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Board of Commissioners of Public Utilities

Financial Consultants Report

Newfoundland and Labrador Hydro

P.U. 13 (2016) Prudence Review – Compliance Application  
August 30, 2016

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# 1 Introduction

## 2 P.U. 13 (2016)

3 On April 26, 2016 the Board of Commissioners of Public Utilities (“the Board”) issued P.U. 13 (2016) in  
4 the matter of ‘A Prudence Review by the Board of Certain Projects and Expenditures of Newfoundland  
5 and Labrador Hydro’ (“the Order”). The Order provided the following instructions to Newfoundland and  
6 Labrador Hydro (“Hydro”, “the Company”):

- 7  
8 1. *“Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs  
9 associated with:*
  - 10  
11 1. *overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers associated with imprudence;*
  - 12 2. *the portion of the Sunnyside Terminal Station equipment repairs and replacement associated with imprudence;*
  - 13 3. *the Western Avalon T5 tap changer replacement and transformer repair associated with imprudence;*
  - 14 4. *extraordinary transformer and breaker repairs in 2014 and 2015 associated with imprudence;*
  - 15 5. *additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage  
16 of Holyrood Unit 1 associated with imprudence;*
  - 17 6. *certain expenses related to professional services-consulting fees, salary transfers, and overtime associated with  
18 imprudence and the Board's investigation into the January 2014 outages; and*
  - 19 7. *Holyrood Unit 1 turbine failure in 2013.*
- 20  
21 2. *Hydro will not recover in the 2014 revenue requirement \$500,000 associated with its imprudence in managing black  
22 start capability at Holyrood;*
- 23  
24 3. *Hydro will create a separate account into which will be transferred professional services-consulting fees, salary transfers  
25 and overtime costs for 2014, 2015 and subsequent years relating to Phase Two of the Board's investigation into the  
26 January 2014 outages, with the recovery of the costs to be addressed in a subsequent order of the Board following a  
27 further application by Hydro; and*
- 28  
29 4. *Hydro will file in accordance with the subsequent direction of the Board a revised 2014 revenue requirement and revenue  
30 deficiency calculation, a revised 2015 test year revenue requirement and revenue deficiency calculation, and supporting  
31 documentation reflecting the findings of the Board in this Decision and Order.”*

## 1 Compliance Application

2 In response to P.U. 13 (2016) Hydro filed a Prudence Review – Compliance Application (“the  
 3 Application”) on May 25, 2016. The Application documents Hydro’s calculation of a revised 2014 revenue  
 4 requirement and revenue deficiency and a revised 2015 Test Year revenue requirement and revenue  
 5 deficiency incorporating the instructions of the Board in Order No. P.U. 13 (2016).  
 6

## 7 The Engagement

8 P.U. 13 (2016) stated that “*the Board’s financial consultants will be asked to review the information provided and may*  
 9 *request any necessary clarification or further information from Hydro to ensure that all costs have been accounted for to the*  
 10 *extent possible.*” The purpose of our engagement was to review the Application submitted by Hydro related  
 11 to Prudency matters considering if the adjustments reflected were in accordance with P.U. 13 (2016). The  
 12 procedures undertaken in the course of our review do not constitute an audit of Hydro’s financial  
 13 information and consequently, we do not express an opinion on the financial information provided by  
 14 Hydro. The procedures performed along with any detailed findings are outlined in each section of this  
 15 report.  
 16

17 In the Application Hydro has noted that “*In some instances, Order No. P.U. 13(2016) references figures based on*  
 18 *actual costs. However, in order to calculate the impact of P.U. 13(2016) on Hydro’s proposed revenue requirements, test year*  
 19 *costs must be used, not actual costs incurred. As such, the figures presented in this report reflect test year data.*” Our review  
 20 has included both actual and test year amounts for completeness. Throughout this report 2014 test year  
 21 balances are presented to be consistent with the terminology that Hydro uses in the Compliance  
 22 Application. However, we understand that the Board has not ruled on whether or not 2014 will be  
 23 accepted as a test year. We anticipate this will be addressed in a future Board Order.  
 24

## 25 Synthesis of Findings

26 Throughout the course of our review we noted the following findings. A more detailed discussion of the  
 27 issue is included at the page reference noted below.

#	Finding	Dollar Impact	Page
1	We have noted that Hydro has recorded a regulatory asset based on the 2014 test year loss on disposal of \$425,000 associated with the Sunnyside Terminal Equipment project. However, since the loss on disposal in the test year was offset with insurance proceeds, setting up the new regulatory asset has resulted in an overall reduction to the 2014 test year revenue requirement.	<ul style="list-style-type: none"> <li>\$425,000 reduction in the 2014 test year revenue requirement.</li> </ul>	Page 9
2	In the report entitled “ <i>Board of Commissioners of Public Utilities Regarding Work to be Performed on Transformers</i> ” – dated June 2, 2014 there was an error in the Schedule to Complete Overdue Transformer PMS included in Appendix C. Per discussion with Hydro’s management, we understand that power transformer OPDTS, T3 should not have been included on this list. As a result, Hydro’s management revised the maintenance schedule to include HDNTS, T1, XFMR.	<ul style="list-style-type: none"> <li>This error had no impact on test year 2014 or test year 2015 revenue requirement or average rate base disclosed in the Compliance Application.</li> </ul>	Page 12

