Hydro reduced 2018 Test Year Depreciation Expense to reflect adjustments related to issues identified by Grant Thornton's "Financial Consultants Report" dated December 4, 2017. The adjustments relate to an error in the useful life used in the depreciation calculation of an asset as well as a discrepancy related to the truncation date for several Holyrood assets. Hydro additionally reduced depreciation expense as a result of the application of the depreciation methodology agreed to by the Parties in the Settlement Agreement and approved in GRA Order. Hydro has also decreased depreciation expense by \$0.3 million in accordance with the GRA Order relating to actual 2018 Capital Activity. Our procedures on the depreciation change included reconciling the detailed depreciation schedule to the Compliance Application, agreeing the useful life of a sample of assets from Hydro's asset records to the depreciation study updated for the new methodology and recalculating the depreciation for the assets in our sample. We found no exceptions in the samples tested.

With regard to the depreciation methodology approved by the Board, we agree with Hydro's comments in the Compliance Application on Page 28 of Exhibit 4 that to be consistent with IFRS Hydro will be required to record a regulatory adjustment under IFRS 14 relating to the loss on asset disposal costs and removal costs method included in depreciation expense.

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- 7) Other adjustments decreased by \$1.6 million based on the Board's determinations in the GRA Order. The adjustments relate to the following:
 - Contribution in Aid of Construction ("CIAC") revenue decreased by \$0.1 million, which is a result of Hydro's update to its depreciation methodology (reflecting the Settlement Agreements) to reflect 2018 Capital Activity; and,
 - An increase in Revenue Requirement Cost of Service Exclusions totaling \$1.5 million which relates
 to short-term incentive payments (\$0.7 million), eliminating the loss on disposal Hydro recorded in
 relation to the sale of the frequency converter to CBPP as discussed above (\$0.7 million), and
 depreciation of assets which are excluded from rate base (\$0.1 million).
- Return on rate base decreased by \$5.9 million which primarily related to a decrease in interest costs on long-term debt for 2018. Refer to Average Rate Base and Return on Rate Base section of our report for further analysis of change in the return on rate base.

We have reviewed the 2018 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 2018 Test Year revenue requirement for revenue deficiency and did not identify any discrepancies.



2019 Revenue Requirement for Rate Setting

In Order No. P.U. 16 (2019) the Board directed Hydro to file a revised 2019 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 2019 Test Year revenue requirement for rate setting purposes as a result of GRA Order:

Table 3: Summary of Revised 2019 Test Year Revenue Requirement for Rate Setting

(000's)	-	119 Rate Setting	
Revenue Requirement per 2017 GRA	nue Requirement per 2017 GRA \$ 692,76		
(Decrease) Increase in 2019 Test Year Revenue Requirement		Total ustments	
Operating expenses	\$	(8,370)	1
Other income and expenses		(2,081)	2
Fuel expense		(35,300)	3
Power purchases		(56)	
Power purchases off-island		14,290	4
Depreciation		(7,760)	5
Other adjustments		(1,806)	6
Return on rate base		(8,642)	7
Total decrease in Revenue Requirement	\$	(49,725)	
Revenue Requirement per Compliance Application	\$	643,041	

- Operating expenses have decreased by \$8.4 million in compliance with the GRA Order which includes adjustments to the following:
 - Increase in vacancy allowance of \$1.3 million from 40 FTEs to 55, as per the Settlement Agreement, approved by the Board in the 2017 GRA Order;
 - Decrease of \$3.0 million in deferral of BST costs due to the removal of costs associated with the program, as agreed upon in the Settlement Agreement; and,
 - GRA Order disallowance of \$4.0 million as a result of a reduction of 2019 Test Year Operating Expenses.
- 2) Other income and expenses decreased by \$2.1 million which reflects the withdrawal of Hydro's proposal to record an inventory allowance associated with the Holyrood Thermal Generating Station.
- 3) Fuel adjustments totalled a \$35.3 million decrease. The adjustments in compliance with the GRA Order are made up of the following reflecting the Expected Supply Scenario:
 - No. 6 fuel price decreased by \$26.4 million resulting from a \$69.4 million reduction from changes in production at Holyrood Thermal Generating Station to reflect the inclusion of off-island purchase, partially offset by a \$34.5 million increase related to change in fuel price from \$87.11/bbl to \$105.90/bbl (reflecting the most current fuel rider forecast) and a \$8.5 million increase resulted from the change in the conversion factor from 616 to 583 kWh/barrel; and
 - Gas turbine and diesel fuel expenses totalled a \$8.9 million decrease which reflects a \$5.5 million reduction from a change in the 2019 Test Year Island Interconnected System Load Forecast as well as a \$3.4 million reduction in fuel expense due to a decrease in gas turbine and diesel fuel prices.

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- **4)** Off-island power purchases have increased to \$14.3 million in the Compliance Application reflecting Hydro's forecast cost of off-island purchases in 2019.
- 5) Depreciation has decreased by \$7.8 million as a result of adjustments to Hydro's 2019 Test Year, summarized in the following table:

Table 3A: 2019 Depreciation Expense Adjustments

(000's)	Adjustments 2019	
Settlement Agreement Adjustments		
Grant Thornton Adjustments	\$	1,757
Depreciation Methodology Adjustments		(10,712)
Settlement Agreement Adjustments Subtotal		(8,955)
Adjustment for Capital Activity		1,195
Total Depreciation Expense Adjustments	\$	(7,760)

Hydro increased 2019 Test Year Depreciation to reflect adjustments related to issues identified by Grant Thornton's "Financial Consultants Report" dated December 4, 2017. The adjustments related to an error accelerating assets incorrectly as well as a discrepancy related to the truncation date for several Holyrood assets. Additionally, Hydro reduced depreciation by \$10.7 million from the application of the depreciation methodology which was agreed upon in the Settlement Agreement and approved in GRA Order. Hydro has decreased depreciation expense in accordance with the GRA Order relating to actual 2018 Capital activity and updated 2019 forecasted activity. Our procedures included reconciling the detailed depreciation schedule to the Compliance Application, agreeing the useful life of a sample of assets from Hydro's asset records to the Gannett Fleming depreciation study updated for the new methodology and recalculating the depreciation for the assets in our sample. We found no exceptions in the samples tested.

- **6)** Other adjustments decreased by \$1.8 million based on the Board's determinations in the GRA Order. The adjustments relate to the following:
 - The CIAC revenue has decreased by \$0.2 million pertaining to Hydro's update to its depreciation methodology (approved in the Settlement Agreement) and to reflect 2018 actual and 2019 Forecast Capital Activity; and,
 - A decrease totaling \$1.6 in revenue requirement which involves the removal of short-term incentive payments of \$0.9 million and the reduction of \$0.8 million related to depreciation of assets excluded from rate base.
- 7) Return on rate base decreased by \$8.6 million which was related to a forecast decrease in interest costs on long-term debt due to a decrease in net income due to Compliance Application adjustments. Refer to Average Rate Base and Return on Rate Base section of our report for further analysis of change in Return on Rate Base.

We have reviewed the 2019 Test Year revenue requirement for rate setting included in the Compliance Application and reviewed the calculation to ensure orders contained in the GRA Order were appropriately reflected in the revised 2019 Test Year revenue requirement for rate setting and did not identify any discrepancies.



Average Rate Base and Return on Rate Base

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

- 2017 average rate base: Exhibit 4 Computation of Average Rate Base for 2017 Page 3;
- 2018 test year (revenue deficiency): Exhibit 4, Appendix A 2018 Finance Schedules Page A-2;
- 2019 test year (rate setting): Exhibit 4, Appendix C 2019 Finance Schedules (Rate Setting) Page C-2;

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

- agreed all carry-forward data to supporting documentation including the 2017 audited financial statements and internal accounting records, where applicable;
- agreed Compliance Application data to supporting documentation to ensure it is internally consistent with the prefiled evidence;
- checked the clerical accuracy of the continuity of the rate base as forecast in the Compliance Application for 2017, 2018 revised test year (2018 revenue deficiency), and 2019 test year (rate setting);
- recalculated the Compliance Application average rate base and return on average rate base for 2018 revised test year (for purposes of calculating 2018 revenue deficiency) and 2019 test year (for rate setting); and
- reviewed the methodology used in the calculation of the average rate base with reference to the Public Utilities
 Act, the Hydro Corporation Act and Board.