#	Finding	Dollar Impact	Page
3	Maintenance on the STBTS, T2 Diverter Switch Leak has been categorized as extraordinary by Hydro. We noted that this maintenance event was not included in either of the <i>“Board of Commissioners of Public Utilities Regarding Work to be Performed on Transformers”</i> or the <i>“Board of Commissioners of Public Utilities Regarding Work to be Performed on Air Blast Circuit Breakers”</i> – dated June 2, 2014. We understand based on discussions with Hydro’s management that this event was not included in the June 2nd reports as the preventative maintenance was overdue at that time. However, these items relate to a critical transformer where maintenance was unplanned.	<ul style="list-style-type: none"> <li>This error had no impact on test year 2014 or test year 2015 revenue requirement or average rate base disclosed in the Compliance Application.</li> </ul>	Page 12
4	We have noted an exception in the prudence review adjustments for Sunnyside Terminal Station Replacement Equipment. Hydro has deducted capital expenditures for B1T1 breaker costs deemed prudent by Liberty. As a result of the error, Hydro has understated test year 2014 and 2015 capital expenditures, average rate base, depreciation and revenue requirement.	<ul style="list-style-type: none"> <li>\$250,150 understatement of average rate base in 2014 test year.</li> <li>\$764,850 understatement of average rate base in 2015 test year.</li> <li>\$19,000 understatement of revenue requirement in 2014 test year.</li> <li>\$75,300 understatement of revenue requirement in 2015 test year.</li> </ul>	Page 37, 38, and 39
5	We have noted an exception in the calculation of average rate base for test year 2014 for Sunnyside Terminal Replacement Equipment (Recovery). Hydro did not use the correct actual 2013 amount for purposes of determining Compliance Application adjustments to average rate base for test year 2014. Hydro has averaged a cost and net book value of \$425,000 for the actual 2013 to test year 2014 period. The Company’s supporting documents show that the actual 2013 cost prior to disposal was \$516,018 with a corresponding net book value of \$501,471.	<ul style="list-style-type: none"> <li>\$38,000 understatement of average rate base for test year 2014.</li> </ul>	Page 41
6	We have noted Hydro has treated recovery of the T5 Tap Changer original assets inconsistently in 2014 and 2015 test years, leaving certain components of the original assets for recovery in rate base while removing other components. Hydro has included original T5 Tap Changer assets in rate base with a net book value of \$178,008 for test year 2014 and a net book value of \$172,828 for test year 2015 and disposed of certain components of original T5 Tap Changer assets with a net book value of \$27,890 for test year 2014.	<ul style="list-style-type: none"> <li>Overstatement of revenue requirement of \$27,890 for test year 2014 versus the recovery treatment applied to the other components of the original T5 Tap Changer assets.</li> </ul>	Page 46
7	We have noted an exception in the calculation of actual depreciation for the Holyrood Unit 1 Turbine Failure. In actual 2014, Hydro has overstated depreciation by \$31,298 due to exclusion of an asset credit balance of \$216,484 in the calculation of depreciation for actual 2014.	<ul style="list-style-type: none"> <li>These errors have no impact on test year 2014 or test year 2015 revenue requirement or average rate base disclosed in the Compliance Application.</li> </ul>	Page 51

# 1 Revenue Requirement and Operating 2 Expenditures

3 The Company's re-calculation of its forecast revenue requirement for the 2014 and 2015 test years is  
4 included in Schedule 2 Page 1 of 2 of the Compliance Application. Our procedures with respect to the  
5 calculation of the revenue requirement were directed towards the assessment of the impact on revenue  
6 requirement of the prudence review adjustments presented by the Company in its Application.

7

8 Specifically we performed the following procedures:

9

- 10 • reviewed the clerical accuracy of calculations;
- 11 • reviewed revenue requirement section of the Compliance Application for consistency with  
12 Newfoundland and Labrador Hydro's 2013 Amended General Rate Application ( "GRA" or  
13 "amended GRA") previously filed;
- 14 • reviewed adjustments to the Compliance Application revenue requirement for consistency with  
15 P.U. 13 (2016); and
- 16 • reviewed adjustments to the Compliance Application revenue requirement for consistency with the  
17 "*Prudence Review of Newfoundland and Labrador Hydro Decision and Actions Final Report*" prepared by  
18 Liberty Consulting Group (the "Liberty report") when applicable.

19

20 Hydro has indicated that in compliance with P.U. 13 (2016) the 2014 and 2015 test year revenue  
21 requirement has been reduce by \$6.1 million and \$3.1 million dollars, respectively. This adjustment  
22 includes reductions in operating costs, depreciation of assets deemed to be imprudent, cost of service  
23 exclusions and a reduced return on rate base. A summary of the various adjustments has been provided in  
24 the tables on the next page.

1 **Table # 1: 2014 Revenue Requirement Impact**

2

		Operating 2014TY	Capital/Rate Base 2014TY	Total Adjustment 2014TY	Total Per Sch 1	Difference
('000s)						
<b>Application Disallowances</b>						
<b>Ref #</b>						
Sch 4	Overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers	\$ -	\$ 24.4	\$ 24.4	\$ 24.4	\$ -
Sch 5	Sunnyside Terminal Station	425.0	99.9	524.9	524.9	-
Sch 6	Western Avalon T5 Tap Changer	-	55.0	55.0	55.0	-
Sch 7	Extraordinary Maintenance	903.0	-	903.0	903.0	-
Sch 8	Additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of Holyrood Unit 1	-	50.6	50.6	50.6	-
Sch 9	Professional Services - Phase One	2,801.0	-	2,801.1	2,801.1	-
Sch 11	Holyrood Unit 1 Failure 2013	-	1,138.6	1,138.6	1,138.6	-
Sch 12	Black Start Capability at Holyrood	500.0	-	500.0	500.0	-
Sch 10	Professional Services - Phase Two	126.0	(4.5)	121.5	121.5	-
		<b>\$ 4,755.0</b>	<b>\$ 1,364.0</b>	<b>\$ 6,119.1</b>	<b>\$6,119.1</b>	<b>\$ -</b>

3

4

5 **Table # 2: 2015 Revenue Requirement Impact**

6

		Operating 2015TY	Capital/Rate Base 2015TY	Total Adjustment 2015TY	Total Per Sch 1	Difference
('000s)						
<b>Application Disallowances</b>						
<b>Ref #</b>						
Sch 4	Overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers	\$ -	\$ 105.6	\$ 105.6	\$ 105.6	\$ -
Sch 5	Sunnyside Terminal Station Prudent	-	371.9	371.9	371.9	-
Sch 6	Western Avalon T5 Tap Changer	-	138.4	138.4	138.4	-
Sch 7	Extraordinary Maintenance	(208.0)	283.0	75.0	75.0	-
Sch 8	Additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of Holyrood Unit 1	-	371.7	371.7	371.7	-
Sch 9	Professional Services - Phase One	854.0	-	854.0	854.0	-
Sch 11	Holyrood Unit 1 Failure 2013	-	1,070.3	1,070.3	1,070.3	-
Sch 12	Black Start Capability at Holyrood	-	-	-	-	-
Sch 10	Professional Services - Phase Two	146.0	(13.6)	132.4	132.4	-
		<b>\$ 792.0</b>	<b>\$ 2,327.3</b>	<b>\$ 3,119.3</b>	<b>\$3,119.3</b>	<b>\$ -</b>

7

8

9 The revenue requirement impact of depreciation of imprudent assets, cost of service exclusions and the  
 10 reduction to the return on rate base are discussed in the capital expenditures and deferred charges section  
 11 of this report. The table on the next page summarizes the impact of P.U. 13 (2016) on Hydro's 2014 and  
 12 2015 test year operating costs.

1 **Table # 3: Summary of Impact of P.U. 13 (2016) on 2014 and 2015 Test Year Operating Costs**  
 2

('000s)		<u>Operating Costs</u> <u>2014TY</u>	<u>Operating Costs</u> <u>2015TY</u>
<b>Application Disallowances</b>			
<b>Ref #</b>			
Sch 4	Overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers	\$ -	\$ -
Sch 5	Sunnyside Terminal Station Imprudent	425.0	
Sch 6	Western Avalon T5 Tap Changer	-	-
Sch 7	Extraordinary Maintenance	903.0	(208.0)
Sch 8	Additional supply costs associated with the 2014 failure of Holyrood (Note 1)	-	-
Sch 9	Professional Services - Phase One	2,801.0	854.0
Sch 11	Holyrood Unit 1 Failure 2013	-	-
Sch 12	Black Start Capability at Holyrood	500.0	-
Sch 10	Professional Services - Phase Two	126.0	146.0
		<u>\$ 4,755.0</u>	<u>\$ 792.0</u>

*Note 1 - Additional supply costs associated with the 2014 failure of Holyrood have been deferred and are amortized over five years. As a result, the impact of this prudence adjustment flows through depreciation and not operating expenditures.*

3  
4



1 Sunnyside Terminal Station - Operating Costs

2 With regards to the operating costs associated with the Sunnyside Terminal Station P.U. 13 (2016) states:

3  
 4 *“Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs*  
 5 *associated with:*

- 6 • *the portion of the Sunnyside Terminal Station equipment repairs and replacement associated with imprudence.”*

7  
 8 To assess compliance with this directive we obtained a summary of the 2014 and 2015 test year and actual  
 9 operating costs associated with the Sunnyside Terminal Station equipment. The information provided is  
 10 presented in the table below:

11  
 12 **Table # 4: Summary of Operating Costs - Sunnyside Terminal Station Equipment Replacement**