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2017 Forecast Average Rate Base for 2017 GRA

Hydro updated its 2018 Test Year to align with actual 2018 Capital Assets and the approval of the 2015, 2016 and 2017 Supply Cost Deferral Accounts based on decisions within the GRA Order. Therefore, Hydro adjusted its 2017 forecast Average Rate Base to ensure the 2018 opening balance was correct.

During the 2017 GRA, Hydro filed a proposed 2017 forecast Average Rate Base of \$2,075.5 million. Hydro's revised 2017 forecast Average Rate Base for the Compliance Application is \$2,093.8 million, which is an increase of \$18.3 million. The table below provides a comparison of the 2017 GRA against the Compliance Application to reflect the Board's decisions in the GRA Order:

Table 4: 2017 Forecast Average Rate Base for 2017 GRA

(000's)	2017 GRA Adjustments		2017 GRA			С	2017 GRA ompliance application
Capital Assets: Average	\$	1,837,720	\$ (8,000)	1	\$	1,829,720	
Working Capital Allowance Fuel inventory Supplies inventory Deferred charges		7,582 67,287 33,135 129,780	 - - - 26,294	2		7,582 67,287 33,135 156,074	
Average rate base	\$	2,075,503	\$ 18,293		\$	2,093,796	

- 1) The revised balance for the Compliance Application was \$1,829.7 million which agrees to Hydro's closing average capital assets in its 2017 Annual Return, Return 3. The overall adjustment for the Compliance Application was a decrease in average rate base of \$8.0 million.
- 2) The increase of \$26.3 million to deferred charges was to incorporate the Holyrood Conversion, Isolated Systems, and Energy Supply Deferral account balances for 2015, 2016 and 2017 approved in the GRA Order.

Based on our review, Hydro has appropriately incorporated the Board's decisions from the GRA Order within its 2017 Forecast Average Rate Base filed in the Compliance Application.

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2018 and 2019 Average Rate Base

Details of the 2018 test year and 2018 test year average rate base as filed in the 2017 GRA, GRA Order adjustments, and the 2018 test year and 2019 test year average rate bases for purposes of calculating revenue deficiency and for rate setting, as filed in Hydro's Compliance Application, are presented in the following table:

Table 5: Average Rate Base, Return on Rate Base and Rate of Return on Average Rate Base 2018 & 2019

(000's)	Test Year 2018	Compliance Adjustments 2018		Revised Test Year 2018	Test Year 2019	Compliance Adjustments 2019	-	Revised Test Year 2019
Net capital assets - average	2,068,791	(37,811)	1	2,030,980	2,178,999	(57,118)	5	2,121,881
Cash working								
capital allowance	2,772	(528)		2,244	2,255	(233)		2,022
Fuel inventory	76,472	(23,983)	2	52,489	74,369	(17,219)	6	57,150
Supplies inventory	33,034	-		33,034	32,884	-		32,884
Deferred charges	82,040	49,123	3	131,163	75,958	27,375	7	103,333
Average rate base	2,263,109	(13,199)		2,249,910	2,364,465	(47,195)	=	2,317,270
Return on rate base:								
Unadjusted return								
on regulated equity	31,013	(1,073)		29,940	33,991	(6,515)		27,476
Cost of service exclusions	1,644	1,533		3,177	1,439	1,649		3,088
Netinterest	96,975	(6,348)		90,627	98,990	(3,776)	_	95,214
Return on rate base:	\$ 129,632	\$ (5,888)	4	\$ 123,744	\$ 134,420	\$ (8,642)	8	\$ 125,778
Rate of return on								
average rate base	5.73%	-0.23%	4	5.50%	5.68%	-0.25%	8	5.43%

As illustrated in the table average rate base for 2018 revenue deficiency has decreased by \$13.2 million from \$2,263.1 million filed in the 2017 GRA to \$2,249.9 million in the Compliance Application. The average rate base for 2019 for rate setting has decreased by \$47.2 million from \$2,364.5 million filed in the 2017 GRA to \$2,317.3 million in the Compliance Application. The following commentary discusses the various impacts on average rate base from Hydro's compliance with the GRA Order.

- 1) In accordance with the GRA Order, Hydro has decreased average net capital assets in test year 2018 by \$37.8 million in order to adjust for 2018 actual capital asset additions. We agreed that Hydro's actual capital assets for 2018 are included in Rate Base, restated for application of the new depreciation methodology and we confirmed with Hydro that it excludes the Muskrat Falls to Happy Valley Interconnected Project as directed by the Board.
 - In the GRA Order, the Board directed Hydro to address the balance in the 2018 Cost Deferral Account. Hydro has proposed to restate its property, plant and equipment (PPE) based on new depreciation methodology effective January 1, 2018, which will result in an \$18.5 million increase in PPE in Hydro's actuals and a corresponding decrease of the 2018 Cost Deferral Account. This approach eliminates the 2018 Cost Deferral Account with no impact on customer rates for the 2017 GRA. Hydro has proposed the Board approve the conclusion of the account effective September 30, 2019.
- 2) Fuel inventory has decreased by \$24.0 million as a result of a number of factors impacting the change in fuel inventory:
 - The changes in forecast No. 6 fuel consumption;
 - The updated conversion factors, which were 618 kWh and 583 kWh per barrel for 2018 and 2019 test years respectively. These were both accepted by the Board within the GRA Order;

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- The prices of No. 6 fuel, which for 2018 test year reflect the approved 2015 test year fuel cost of \$64.41 and 2019 test year be based on the most current fuel rider. Both of these proposals were accepted by the Board in the GRA Order; and,
- The changes related to gas turbine and diesel prices to reflect the most current price forecast for those fuels, which was accepted by the Board in the GRA Order.
- 3) Deferred charges have increased average rate base by \$49.1 million in the Compliance Application due to the following:
 - 2015 to 2017 Supply Cost Deferrals adjustment, to reflect the Board's approval with an increase in Average Rate Base of \$59.0 million. Hydro has included the balances in deferred charges for the beginning of 2018 as the Supply Cost Deferrals relate to prior to 2018;
 - The Holyrood inventory allowance in relation to the withdrawal of Hydro's proposal to record an inventory allowance associated with the Holyrood Thermal Generating Station is an average increase of \$1.0 million. This adjustment reflects the Board's Approval of the Settlement Agreement; and,
 - 2018 revenue deficiency average deferred changes impact is a decrease of \$10.9 million.

Hydro created the BST program deferral to reflect costs associated with the program. Deferred charges increased by \$2.5 million in accordance with the GRA Order, however Hydro has excluded it from rate base.

4) 2018 Return on average rate base has decreased by 23 basis points from 5.73% filed in the 2017 GRA to 5.50% in the Compliance Application as illustrated in the following table:

Table 5A: 2018 Return on Average Rate Base (Revenue Deficiency) from 2017 GRA to Compliance Application

	Average Rate Base	Return on Average Rate Base (%)
Α	2,263,109	5.73%
В_	(13,199)	
[C = A + B] _	2,249,910	
D_	129,632	
E	460	
F_	(6,348)	
[G = E + F]	(5,888)	
[H = D + G]	123,744	5.50%
	B_ [C = A + B] = D_ E F_ [G = E + F]	Base A 2,263,109 B (13,199) [C = A + B] 2,249,910 D 129,632 E 460 F (6,348) [G = E + F] (5,888)

[I = H/C]

The change in return on rate base is a function of reductions in average rate base of \$13.2 million for GRA Order adjustments. These adjustments have increased return on rate base relative to the initial return on rate base of \$129,631,000 filed in 2017 GRA by approximately 3 basis points. This increase has been offset by a reduction in return on rate base of \$5,888,000, a decrease of 26 basis points, as a result of implementing the GRA Order consisting of the following: (1) an increase in regulated earnings of \$0.5 million and (2) a reduction in net interest of \$6.3 million which includes a reduction in debt guarantee fees related to the GRA Order. This impact is a reduction in return on average rate base of 23 basis points.