13

	Sunnyside Terminal Station Equipment Replacement					
	2014 TY	2014 Actual	2015 TY	2015 Actual	Total TY	Total Actual
(000s)						
6014 -> Inter-company Salary	\$ 19.1	\$ 19.1			\$ 19.1	\$ 19.1
6035 -> Labour In	72.3	72.3	-	0.6	72.3	72.9
6040 -> Overtime (In)	93.0	93.0			93.0	93.0
6105 -> Materials	13.1	13.1	-	9.9	13.1	23.1
6106 -> Contract Labour	30.4	764.6	-	(3.4)	30.4	761.2
6107 -> Contract Materials	53.0	114.1			53.0	114.1
6264 -> Consultants	543.6	423.0	-	59.4	543.6	482.4
6505-> Travel	8.1	5.8			8.1	5.8
6635-> Employee Expenses	0.8	0.8			0.8	0.8
6660-> Sundry	0.1	0.0			0.1	0.0
Other expense codes - prudency only	0.0	30.4	-	(200.0)	0.0	(169.6)
Total Operating Costs	\$ 833.5	\$ 1,536.2	\$ -	\$ (133.5)	\$ 833.5	\$ 1,402.8
Loss on Disposal	425.0	514.8			425.0	514.8
Insurance Proceeds	(1,258.0)	(1,174.0)			(1,258.0)	(1,174.0)
<b>Sunnyside Terminal Station Equipment Replacement</b>	<b>\$ 0.5</b>	<b>\$ 877.0</b>	<b>\$ -</b>	<b>\$ (133.5)</b>	<b>\$ 0.5</b>	<b>\$ 743.6</b>

14 *Note - this table does not include depreciation which has been addressed in the Capital Expenditures section of this report.*

15  
 16 The test year balances presented in Hydro’s amended General Rate Application reflected a net nil impact  
 17 of the Sunnyside Terminal Station equipment as shown in the table above. Hydro’s forecast included  
 18 operating expenditures and a loss on the disposal of the damaged equipment. However, due to the  
 19 anticipated insurance proceeds Hydro’s allocation of the proceeds between operating costs and capital  
 20 expenditures offset the total impact of the project on the operating costs in 2014 test year.

The table below provides a summary of the costs connected to the Sunnyside Terminal Station equipment failure and the resulting insurance application:

**Table # 5: Summary of Operating Costs - Sunnyside Terminal Station Equipment Replacement**

	Sunnyside Terminal Station Equipment Replacement					
	2014 TY	2014 Actual	2015 TY	2015 Actual	Total TY	Total Actual
Capital Expenditures	\$ 7,197.8	\$ 5,062.7	\$ 1,226.4	\$ 1,549.7	\$ 8,424.2	\$ 6,612.4
Operating Costs	833.5	1,536.3	-	(133.5)	833.5	1,402.8
Total Project Costs	8,031.3	6,599.0	1,226.4	1,416.2	9,257.7	8,015.2
Less: Non-insurable Expenditures	(1,494.9)	(1,599.0)	(1,226.4)	(1,416.2)	(2,721.5)	(3,015.2)
Less: Deductible	(2,000.0)	(2,000.0)	-	-	(2,000.0)	(2,000.0)
Total Insurable Expenditures	\$ 4,536.4	\$ 3,000.0	\$ -	\$ -	\$ 4,536.4	\$ 3,000.0
Allocation of Insurance Proceeds						
Insurance Proceeds Allocated to Operating Costs	\$ 833.5	\$ 1,174.0	\$ -	\$ -	\$ 833.5	\$ 1,174.0
Insurance Proceeds Allocated to Loss on Disposal	425.0	-	-	-	-	-
Insurance Proceeds Allocated to Capital Expenditures	3,278.4	1,826.0	-	-	3,278.4	1,826.0
<b>Total Insurance Proceeds - Sunnyside Terminal</b>	<b>\$ 4,536.9</b>	<b>\$ 3,000.0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,111.9</b>	<b>\$ 3,000.0</b>

Note: Insurance proceeds allocated to capital expenditures have been addressed in further detail in the capital expenditure section of this report.

During the course of our review we traced the insurance proceeds recorded in 2014 actuals to the remittance advice and supporting correspondence with the insurer Factory Mutual Insurance Company.

Despite the fact that there was effectively no balance in the 2014/2015 test year operating expenditures presented in the amended General Rate Application, the Compliance Application presents a \$425,000 reduction to 2014 test year operating expenses in response to P.U. 13 (2016). We have reviewed this adjustment with Hydro's management and have noted the following:

P.U. 13 (2016) states *"The Board will not allow recovery of the capital and/or operating expenses included in the calculation of the 2014 revenue requirement and the 2015 test year costs associated with Hydro's imprudence in relation to the Sunnyside terminal station replacement equipment, the Western Avalon terminal station T5 tap changer replacement and the overhauls of the 230 kV breakers B1LO3 and BIL17. Hydro will continue to recover the capital costs for the replaced equipment at the Sunnyside terminal station and the Western Avalon terminal station for the remainder of the expected lives of these assets as were determined by Hydro prior to the failure of the assets in January 2014 and the recovery of these capital costs will be included in the 2014 revenue requirement and the 2015 test year costs."* However, the Board Order does not expressly state the required adjustments. As a result, Hydro has made reference to testimony from the prudence hearing when interpreting the Board's intended adjustments. In particular Hydro has referenced some of Mr. Antonuk's testimony from November 12, 2015 as the basis for their treatment of the adjustment in the Compliance Application related to this project. During his testimony Mr. Antonuk stated *"If the remaining expected life was ten years, then what you would do is you would continue on a regulatory asset basis to depreciate the value it had for ten years, that regulatory asset. You create a corresponding regulatory asset which consists of the installed cost of the replacement. For those ten years when it would not have been in service but for imprudence, you depreciate that regulatory asset. Then at the end of those ten years, you put it in at its then depreciated original cost."*

As a result, Hydro has set up a new regulatory asset by deferring general operating costs in an amount equal to the loss on disposal from the Sunnyside Terminal Station that was recorded in the 2014 test year balances within the Amended General Rate Application. This balance is treated as a new regulatory asset with a useful life reflective of the Sunnyside Terminal Station’s useful life as if the asset were never destroyed through imprudence. Due to the allocation of the insurance proceeds this adjustment has a net impact of reducing the 2014 revenue requirement as illustrated below:

**Table # 6: Net Impact of Sunnyside Adjustment on Operating Costs**

('000s)	<u>Amended GRA 2014 TY</u>	<u>Compliance Adjustment</u>	<u>Adjusted 2014 TY</u>
Total Operating Costs	\$ 833.5	\$ -	\$ 833.5
Loss on Disposal	425.0	(425.0)	-
Insurance Proceeds	(1,258.0)	-	(1,258.0)
<b>Net Impact on Operating Costs</b>	<b><u>\$ 0.5</u></b>	<b><u>\$ (425.0)</u></b>	<b><u>\$ (424.5)</u></b>

This treatment results in \$1.258 million in test year insurance proceeds being allocated to operating costs of \$0.833 million. According to Hydro, this approach was taken to set up the new regulatory asset to represent the old asset rather than assuming the loss and associated receipt of insurance proceeds did not occur. This approach reduces the total revenue requirement in the 2014 test year.

However, if it was the Board’s intent to reverse the loss rather than setting up a new regulatory asset the excess insurance proceeds should be reallocated to reduce the cost base of the Sunnyside Terminal Station replacement asset. This reallocation would reflect compliance with guidance set out in Board Order P.U. 13 (2012). P.U. 13 (2012) states *“Hydro shall record net insurance proceeds associated with capital projects of \$50,000 or more as an offset against the cost of capital assets and as a reduction of the rate base value of those assets.”*

**Based upon our review, we have noted that Hydro has excluded operating expenditures associated with the imprudent Sunnyside Terminal Station equipment repairs and replacement from the 2014 and 2015 test year revenue requirement calculation. In addition, Hydro has recorded a regulatory asset based on the 2014 test year loss on disposal associated with the Sunnyside Terminal Equipment project. This is in compliance with P.U. 13 (2016). However, we recommend that the Board clarify the treatment of the excess insurance proceeds within 2014 test year revenue requirement.**

1 Extraordinary Transformer and Breaker Repairs

2 With regards to the operating costs associated with the Extraordinary Transformer and Breaker Repairs  
 3 P.U. 13(2016) states:

4  
 5 *“Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs  
 6 associated with:*

- 7 • *extraordinary transformer and breaker repairs in 2014 and 2015 associated with imprudence.”*

8  
 9 To assess compliance with this directive we obtained a summary of the 2014 and 2015 test year and actual  
 10 operating costs associated with both normal and extraordinary transformer and breaker repairs. The  
 11 information provided by Hydro is presented in the table below:

12  
 13 **Table # 7: Summary of 2014-2015 Transformer and Breaker Maintenance Costs for Select**  
 14 **Operating Expense Accounts**

15 ('000s)

	Normal Transformer and Breaker Maintenance					
	2014 TY	2014 Actual	2015 TY	2015 Actual	Total TY	Total Actual
6035 -> Labour In	\$ 327.8	\$ 283.5	\$ 295.0	\$ 199.6	\$ 622.8	\$ 483.1
6040 -> Overtime (In)	127.1	387.9	114.4	194.7	241.5	582.6
6105 -> Materials	53.5	229.8	48.2	47.7	101.7	277.5
6106 -> Contract Labour	66.9	249.2	60.2	21.9	127.1	271.1
6107 -> Contract Materials	-	-	-	0.2	-	0.2
6130 -> Lubes, Chems & Gases	-	-	-	1.0	-	1.0
6405 -> Equipment Rental	-	-	-	3.4	-	3.4
6505-> Travel	35.2	8.1	31.1	2.2	66.3	10.3
6635-> Employee Expenses	-	0.4	-	0.2	-	0.6
6660-> Sundry	-	0.5	-	-	-	0.5
6820 & 6840 -> Vehical Rental & Fuel	58.9	268.6	53.0	157.7	111.8	426.3
7230-> Holyrood Gas Turbine	-	-	-	3.5	-	3.5
<b>Normal Maintenance</b>	<b>\$ 669.4</b>	<b>\$ 1,428.0</b>	<b>\$ 601.9</b>	<b>\$ 632.1</b>	<b>\$ 1,271.2</b>	<b>\$ 2,060.1</b>