As a result of the GRA Order, Hydro updated its cost of debt to reflect actual long-term debt issuances in 2017 and 2018 and its planned borrowing. As a result, Hydro's cost of debt decreased from 5.34% to 5.0%, along with lower long term debt; Hydro has also increased its interest cost of service exclusions relating to fees on long term debt issues of \$0.6 million and debt guarantee fee issued by Hydro directly to the Government. Hydro's compliance with the GRA Order has reduced net interest overall by \$6.3 million.



Hydro's 2018 revenue deficiency return on rate base of 5.50% incorporates a return on regulated equity of 8.5% as mandated in the GRA Order.

- 5) In response to the GRA Order, Hydro has decreased average net capital assets in test year 2019 by \$57.1 million in order to reflect 2018 actuals and 2019 forecast capital. Hydro has included \$10 million in the ending 2019 rate base (\$5 million average rate base) relating to the Muskrat Falls to Happy Valley Interconnection Capital Project as explained in LAB-NLH-007.
- 6) Fuel inventory has decreased by \$17.2 million due to changes made to fuel inventory from the 2017 GRA filing to the 2017 GRA Compliance Application. This adjustment reflects the changes in forecasted No. 6 fuel consumption, updated conversion factors, prices in No. 6 fuel, and prices related to gas turbine and diesel prices.
- 7) Deferred charges have increased average rate base by \$27.4 million in the Compliance Application due to the following:

Deferred Charges Account	\$ Change (millions)	_
2015 to 2017 Supply Cost Deferrals	60.5	Α
Holyrood Inventory Allowance	3.1	В
2018 Revenue Deficiency	(15.1)	С
2019 Revenue Deficiency	22.0	D
RSP Adjustments	(43.3)	Ε
Other	0.2	_
Total Adjustment	27.4	_

- A) 2015 to 2017 Supply Cost Deferrals adjustment have increased to reflect the inclusion of these deferred supply costs in Hydro's January 1, 2019 opening balance and the disposition of a portion between October and December 2019;
- **B)** The Holyrood inventory allowance has increased in relation to the withdrawal of Hydro's proposal to record an inventory allowance associated with the Holyrood Thermal Generating Station. This adjustment reflects the Board's Approval of the Settlement Agreement;
- C) The 2018 revenue deficiency has decreased to reflect the in January 1, 2019 opening balance and the disposition of a portion of the deficiency between October to December 2019:
- D) The 2019 revenue deficiency has increased to reflect inclusion in 2019, as well as disposition of a portion of deficiency between October to December 2019; and,
- E) RSP adjustments against the 2018 and 2019 revenue deficiencies has decreased average rate base.

Hydro created the BST program deferral to reflect the costs associated with the program. Deferred charges has increased by \$4.1 million in accordance with the GRA Order; however Hydro has excluded it from rate base.

8) Return on average rate base has decreased 25 basis points (\$8.6 million) from 5.68% (\$134.4 million) filed in the 2017 GRA, to 5.43% (\$125.8 million) in the Compliance Application as illustrated in the following table:

Table 5B: 2019 Return on Average Rate Base (Rate Setting) from 2017 GRA to Compliance Application

(000's)		Average Rate Base	Return on Average Rate Base (%)
Rate base as filed 2017 GRA	Α	2,364,465	5.68%
Compliance adjustments to average rate base	В	(47,195)	
Revised average rate base Compliance Application	[C = A + B]	2,317,270	
Return on average rate base 2017 GRA	D	134,420	
GRA compliance adjustments	E	(4,866)	
Net interest adjustments	F	(3,776)	
Total Compliance Application Adjustments	[G = E + F]	(8,642)	
Return on average rate base Compliance Application	[H = D + G]	125,778	5.43%

[I = H/C]

The change in return on rate base is a function of reductions in average rate base of \$47.2 million for GRA adjustments. These adjustments have increased return on rate base relative to the initial return on rate base of \$134.4 million filed in the 2017 GRA, by approximately 12 basis points. This increase has been offset by a reduction in return on rate base of \$8,642,000, a decrease of 37 basis points, as a result of implementing the GRA Order consisting of the following: (1) A decrease in regulated earnings of \$4.9 million; and, (2) A reduction in net interest of \$3.8 million. This impact is a reduction in return on average rate base of 25 basis points.

As a result of the GRA Order, Hydro updated its cost of debt to reflect actual long-term debt issuance in 2017 and 2018 and its planned borrowing. As a result, the 2019 cost of debt decreased from 5.25% to 4.91%. Hydro also updated its interest cost of service exclusions to include additional fees on long-term debt issues of \$0.7 million and debt guarantee fees of \$1.4 million. Hydro Compliance with GRA Order has reduced net interest overall by \$3.8 million.

Hydro's 2019 return on rate base of 5.43% incorporates a return on regulated equity of 8.5% as mandated in the GRA Order.

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 6: Summary of Average Rate Base and Return on Rate Base Compliance Application

(000's)	 Average Rate Base		eturn on erage Rate Base	Return on Average Rate Base %		
2017	\$ 2,093,796					
2018 Revenue Deficiency	\$ 2,249,910	\$	123,744	5.50%		
2019 Rate Setting	\$ 2,317,270	\$	125,778	5.43%		



Revenue Deficiency

In order to determine the total revenue deficiency or revenue excess for each year, Hydro compared forecast revenues under rates in effect applied to the Test Year Forecast Load with the revised Test Year Revenue Requirement in compliance with the GRA Order. This approach is consistent with the process used in the 2013 Amended General Rate Application. Cost of Service studies, which reflect the Board's decisions in the GRA Order, are used in determining the revenue deficiency responsibility by customer class.

Our procedures with respect to the test year revenue deficiencies calculated for 2018 and 2019 included the following:

- Reviewed and agreed the revenue that results from using the existing rates to the revised Test Year Cost of Service filed by the Company in the Compliance Application. Where appropriate we also made enquiries and obtained additional documentation to support the existing revenue amounts by customer class included in the Cost of Service;
- Reviewed and agreed the allocated revenue requirement by customer class to the Test Year Cost of Service filed by the Company in the Compliance Application; and
- 3. Review the calculation of the revenue deficiencies included in Exhibit 5 to ensure it is reconciled to the calculation of the revenue requirement in Exhibit 4 and to the revised test year cost of service. Where appropriate, we obtain additional documentation and support for the reconciling items.

Below is a summary of the revenue deficiencies proposed by Hydro for 2018 and 2019:

Table 7: Summary of Revenue (Deficiencies) Excess by Customer Group for 2018 and 2019

(000's)	 2018	2019	Total	
Customer Group				
Newfoundland Power	\$ (4,137)	\$ (47,744)	\$ (51,881)	
Island Industrial	2,499	(4,905)	(2,406)	
Labrador Interconnected	892	614	1,506	
Other Hydro Rural	-	(84)	(84)	
Labrador Industrial	(10)	306	296	
Total	\$ (756)	\$ (51,813)	\$ (52,569)	

As part of the Settlement Agreement dated July 16, 2018, the parties to the agreement agreed to the following:

"The Parties agree that for Newfoundland Power and Industrial Customers any revenue deficiency or excess revenues arising from the difference between actual rates charged in 2018 and those which recover Hydro's approved 2018 Revenue Requirement by customer class, will be recovered or refunded through rate riders determined separately for each class and computed reflecting a 20 month period beginning with the effective date of final rates approved by the Board in the 2017 GRA Compliance Application."

For Hydro's Labrador Customers the Settlement Agreement set out the following:

"The Parties agree to amortize 2018 revenue deficiency over 24 months, beginning with the effective date of the 2017 GRA finals rated approved by the Board."

The Board was satisfied that the recovery or refund of revenue deficiencies or excess from or to customers set forth in the Settlement Agreements for 2018, and the same methodology should be applied for 2019 recoveries or refunds as well. See GRA Cost Recovery Rider section for further discussion on recovery of revenue deficiencies within our report.