16 *Note - this table does not include depreciation which has been addressed in the Capital Expenditures section of this report.*

17 ('000s)

	Extraordinary Transformer and Breaker Maintenance					
	2014 TY	2014 Actual	2015 TY	2015 Actual	Total TY	Total Actual
6035 -> Labour In	\$ 362.0	\$ 94.3	\$ 825.0	\$ 48.2	\$ 1,187.0	\$ 142.5
6040 -> Overtime (In)	129.0	125.7	133.0	46.9	262.0	172.6
6105 -> Materials	73.0	35.6	106.0	18.5	179.0	54.1
6106 -> Contract Labour	270.0	136.2	-	5.8	270.0	142.0
6107 -> Contract Materials	-	-	-	-	-	-
6130 -> Lubes, Chems & Gases	-	-	-	-	-	-
6405 -> Equipment Rental	-	-	-	0.7	-	0.7
6505-> Travel	50.0	3.2	50.0	0.9	100.0	4.1
6635-> Employee Expenses	-	0.4	-	0.2	-	0.6
6660-> Sundry	-	0.2	-	-	-	0.2
6820 & 6840 -> Vehical Rental & Fuel	116.0	88.0	131.0	38.0	247.0	126.0
7230-> Holyrood Gas Turbine	-	-	-	0.1	-	0.1
<b>Extraordinary Maintenance</b>	<b>\$ 1,000.0</b>	<b>\$ 483.6</b>	<b>\$ 1,245.0</b>	<b>\$ 159.3</b>	<b>\$ 2,245.0</b>	<b>\$ 642.9</b>

18 *Note - this table does not include depreciation which has been addressed in the Capital Expenditures section of this report.*

1 In Board Order P.U. 13 (2016), it states, “The Board will not allow recovery of the incremental costs associated with the  
 2 extraordinary transformer repairs in 2014 and 2015 and breaker repairs in 2014. Since Hydro's decision to move to a  
 3 four-year maintenance cycle for air-blast circuit breakers as of 2015 was prudent, additional costs associated with that decision  
 4 are justified and will be allowed.”

5

6 **Table # 8: Summary of 2014-2015 Extraordinary Transfer and Breaker Maintenance Costs for**  
 7 **Select Operating Expense Accounts**

8

('000s)	Extraordinary Transformer and Breaker Maintenance		
	2014 TY	2015 TY	Total TY
Liberty Results			
Transformer Maintenance (Note 1)	\$ 434.8	\$ -	\$ 434.8
Air-blast Circuit Breaker Maintenance (Note 1)	468.3	-	468.3
			-
Breaker and transformer cost		1,846.8	1,846.8
Less: deferral		(1,245.0)	(1,245.0)
Liberty's assessment of imprudence			-
Transformer in excess of		(411.9)	(411.9)
Breaker in excess of		(398.0)	(398.0)
			-
Reverse test year amortization of deferral (Note 2)		249.0	249.0
Reduction in return on rate base (Note 3)		34.0	34.0
<b>Prudency Adjustment</b>	<b>\$ 903.1</b>	<b>\$ 74.9</b>	<b>\$ 978.0</b>

Note 1 - 2014 test year prudency adjustment is based on Liberty's figures as referenced in P.U. 13 (2016) on page 66.

Note 2 - The reversal of the test year amortization is the \$1,245,000 deferral amortized over 5 years.

Note 3 - The reduction in the return on rate base is calculated as follows (1,245,000 less 249,000) multiplied by 6.82% return on rate base.

9

10

11 During our review, we obtained a copy of Hydro's allocation of terminal and breaker maintenance related  
 12 work orders. We reviewed the allocation between normal and extraordinary maintenance. We compared  
 13 Hydro's allocation based on work order description to the following to validate that the allocation was in  
 14 accordance with the Board's direction:

- 15 • Board of Commissioners of Public Utilities Regarding Work to be Performed on Air Blast Circuit
- 16 Breakers – dated June 2, 2014;
- 17 • Hydro's Air Blast Circuit Breakers annual maintenance plan for 2014 and 2015;
- 18 • The information provided in PR-PUB-NLH-168;
- 19 • Board of Commissioners of Public Utilities Regarding Work to be Performed on Transformers –
- 20 dated June 2, 2014;
- 21 • Hydro's Transformers annual maintenance plan for 2014 and 2015; and
- 22 • The information provided in PR-PUB-NLH-170 (Revision 1, Jun 11-15).

1 Based upon our review of the allocation we have noted the following:

- 2     • In the report entitled “*Board of Commissioners of Public Utilities Regarding Work to be Performed on*  
3 *Transformers*” – dated June 2, 2014 there was an error in the Schedule to Complete Overdue  
4 Transformer PMS included in Appendix C. Per discussion with Hydro’s management we  
5 understand that power transformer OPDTS, T3 should not have been included on this list. As a  
6 result, Hydro’s management revised the maintenance schedule to include HDNTS, T1, XFMR;  
7 and
- 8     • Maintenance on the STBTS, T2 Diverter Switch Leak has been categorized as extraordinary by  
9 Hydro. We noted that this maintenance event was not included in either of the “*Board of*  
10 *Commissioners of Public Utilities Regarding Work to be performed on Transformers*” or the “*Board of*  
11 *Commissioners of Public Utilities Regarding Work to be performed on Air Blast Circuit Breakers*” – dated June  
12 2, 2014. We understand based on discussions with Hydro’s management that this event was not  
13 included in the June 2nd reports as the preventative maintenance was overdue at that time.  
14 However, these items relate to a critical transformer where maintenance was unplanned.