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2018 Revenue Deficiency

The Board directed Hydro to revise 2018 Test Year revenue requirements for 2018 revenue deficiency. The following table is a summary of 2018 existing revenues based on test year loads compared to 2018 revised test year costs by customer group before the Rural Deficit allocation from the revised 2018 Test Year Cost of Service:

Table 8: 2018 Revenues versus Costs

	2018 Existing		201	8 Test Year		
	Rev	Revenues (A)		Costs (B)	Diffe	rence (A - B)
(000's)						
Customer Group						
Newfoundland Power	\$	441,522	\$	389,996	\$	51,526
Island Industrial		41,226		38,727		2,499
Labrador Interconnected		20,841		17,457		3,384
Other Hydro Rural		63,130		121,285		(58,155)
Labrador Industrial		4,740		4,750		(10)
	\$	571,459	\$	572,215	\$	(756)

The table below presents the 2018 revenue deficiency to be recovered by customer group after the Rural Deficit allocation:

Table 9: 2018 Revenue Deficiency Allocation

	18 Existing venues (A)	Cos	8 Test Year its Revenue ficiency (B)	Difference (A - B)		
(000's)						
Customer Group						
Newfoundland Power	\$ 441,522	\$	445,659	\$	(4,137)	
Island Industrial	41,226		38,727		2,499	
Labrador Interconnected	20,841		19,949		892	
Other Hydro Rural	63,130		63,130		-	
Labrador Industrial	4,740		4,750		(10)	
	\$ 571,459	\$	572,215	\$	(756)	

The amounts are equal to the difference between the 2018 existing revenues using test year loads and the revised 2018 Test Year costs with the Rural Deficit allocated based on the revenue requirement methodology as approved in the GRA order.

As a result of the allocation of the 2018 revenue deficiency, there is a revenue deficiency of \$4.1 million for Newfoundland Power and \$10,000 for the Labrador Industrial customers. There is a revenue surplus of \$2.5 million for Island Industrial Customers and \$0.9 million for Labrador Interconnected.

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2019 Revenue Deficiency

To determine the revenue deficiency for the first three quarters of 2019, Hydro compared the forecasted 2019 Test Year revenues under existing rates in effect January 1, 2019 to September 30, 2019 and proposed base rates for October 1, 2019 to December 31, 2019 compared to the revised 2019 Test Year Cost of Service.

The following table is a summary of 2019 existing revenues using test year loads compared to 2019 revised test year costs before the Rural Deficit allocation from the 2019 Test Year Cost of Service for revenue deficiency purposes:

Table 10: 2019 Revenues versus Costs

	19 Existing venues (A)	 9 Test Year Costs (B)	Difference (A - B)		
(000's)					
Customer Group					
Newfoundland Power	\$ 459,233	\$ 445,214	\$	14,019	
Island Industrial	40,757	45,662		(4,905)	
Labrador Interconnected	21,250	18,122		3,128	
Other Hydro Rural	64,697	129,058		(64,361)	
Labrador Industrial	 5,291	4,985		306	
	\$ 591,228	\$ 643,041	\$	(51,813)	

The table below presents the 2019 revenue deficiency to be recovered by customer group after the Rural Deficit allocation:

Table 11: 2019 Revenue Deficiency Allocation

	19 Existing venues (A)	Co	19 Test Year sts Revenue eficiency (B)	Difference (A - B)		
(000's) Customer Group						
Newfoundland Power	\$ 459,233	\$	506,977	\$	(47,744)	
Island Industrial	40,757		45,662		(4,905)	
Labrador Interconnected	21,250		20,636		614	
Other Hydro Rural	64,697		64,781		(84)	
Labrador Industrial	 5,291		4,985		306	
	\$ 591,228	\$	643,041	\$	(51,813)	

The amounts are equal to the difference between the 2019 existing revenues using test year loads and the revised 2019 Test Year costs with the Rural Deficit allocated based on the revenue requirement methodology as approved in the GRA order.

As a result of the allocation of the 2019 revenue deficiency, there is a revenue deficiency of \$47.7 million for Newfoundland Power, \$4.9 million for Island Industrial Customers and \$84,000 for Other Hydro Rural, which is related to Government Customers. There is a revenue surplus of \$0.6 million for Labrador Interconnected and \$0.3 million for Labrador Industrial.

We did not identify any discrepancies in the calculations of the revenue deficiencies for 2018 and 2019 included in the Compliance Application.

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Rate Stabilization Plan (RSP)

In its Compliance Application, Hydro updated the operation of the 2018 and 2019 Rate Stabilization Plan ("RSP") based on the GRA Order. Each in turn will be discussed below.

2018 Test Year

At the conclusion of the 2013 Amended General Rate Application, the Board issued Order No. P.U. 49 (2016). This Order included the approval of the 2015 test year inputs for hydrology, fuel price, customer load and the weighted average cost of capital. In the GRA order on page 56 the Board accepted Hydro's proposal that the RSP for 2018 operate based on the 2015 Test Year inputs, updated to reflect the use of the approved 2018 test year load forecast included in the Compliance Application. In its Compliance Application, Hydro has included schedules of the 2018 RSP using 2015 Test Year inputs and 2018 RSP using 2015 Test Year inputs (adjusted for 2018 load) in Exhibits 9 and 10, respectively.

The restated 2018 RSP balance has a balance of \$73,741,534 owing to ratepayers at the end of December 31, 2018 as included in Exhibit 10 using 2015 Test Year inputs adjusted for 2018 load. The table below outlines the impact of the 2018 load adjustments:

Table 12: 2018 RSP 2015 Test Year (adjusted for 2018 load) versus 2018 RSP 2015 Test Year

(000's)

Component	2018 Ijusted for 018 Load	2018	Dif	ference
Hydraulic balance	\$ (32,231)	\$ (32,231)	\$	-
Utility balance	(32,782)	(26,673)		(6,109)
Industrial balance	1,212	1,816		(604)
Utility RSP surplus	(9,940)	(9,940)		-
Total balance owing	\$ (73,741)	\$ (67,028)	\$	(6,713)

The restated 2018 RSP is based on the 2015 cost of service inputs approved for the 2015 Test Year, adjusted for 2018 Test Year load as follows:

2015 Test Year Inputs

- Net hydraulic production of 4,603.6 GWh
- Holyrood Operating Efficiency factor of 618 kWh/barrel
 - \$64.41 per barrel of No. 6 fuel
 - Weighted Average Cost of Capital ("WACC") of 6.61%

2018 Test Year Input

Customers Utility load of 5,824.5 GWh and Industrial load of 726.0 GWh

Based on our review of the restated 2018 RSP report in Exhibit 10 of the Compliance Application, we confirm the following:

• The 2018 RSP opening balances agree to the 2017 RSP actual closing balances; the 2017 actual RSP is based on the 2015 cost of service inputs approved for the 2015 test year including net hydraulic production of

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- 4,603.6 GWh, customers Utility load of 5,924.1 GWh and Industrial load of 621.4 GWh, Holyrood Operating Efficiency factor of 618 kWh/barrel, WACC of 6.61% and \$64.41 per barrel of No. 6 fuel.
 - The cost of service inputs are those approved for the 2015 test year for hydrology, fuel price, WACC and Holyrood Operating Efficiency factor as directed in the GRA Order.
 - The Customers Utility load and Industrial load have been updated in the operation of the 2018 RSP, which
 agrees to the 2018 Test Year load included in the Compliance Application as directed in the GRA Order.
 - The monthly activity recorded includes 2018 actual results for the entire year.
- The Rural Deficit allocation is calculated based on the 2015 Test Year Cost of Service for Rate Setting approved in Order No. P.U. 49(2016).
- The allocation of the RSP load variation component between Newfoundland Power and the Industrial customers is based on energy ratios approved in Order No. P.U. 49 (2016).
 - The Newfoundland Power RSP Adjustment rate in 2018 RSP is the rate of (0.371) cents per kWh that was approved for the period July 1, 2017 to June 30, 2018 in P.U 22(2017), and the rate used effective July 1, 2018 is 0.127 cents per kWh which was approved in Order No. P.U 15(2018).
 - The Industrial Customer RSP Adjustment rate in 2018 RSP is (0.061) cents per kWh for the period from January to March 2018 approved in Order No. P.U. 26 (2017) and the rate used effective April 1, 2018 is (0.309) cents per kWh which was approved in Order No. P.U. 7 (2018).

The restated balances of \$73,741,000 have been appropriately reflected in the opening balances of the restated 2019 RSP based on 2019 Test Year Inputs discussed below.

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2019 Test Year

In its Compliance Application, Hydro has included the March 2019 schedules of the 2019 RSP using 2015 Test Year inputs and March 2019 RSP using 2019 Test Year inputs in Exhibits 11 and 12, respectively.

The restated 2019 RSP balance as at March 31, 2019 included in Exhibit 12 using 2019 Test Year inputs has a balance of \$103,946,000 owing to ratepayers, prior to the proposed offset of 2019 revenue deficiency of \$48,401,000 and \$4,755,000 to Newfoundland Power and Industrial Customer, respectively. The table below outlines the impact of the 2019 Test Year balances:

Table 13: 2019 RSP 2019 Test Year versus 2019 RSP 2015 Test Year (000's)

Component	 arch 2019 - 9 Test Year	Note	 rch 2019 - 015 Test Year	Note	D:	fference
Component	 J lest lear	Note	 Ieai	Note		Herence
Hydraulic balance	\$ (39,996)		\$ (31,462)		\$	(8,534)
Utility balance	(63,006)	(1), (2), (3)	(14,605)			(48,401)
Industrial balance	(944)	(1)	3,811			(4,755)
Utility RSP surplus	 -	(3)	-	(3)		-
Total balance owing	\$ (103,946)		\$ (42,256)		\$	(61,690)

- 1) Balances are prior to proposed transfer of \$48.4 million and \$4.8 million to offset the revenue deficiencies for the Utility and Industrial Customer, respectively;
- 2) The balance of the Utility Customer as at March 31, 2019 included in Exhibit 12 was \$63,008,000 prior to proposed transfer, however Table 9 of Exhibit 5 presented \$63,006,000 with a transfer of \$48,401,000 to offset the 2019 revenue deficiency, a difference of \$2,000; and,
- 3) Effective March 31, 2019 Hydro transferred the remaining balance of \$10.0 million of the Utility RSP Surplus refund account to Utility balance account.

The restated 2019 RSP is based on the 2019 cost of service inputs as follows:

- Net hydraulic production of 4.600.5 GWh.
- Customers' Utility load of 5,800.7 GWh and Industrial load of 743.3 GWh.
- Holyrood Operating Efficiency factor of 583 kWh/barrel.
- \$105.90 per barrel of No. 6 fuel.

Proposals

Hydro is proposing to use the restatement in the RSP of \$48,401,000 in the above table to partially offset the total revenue deficiencies for 2018 and 2019 of \$51,880,000 for Newfoundland Power through the proposed Newfoundland Power 2017 GRA Cost Recovery Rider. Hydro is also proposing to use the restatement in the RSP of \$4,755,000 in the above table to offset the total revenue deficiencies for 2018 and 2019 of \$2,406,000 for the Industrial Customer through the proposed Island Industrial Customer 2017 GRA Cost Recovery Rider

Hydro is proposing to transfer a credit balance of \$36,310,729 from the RSP Hydraulic Variation component effective March 31, 2019 to reduce the deferred supply costs to be recovered from Newfoundland Power through the proposed Newfoundland Power 2017 GRA Cost Recovery Rider. Hydro also proposes a transfer of \$3,563,607 credit balance from the RSP Hydraulic Variation component effective March 31, 2019 to the proposed Island Industrial Customer 2017 GRA Cost Recovery Rider (\$2,997,357 to reduce the deferred supply costs and the \$566,250 to reduce the RSP current plan adjustment). The proposed Hydraulic Variation allocation is included in Appendix A, Exhibit 7.



We agreed the balance of the RSP Hydraulic Variation account as at March 31, 2019 and recalculated the Hydraulic Variation components for both Newfoundland Power and Industrial Customers based on the allocation methodology and found no exceptions.

The GRA Cost Recovery Rider is discussed further in our report.

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WACC error

The interest rate used within the 2019 RSP is based on the 2015 Test Year WACC of 6.61% in error due to a formula error in the operation of the 2019 RSP. This formula error resulted in RSP financing charges being recorded based upon the 2015 Test Year WACC and not the 2019 Test Year WACC of 5.43%.

Hydro has recalculated the 2019 RSP balances using the 2019 Test Year WACC which results in the adjustments as outlined in Table 14.

Table 14 – RSP Financing Adjustments (\$)						
Account	Interest As Filed	Interest Corrected	Difference			
Utility Current Plan	(643,529)	(530,929)	112,600			
Industrial Current Plan	6,930	5,710	(1,220)			
Hydraulic Account	(559,793)	(461,835)	97,958			
Utility Surplus	(160,130)	(132,097)	28,033			
Total	(1,356,522)	(1,119,151)	237,371			

Table 14 shows that the RSP balances owing to customers included in the 2017 GRA Compliance Application were overstated by approximately \$240,000. Tables 15 and 16 provide a breakdown of this adjustment by customer class after allocating the Hydraulic Variation Account variance.

Table 15 – Utility Customer Impact (\$)						
Newfoundland Power	Interest As Filed	Interest Corrected	Difference			
Current Plan	(643,529)	(530,929)	112,600			
Hydraulic Account (1)	(508,218)	(419,285)	88,933			
Utility Surplus	(160,130)	(132,097)	28,033			
Total	(1,311,877)	(1,082,311)	229,566			

(1) The hydraulic balance is allocated as follows, consistent with the 2017 GRA Compliance Application: 90.79% to Newfoundland Power, 8.91% to Island Industrial Customers, and 0.30% to the Labrador Write Off.

Table16 – Industrial Customer Impact (\$)							
Island Industrial	Interest As Filed	Interest Corrected	Difference				
Current Plan	6,930	5,710	(1,220)				
Hydraulic Account ¹	(49,878)	(41,149)	8,728				
Total	(42,948)	(35,439)	7,508				

According to Hydro, they could file a revision to the 2017 GRA Compliance Application which would result in a minor revision to 2017 GRA Cost Recovery Riders proposed in the 2017 GRA Compliance Application. According to Hydro, this change would not result in a change in the percent rate change impacts as originally proposed due to the size of the correction. If Hydro were to proceed with refiling the 2017 GRA Compliance Application, the time necessary to file this revision and time for further review would jeopardize the ability to have final customer rates in effect for October 1, 2019.

Instead Hydro has proposed the following:

"In light of the advanced stage of the 2017 GRA Compliance Application, and the limited time remaining to allow for the implementation of final customer rates on October 1, 2019, Hydro is proposing to proceed with a one-time adjustment to each respective customers' RSP current plan account effective April 1, 2019. By posting the adjustment on April 1, 2019 there will be no impact on the rates and transfers included in the 2017 GRA Compliance Application. This adjustment would then be reflected in customers 2020 RSP Adjustment factors.

Hydro submits that this approach will allow the continuation of the 2017 GRA Compliance Application process while correcting the financing error."



We recalculated the WACC error presented in tables 14, 15 and 16 and found no exceptions.

2019 Monthly No. 6 fuel price

In the operation of the 2019 RSP, Hydro uses a flat monthly fuel cost of \$105.90 Can/bbl as its No. 6 fuel cost for the operation of the Test Year RSP, which differs from previous Test Years where a monthly series underpinning the \$105.90 of fuel price was used.

Prior to the 2015 Test Year, the test year forecast monthly fuel price did not differ materially from the annual average. However, the monthly price forecast used for the 2015 Test Year was more volatile than what was used for the 2003 and 2007 Test Years. According to Hydro, monthly fuel prices for the 2003 and 2007 Test Years varied by an average of less than \$5 per barrel. However, the 2015 Test Year series varied by approximately \$19 per barrel. Hydro has explained that this large variation in monthly fuel prices in the 2015 Test Year results in variations from Hydro's No. 6 fuel expense being normalized to \$57.55 in January and \$76.05 in December of each year it operates. As Hydro's base rate revenues are currently set based upon an average No. 6 fuel cost of \$64.41 it creates seasonal variations in Hydro's earnings. Hydro believes that this result is counter to the original intent of the RSP – for risks associated with variations in No. 6 fuel price to be deferred. According to Hydro, the March 2019 fuel price forecast has a variation of \$26.66 between the highest and lowest forecast months which would result in more volatility than the 2015 Test Year fuel price forecast. In order to remedy this issue, Hydro modified the 2019 Test Year fuel price to be set based upon a flat price of \$105.90 for every month of the year. Hydro also noted that this approach is consistent with the annual fuel price used in the Energy Supply Cost Variance Deferral Account as approved by the Board.