15  
16 Both of the theses items impact the actual extraordinary expense incurred by Hydro but they do not  
17 appear to have an impact on the figures presented in the 2014 and 2015 test year figures presented in the  
18 Amended General Rate Application. As a result, nothing has come to our attention which would suggest  
19 that an adjustment to the Compliance Application is required.

20  
21 **Nothing has come to our attention which would suggest that Hydro has not complied with the**  
22 **directives set out in P.U. 13 (2016). Allocations of costs between normal and extraordinary**  
23 **maintenance is consistent with information previously provided to the Board.**

1 **Fuel Supply Deferral**

2 With regards to the Fuel Supply Deferral associated with the Extraordinary Transformer and Breaker  
 3 Repairs P.U. 13 (2016) states:

4  
 5 *“Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs*  
 6 *associated with:*

- 8 • *additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of*  
 9 *Holyrood Unit 1 associated with imprudence.”*

10  
 11 In the 2013 Amended GRA Hydro deferred fuel supply costs of approximately \$10 million in the 2014 test  
 12 year associated with additional capacity-related supply costs incurred by Hydro in the first quarter of 2014.  
 13 The deferral of these costs has been approved under Board Order P.U. 56 (2014). It has also been  
 14 proposed by Hydro that they defer and amortize these amounts over a five-year period starting in 2015.

15  
 16 Hydro’s Compliance Application includes an adjustment to the original cost of the fuel supply deferral  
 17 account to reflect the following excerpt from P.U. 13 (2016):

18  
 19 *“The Board will not allow recovery of the additional supply costs associated with the failure of breaker B1L17 and the*  
 20 *resulting outage of Unit 1 at Holyrood during January 5-8, 2014. The additional supply costs should be reduced by the*  
 21 *amount calculated using Liberty's methodology, including the adjustment for double-counting and adjusted on a prorated basis*  
 22 *for Unit 1 going back online at 3:30 pm on January 8, 2014.”*

23  
 24 The following table summarizes Hydro’s calculation of the disallowed portion of the fuel supply deferral:

25  
 26 **Table # 9: Disallowed Portion of the Fuel Supply Deferral**

27

('000s)	Fuel Supply Deferral			
	Original	Compliance Adjustment		
		Unit 1 Vibration	Breaker B1L17	Total Adjustment
Original Supply Cost Deferral	\$ 9,650.0	\$ -	\$ -	\$ -
Supply Costs 01/04 2130 hrs to 01/05 2130 hrs		1,207.7		1,207.7
Less: Costs Related to Vibration		(681.8)		(681.8)
Supply Costs 01/05 2130 hrs to 01/08 1545 hrs			1,507.5	1,507.5
Less: Supply Costs 01/09 2130 hrs to 01/12 1545 hrs			(610.7)	(610.7)
<b>Total Supply Cost</b>	<b>\$ 9,650.0</b>	<b>\$ 525.9</b>	<b>\$ 896.8</b>	<b>\$ 1,422.70</b>
Liberty's Estimate of Adjustment				1,699.7
Variance				\$ (277.0)

1 **Table # 10: Revised Fuel Supply Deferral**

2

(’000s)	<u>Fuel Supply Deferral</u>	
Original Supply Cost Deferral	\$	9,650.0
Less: Compliance Adjustment		<u>(1,422.7)</u>
Revised Supply Cost Deferral	\$	<u>8,227.3</u>

3

4

5 We have reviewed Hydro’s calculation and can confirm the following:

- 6
- 7 • Hydro’s calculation of the disallowance associated with Unit 1 Vibration is calculated over the period from January 4-5; and
  - 8 • Hydro’s calculation of the disallowance associated with Unit 1 Breaker B1L17 is calculated by taking the total supply costs for the period from January 5-8 less the supply cost from the period from January 9-12. This approach is consistent with Liberty’s methodology as presented in P.U. 13 (2016).
- 9
- 10
- 11
- 12

13 In P.U. 13 (2016) it notes that *“in the absence of specific data, Liberty estimated the added costs at \$1,699,707 (\$2,204,317 less \$504,610) based on an averaging of the supply costs for the subsequent period January 9-12, and subtracting this from the actual costs for the period January 5-8. The reduction of this amount by \$504,610 accounts for the double-counting of replacement power costs, which Liberty acknowledged.”* In the table above we have compared Hydro’s calculated disallowance to the estimate provided by Liberty. We have noted that the proposed adjustment is approximately \$277,000 less than what Liberty had suggested. However, the Board Order indicates that Liberty did not have specific data to confirm the adjustment amount.