If monthly test year fuel prices were used in the monthly operation of the RSP in 2019 from January 2019 to March 2019 included in the Compliance Application, the resulting difference in the fuel variation would be offset by an equal and opposite balance in the 2019 Test Year revenue requirement as Hydro's Test Year fuel expense would also be calculated on the same monthly test year price. Hydro's change to the monthly No. 6 fuel cost will result in No. 6 fuel expenses matching its base rate revenues and variations from the test year forecast will be deferred under the RSP.

In the 2019 Test Year RSP, Hydro changed the methodology in calculating the monthly Test Year Cost of Service No. 6 Fuel Cost in the RSP rules (i.e. Section B, 1.1 Fuel Cost Variations, D in the formula) from a monthly series to a flat price of \$105.90 for each month of the year. As a result, we recommend the Board direct Hydro to propose a revision in the RSP rules regarding the Fuel Cost Variation formula.

Review of 2019 RSP

Based on our review of the restated March 2019 RSP report included in Exhibit 12 to support the balances for the 2019 RSP, we confirm the following:

- The 2019 Test Year RSP is prepared starting with the closing balances of the restated 2018 Test Year RSP (using updated load).
- The 2019 activity is calculated using the proposed 2019 Test Year inputs included in the Compliance

 40 Application except finance charges is based on the 2015 Test Year WACC of 6.61% as discussed above.
- Hydro used a flat monthly fuel cost of \$105.90 Can/bbl as its No. 6 fuel cost, which differs from previous Test
 Years where a monthly series underpinning the \$105.90 of fuel price was used.
- The Rural Deficit allocation is calculated based on the 2019 Test Year Cost of Service.
- The allocation of the RSP load variation component between Newfoundland Power and the Industrial customers is based on energy ratios as approved in Order No. P.U. 49 (2016).
- The Newfoundland Power RSP Adjustment rate in 2019 RSP is 0.127 cents per kWh which was approved in Order No. P.U 15 (2018), effective July 1, 2018.
- The Industrial Customer RSP Adjustment rate in 2019 RSP is 0.302 cents per kWh which was approved in Order No. P.U. 4 (2019), effective January 1, 2019.



Proposed RSP Rates

Utility RSP Current Plan Adjustment rate

Hydro has proposed a Utility RSP Current Plan adjustment effective October 1, 2019 with the rate calculation in accordance with the RSP rules; Hydro's does not propose any modification to its rate calculation for the three month implementation delay. Effectively, Hydro's adjustment will be in effect for the proposed nine month period (October 1, 2019 to June 30, 2020) instead of normal 12 month period. Hydro proposes that any RSP Current Plan balance impacts from the delayed implementation will be incorporated into the Utility RSP Current Plan Adjustment in 2020. We also note that effective March 31, 2019 Hydro transferred \$10,039,986 of the balance remaining of the Utility RSP Surplus refund to Newfoundland Power's RSP Current Plan which according to Hydro is in accordance with Order No. P.U. 36 (2016). The Plan Termination Section of Hydro's RSP surplus Customer Refund Plan approved in Order No. P.U. 36 (2016) states:

"Upon Closure of the Hydro Customer Refund Plan Hydro will transfer any remaining balance in the RSP Surplus, including any variance between the total refund amount calculated under the Newfoundland Power Customer Refund Plan and the total amount of the Newfoundland Power Refund calculated in the Hydro Customer Refund Plan, to Newfoundland Power's current balance in the Rate Stabilization Plan."

Hydro commented in the Compliance Application in footnote 7 of Exhibit 7 that with the low amount of remaining activity anticipated, it believes it is appropriate to credit the current Utility RSP Surplus balance to the Newfoundland Power RSP Current Plan balance when determining customer rates to become effective October 1, 2019, (i.e. through the calculated RSP current plan adjustment rate of (0.188) cents per kWh).

In Exhibit 6, Appendix A of the Compliance Application, Hydro provides the calculation of the proposed Utility RSP Adjustment rate which includes \$10,039,986 transfer from the Utility RSP Surplus refund account. Our procedures included reviewing the information to ensure the methodology and calculation related to the Utility RSP adjustment rate was in accordance with the RSP rules.

Based upon our results of our procedures we did not identify any discrepancies in the calculation or methodology of the Utility RSP Adjustment rate of (0.188) cents per kWh included in Exhibit 6, Appendix A.

Island Industrial Customer Current Plan Adjustment rate

Hydro has proposed to discontinue the Island Industrial Customer Current Plan Adjustment rate of 0.302 cents per kWh effective October 1, 2019. As a result, Hydro has also proposed to dispose of the projected outstanding amount in the Island Industrial Customer RSP Current Plan balance as at September 30, 2019 of \$566,250. We recalculated the \$566,250 balance by taking the RSP Current Plan adjustment rate of 0.302 cents per kWh multiplied by Test Year Island Industrial Customer kWh sales from October to December 2019 (inclusive). This balance is reflected in the 2017 GRA Cost Recovery Rider for Island Industrial Customers on Table 4, Exhibit 7 discussed further in our report.

RSP Fuel Rider

In Order No. P.U. 16 (2019) the Board accepted the settlement proposal that the 2019 test year cost of No. 6 fuel be set based on the most current fuel rider forecast. Hydro calculated the forecast price of No. 6 fuel to be \$105.90 which is based on the current fuel rider forecast in March 2019. We reviewed the calculation of the \$105.90 forecast price of No. 6 fuel and agreed to PIRA's No. 6 Fuel price forecast and found no exceptions in our recalculation.

Newfoundland Power's current RSP Fuel Rider rate is 0.423 cents per kWh approved in Order No. P.U. 15 (2018). There is no RSP Fuel Rider for the Industrial Customer.

As Hydro has proposed the most current fuel rider forecast in determining No. 6 fuel costs in the 2019 Test Year revenue requirement, Hydro has also proposed to discontinue the existing fuel rider for Newfoundland Power. Hydro has also proposed to debit the Utility Customer RSP Current Plan in the amount of \$9,380,000 effective September 30, 2019 which represents the Test Year Utility RSP fuel Rider billings for the period from April 2019 to September 2019 (inclusive). We recalculated the \$9,380,000 balance by taking the RSP Fuel Rider adjustment rate of 0.423 cents per kWh multiplied by Test Year Utility Customer kWh sales from April 2019 to September 2019 (inclusive). This balance is reflected in the 2017 GRA Cost Recovery Rider for Newfoundland Power on Table 3, Exhibit 7 discussed further in our report.



RSP Rule Changes

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In Order No. P.U. 16 (2019), the Board approved the following amendments to the RSP rules:

- The proposed change to the calculation of the Rural Rate Alteration component to use test year data instead of actual billing data in the monthly calculations to be approved with effect from January 1, 2018; and
- Revision to the RSP rules to clarify that No. 6 fuel costs in Canadian dollars reflect foreign exchange gains and losses.

Hydro has proposed to add a Section F to the RSP Rules to permit any over or under recovery of the 2017 GRA Cost Recovery Rider for Island industrial Customers to be charged or credited to the Island Industrial Customer RSP Current Plan balance at the conclusion of the 20-month amortization period.

Hydro's proposed revised RSP Rules are included in Exhibit 15 of the Compliance Application. We have reviewed Hydro's proposed revisions and can confirm that the rules are in accordance with the above amendments approved in Order No. P.U. 16 (2019) and as proposed by Hydro in relation to 2017 GRA Cost Recovery Rider for Island industrial Customers.

GRA Cost Recovery Rider

Hydro's Compliance Application provides the calculation of revenue deficiencies for the 2018 and 2019 Test Years and allocation of deferred supply costs by customer class for the 2015 to 2017 period. The Settlement Agreements provided that 2018 revenue deficiency/excess for Newfoundland Power and Island Industrial Customers be disposed of through rate riders over a 20 month period, with the same approach for the deferred supply costs agreed upon as well. Additionally, Hydro has applied this method for the 2019 revenue deficiency/excess.

Hydro has calculated a 2017 GRA Cost Recovery Rider for each Newfoundland Power and the Island Industrial Customers within the Compliance Application to include the deferred supply costs and revenue deficiencies discussed above. The computed rider also reflects the proposed use of the balance in the RSP Hydraulic Variation component, the excess RSP Fuel Rider recovery for Newfoundland Power and conclusion of the RSP Current Plan for Industrial Customers to mitigate the customer rate impacts from implementation of the 2017 GRA final rates.

The tables below provide the calculation of the recovery riders to apply to Newfoundland Power and Island Industrial Customers for the period October 1, 2019 to May 31, 2021:

Table 17: Newfoundland Power 2017 GRA Cost Recovery Rider

Deferred Cost/Credit	 Dollars	Reference Page No.
2018 Revenue (Deficiency)/Excess	\$ (4,136,432)	Page 19
2019 Revenue (Deficiency)/Excess	(47,733,982) 1	Page 19
RSP Balance Restatement	48,401,120	Page 24
Excess RSP Fuel Rider Recovery for 2019	9,380,025	Page 28
2015-2017 Deferred Supply Costs	(60,065,830) 2	
Hydraulic Credit Allocation	 36,310,729	Page 24
Total Deficiency	(17,844,370)	
Annual Recovery (12/20 x Total Deficiency)	(10,706,622)	
2017 GRA Cost Recovery Rider (Monthly Charge)	\$ (892.219)	

- 1) 2019 Revenue Deficiency differs from our Revenue Deficiency section by \$10,000 due to rate rounding according to Hydro; and,
- The 2015 to 2017 Deferred Supply Costs: Energy Supply Cost and Holyrood Conversion Deferrals for each of 2015, 2016 and 2017 have been allocated to Newfoundland Power based on actual energy consumption from each respective year and the Isolated Systems Deferral has been allocated based upon the 2015 Test Year rural deficit allocation as per the GRA Order.



Table 18: Island Industrial Customers 2017 GRA Cost Recovery Rider

Deferred Cost/Credit		Dollars	Reference Page No.
2018 Revenue (Deficiency)/Excess 2019 Revenue (Deficiency)/Excess	\$	1,890,450 1 (4,893,461) 2	Page 19 Page 19
RSP Balance Restatement		4,754,971 (5,273,486) 3	Page 24
2015-2017 Deferred Supply Costs RSP Hydraulic Credit Allocation		3,563,607	Page 24
Conclusion of RSP Current Plan Adjustment Total Deficiency	-	(566,250) (524,169)	Page 28
Annual Recovery (12/20 x Total Deficiency)	\$	(314,501)	
2017 GRA Cost Recovery Rider (C/kWh)		0.042	

- 2017 GRA Cost Recovery Rider (C/kWh)
- 1) 2018 Revenue Excess of \$1,890,000 differs from our Revenue Deficiency section of \$2,499,000 due to the Island Industrial Specifically Assigned charges of \$609,000 as these charges are proposed to be credited or debited to each customer in the form of a bill credit/charge provided through the October 2019 billing
- 2019 Revenue Deficiency of \$4,893,000 differs from our Revenue Deficiency section of \$4,905,000 due to the Island Industrial Specifically Assigned charges of \$6,000 as these charges are proposed to be credited or debited to each customer in the form of a bill credit/charge provided through the October 2019 billing process and rounding of \$6,000; and.
- The 2015 to 2017 Deferred Supply Costs: Energy Supply Cost and Holyrood Conversion Deferrals for each of 2015, 2016 and 2017 have been allocated to Island Industrial Customers based on actual energy consumption from each respective year and the Isolated Systems Deferral has been allocated based upon the 2015 Test Year rural deficit allocation as per the GRA Order.

The calculation of the GRA Cost Rider for both Newfoundland Power and Island Industrial Customers is over a 20 month amortization period as directed by the Board in the GRA Order.

Hydro is proposing to track the Island Industrial Customer 2017 GRA Cost Recovery Rider by month such that any over or under recovery of the total deficiency above is charged or credited to the RSP Current Plan balance at the conclusion of the 20 month amortization period, as the rate rider is based off test year and can differ from actual. Hydro is proposing to revise the RSP Rules to permit the proposed true-up.

We have recalculated the 2017 GRA Cost Recovery Rider for both Newfoundland Power and Island Industrial Customers and found no exceptions.

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Account Definitions

Revised Energy Supply Cost Variance Deferral Account

Hydro initially provided its proposed definition within their "Additional Cost of Service Information" on March 22, 2018, with a revised definition provided in Revision Two of the "2018 Cost Deferral and Interim Rates Application", which was in accordance with Order No. P.U. 48 (2018). This revision reflected that the account will not include any expenditure related to the use of the Labrador-Island Link or Labrador Transmission Assets under the Interim Transmission Funding Agreements as per OC2018-213. This definition was accepted in the GRA Order with an effective date of January 1, 2019. This definition within Hydro's Compliance Application, Exhibit 8, Appendix A is in accordance with the GRA Order.

Excess Earnings Account

Hydro filed a revised Excess Earnings Account definition reflecting a range of return on rate base of plus or minus 20 basis points, consistent with the Board Order No. P.U. 49 (2016). In the Settlement Agreement dated April 11, 2018, Hydro and the parties agreed that the proposed definition should be approved and was accepted within the GRA Order by the Board. Hydro presents this definition in Exhibit 8, Appendix B, which is in accordance with the GRA Order

Return on Equity (ROE) Rate Change Deferral Account

Hydro's proposed methodology for determining revenue requirement adjustments to flow-through by customer class as a result of changes in the ROE between test years for Hydro that result from changes in Newfoundland Power's ROE was proposed and agreed within the Settlement Agreement dated April 11, 2018. The Company filed the definition on May 15, 2018, which was later accepted in the GRA Order and ordered Hydro to file it with the Compliance Application for the Board's approval. The ROE rate change deferral account definition is provided within Exhibit 8, Appendix C in the Compliance Application.

Based on our review of the Compliance Application, the account definitions presented are consistent with the GRA Order.



Proposed Revenue from Rates

The Company is proposing that the Board approve rates, tolls and charges effective for service provided on and after October 1, 2019, to provide an average increase by customer as follows:

Table 19: Customer Average % Increase in Rates

Customer	Rate Impact (%)
Newfoundland Power Wholesale	11.5
Newfoundland Power Retail	7.6
Island Industrial Customers	11.2
Island Industrial Customers with Specifically Assigned Credit	9.7
Hydro Rural Interconnected and L'Anse au Loup	7.6
Government Diesel	7.7
Hydro Diesel Systems	7.6
Labrador Rural Interconnected	(3.1)
Labrador Industrial Transmission Customers	(7.6)

We have reviewed the Company's proposed rates effective October 1, 2019. Specifically, the procedures we have performed include the following:

- 1. Recalculated the revenue that results from using the revised rates, ensuring that it agrees with the revenue requirement submitted by the Company;
- 2. Agreed the factors used in the revenue calculations (number of customers, updated customer load forecast, etc.) to those presented by the Company;
- Agreed the rates used in the revenue calculations to those in the proposed Revised Schedule of Rates, Tolls and Charges;
- 4. Recalculated the percentage increase in revenue by rate class and the percentage increase in individual rates, tolls and charges;
- 5. Recalculated the Industrial customer rates following the findings of the GRA Order;
- Agreed the sale of the frequency converter to Corner Brook Pulp and Paper Limited is included within final rates;
- 7. Reviewed the accepted Newfoundland Power's rate design, continuation of the current Labrador Industrial Transmission Rate and billing credit to IOC used;
- 8. Recalculated the proposed updated CDM Cost Recovery Adjustment for Newfoundland Power to become effective October 1, 2019:
- Recalculated the Deferred Supply Cost and Revenue Deficiency through a 2017 GRA Cost Recovery Rider computed for each of Newfoundland Power and Island Industrial Customers;
- 10. Recalculated specifically assigned charges to Industrial customers on the Island Interconnected applying the existing methodology; and
- 11. Agreed the changes made in Hydro's Rules and Regulations to the GRA Order.



The following table compares the existing rates to October 1, 2019 proposed rates by customer:

Table 20: Existing and Proposed Rates, Tolls & Charges
| Roard of Commissioners of Public Utilities

Board of Commissioners of Public Utilities NL Hydro - Verification of Revised Rates							
Comparison of Existing and Proposed Rates	s, Tolls &	& Charges					
Labrador Interconnected Rate Classes	Existing		Proposed		CHANGE		CHANGE
Domestic - Rate # 1.1	-	Rates		Rates		(\$)	(%)
Basic Customer Charge (Per Month)	\$	7.09	\$	6.87	\$	(0.22)	-3.10%
Energy Charge - All Kilowatt Hours (\$/kWh) Minimum Monthly Charge	\$ \$	0.03255 7.09	\$ \$	0.03154 6.87		0.00101) 0.22000)	-3.10% -3.10%
General Service - Rate # 2.1	Ť	7.00	•	0.0.	• (o,	0.1070
Basic Customer Charge (Per Month)							
Unmetered	\$	6.41	\$	6.27	\$	(0.14)	-2.18%
Single phase	\$	10.37	\$	10.27	\$	(0.10)	-0.96%
Three phase	\$ \$	16.32 0.05092	\$ \$	16.27 0.04911	\$	(0.05) 0.00181)	-0.31% -3.55%
Energy Charge - All Kilowatt Hours (\$/kWh) Minimum	Ф	0.05092	Ф	0.04911	Φ ((J.00161)	-3.33%
Unmetered	\$	6.41	\$	6.27	\$	(0.14)	-2.18%
Single phase	\$	10.37	\$	10.27	\$	(0.10)	-0.96%
Three phase	\$	20.00	\$	20.00	\$	-	0.00%
General Service - Rate # 2.2							
Basic Customer Charge (Per Month)	_						
Unmetered	\$ \$	6.41	\$	6.27	\$	(0.14)	-2.18% -0.96%
Single phase Three phase	э \$	10.37 16.32	\$ \$	10.27 16.27	\$ \$	(0.10) (0.05)	-0.96%
Demand Charge (\$/kW Per Month)	\$	1.76	\$	1.71	\$	(0.05)	-2.84%
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Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.02417	\$	0.02338	\$ (0	0.00079)	-3.27%
General Service - Rate # 2.3							
Demand Charge (\$/kW Per Month)	\$	1.97	\$	1.91	\$	(0.06)	-3.05%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.02090	\$	0.02026	\$ (0	0.00064)	-3.06%
General Service - Rate # 2.4							
Demand Charge (\$/kW Per Month)	\$	1.71	\$	1.66	\$	(0.05)	-2.92%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.01725	\$	0.01675	\$ (0	0.00050)	-2.90%
Street Lights 4.1L							
250W Mercury Vapour (Per Month)	\$	15.42	\$	14.94	\$	(0.48)	-3.11%
100W High Pressure Sodium (Per Month)	\$	11.43	\$	11.08	\$	(0.35)	-3.06%
150W High Pressure Sodium (Per Month)	\$	15.42	\$	14.94	\$	(0.48)	-3.11%
250W High Pressure Sodium (Per Month)	\$	20.34	\$	19.71	\$	(0.63)	-3.10%
400W High Pressure Sodium (Per Month)	\$	26.20	\$	25.47	\$	(0.73)	-2.79%
Wood Poles (Per Month)	\$	3.88	\$	3.76	\$	(0.12)	-3.09%
100W High Pressure Sodium Closed (Per Month)	\$	7.71	\$	7.68	\$	(0.03)	-0.39%
100W High Pressure Sodium (Per Month)	\$	4.68	\$	4.53	\$	(0.15)	-3.21%
Wood Poles Closed (Per Month)	\$	3.71	\$	3.68	\$	(0.03)	-0.81%



Table 20: 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

Diesel - Government Departments	Existing Rates		Proposed Rates		CHANGE (\$)		CHANGE (%)
Rate 1.2G Domestic Diesel							
Basic Customer Charge (Per Month)	\$	55.69	\$	58.95	\$	3.26	5.85%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.89164	\$	1.00145	\$	0.10981	12.32%
Rate 2.1G General Service Diesel (0-10 kW)							
Basic Customer Charge (Per Month)	\$	59.76	\$	59.82	\$	0.06	0.10%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.81367	\$	0.85567	\$	0.04200	5.16%
Rate 2.2G General Service Diesel (Over 10kW)							
Basic Customer Charge (Per Month)	\$	73.76	\$	71.78	\$	(1.98)	-2.68%
Demand Charge (\$/kW Per Month)	\$	59.83	\$	65.23	\$	5.40	9.03%
Energy Charge - All Kilowatt Hours (\$/kWh)	\$	0.60033	\$	0.63394	\$	0.03361	5.60%
Street and Area Lighting Diesel 4.1G							
250W Mercury Vapour (Per Month)	\$	85.29	\$	86.83	\$	1.54	1.81%
100W High Pressure Sodium (Per Month)	\$	57.28	\$	58.31	\$	1.03	1.80%
150W High Pressure Sodium (Per Month)	\$	85.29	\$	86.83	\$	1.54	1.81%
Monthly Demand Charge (\$/kW)	\$	4.75	\$	5.00	\$	0.25	5.26%
Monthly Energy Charges (\$/kWh)							
First 250 GWh Excess of 250 GWh	\$ \$	0.02782 0.10422	\$ \$	0.02444 0.18165		(0.00338) 0.07743	-12.15% 74.29%
Utility							
Firming-up Charge (\$/kWh)	\$	0.02882	\$	0.02882	\$	-	0.00%
RSP Adjustments (\$/kWh)							
Recovery Adjustment Fuel Rider	\$ \$	(0.00296) 0.00423	\$ \$	(0.00188)		0.00108 (0.00423)	-36.49% -100.00%
CDM Cost Recovery Adjustment	\$	0.000220	\$	0.00026	\$	0.00004	18.18%



Table 20: 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 CHANGE CHANGE Existing Proposed Rates Rates (\$) (%) Industrial - Firm Base Rate Monthly Demand Charge (\$/kW) 10.90 10.73 \$ \$ (0.17)-1 56% Firm Energy Charge ((\$/kWh) \$ 0.00352 0.00443 25.76% \$ \$ 0.00091 RSP Adjustments (\$/kWh) Recovery Adjustment \$ 0.00302 \$ \$ (0.00302) -100.00% Fuel Rider \$ \$ \$ Annual Charges Corner Brook Pulp and Paper Limited \$ 11.458 \$ 13,311 \$ 1,853 16.17% North Atlantic Refining Limited \$ 104,051 \$ 107,678 \$ 3,627 3.49% Teck Resources Limited \$ 50,030 51,789 1,759 3.52% Vale \$ \$ 144,378 \$ 145,352 974 0.67% 2017 GRA Cost Recovery Rider \$ 0.00042 \$ 0.00042 \$ 0.00010 10.00% CDM Cost Recovery Adjustment \$ \$ 0.00011 \$ 0.00001 Wheeling Rate (\$/kWh) \$ 0.00423 \$ 0.00831 \$ 0.00408 96.45%

Based on our procedures, we find that the 2019 revenue requirement for rate setting proposed by the Company is calculated based upon the revised Schedule of Rates, Tolls and Charges effective October 1, 2019 and the factors proposed in this Application.



Restrictions, Qualifications and Independence

Purpose

This report was prepared for the Board of Commissioners of Public Utilities in Newfoundland and Labrador. The purpose of our engagement was to review the Compliance Application submitted by Hydro related to Order No. P.U. 16 (2019).

Restrictions and Limitations

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

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

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

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