14

15

16

17

18

19

20

21 **Based upon the procedures performed, nothing has come to our attention that would indicate Hydro has not complied with the direction outlined in P.U. 13 (2016) regarding the supply cost deferral. It appears that Hydro has implemented Liberty’s methodology when calculating the disallowance.**

22

23

24

25



1 Phase One Costs

2 With regards to the Phase One professional services fees P.U. 13 (2016) states:

3  
 4 *“Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs associated with:*

- 5  
 6
  - certain expenses related to professional services-consulting fees, salary transfers, and overtime associated with*
- 7 *imprudence and the Board's investigation into the January 2014 outages.”*
- 8

9 To assess compliance with this directive we obtained a summary of the 2014 and 2015 test year operating  
 10 for phase one costs. The information provided by Hydro is presented in the table below:

11 **Table # 11: Summary of the 2014-2015 Phase One Costs**

12  
 13

('000s)	Phase One Costs		
	2014 TY	2015 TY	Total TY
Inter-company Salary Transfers	\$ 386.0	\$ -	\$ 386.0
Incremental Overtime	510.0	-	510.0
Consultants	1,905.0	854.0	2,759.0
<b>Prudency Adjustment</b>	<b>\$ 2,801.0</b>	<b>\$ 854.0</b>	<b>\$3,655.0</b>

14  
 15  
 16 *Inter-company Salary Transfers*

17 During our review we noted that Hydro had included approximately \$386,000 in the 2014 test year related  
 18 to inter-company salary transfers associated with the imprudent projects. This balance has been included  
 19 in the prudency adjustment noted in the Compliance Application.

20  
 21 *Incremental Overtime*

22 Incremental overtime represents Hydro’s calculation of the additional overtime incurred as a result of the  
 23 imprudent projects. Our procedures related to this balance were as follows:

- 24
  - obtained a copy of Hydro’s calculation and re-performed the analysis to ensure mathematical
- 25 accuracy; and
- 26
  - reviewed Hydro’s calculation methodology for consistency with the methodology Liberty
- 27 proposed.
- 28

29 Hydro’s calculation uses a 3-year averaging of the actual overtime amounts from 2011-2013 to determine a  
 30 reasonable overtime expectation. This overtime expectation was compared to overtime expenses included  
 31 in the 2014 test year to determine the incremental overtime. Hydro’s calculation deviates from Liberty’s  
 32 calculation by excluding overtime which was capitalized. Excluding capitalized overtime is consistent with  
 33 the following guidance from P.U. 13 (2016), *“The Board notes that Hydro’s calculation is based on Liberty’s*  
 34 *methodology, with the removal of the 2014 capital overtime and the overtime associated with the capital projects found to be*  
 35 *imprudent to avoid double-counting. This approach seems reasonable.”*

36

1 During our review, it was noted that there was an error in Hydro’s response to PR-PUB-NLH-086  
2 Revision 1 and PR-PUB-NLH-089 Revision 1. The previously filed evidence included the impact for  
3 banked overtime hours but did not flow through the dollar impact of banked overtime. Hydro’s  
4 calculations for the incremental overtime charge in 2014 actuals are based upon the total values presented  
5 in the general ledger in an attempt to capture this revision.  
6

7 **Based on the procedures performed nothing has come to our attention which would suggest the**  
8 **adjustment to the revenue requirement for incremental overtime is incorrect or noncompliant with**  
9 **the relevant Board Orders.**  
10

11 *Consultants*

12 The balance in account 6264 Consultants represents the professional fees from various consultants  
13 engaged by Hydro during 2014. Our procedures related to this balance were as follows:

- 14 • obtained a copy of Hydro’s allocation of the 2014 test year and 2014 actual balance between phase  
15 one and phase two costs;
- 16 • selected a sample of transactions in both 2014 test year and 2014 actuals and vouched to vendor  
17 invoices for evidence of allocation; and
- 18 • when allocation details were not available on the vendor invoice we reviewed a summary schedule  
19 prepared by the vendor suggesting the allocation and reconciled this schedule to Hydro’s  
20 allocation.  
21

22 **Based on the procedures performed nothing has come to our attention which would suggest the**  
23 **allocation of consultant fees to phase one is incorrect or noncompliant with the relevant Board**  
24 **Orders.**

1 Phase Two Costs

2 With regards to the Phase Two professional services fees P.U. 13 (2016) states:

3  
 4 *“Hydro will create a separate account into which will be transferred professional services-consulting fees, salary transfers and*  
 5 *overtime costs for 2014, 2015 and subsequent years relating to Phase Two of the Board's investigation into the January 2014*  
 6 *outages, with the recovery of the costs to be addressed in a subsequent order of the Board following a further application by*  
 7 *Hydro.”*

8  
 9 To assess compliance with this directive we obtained a summary of the 2014 and 2015 test year operating  
 10 costs for phase two costs. The information provided by Hydro is presented in the table below:

11 **Table # 12: Summary of the 2014-2015 Phase Two Costs**

12  
 13

('000s)	Phase Two Costs		
	2014 TY	2015 TY	Total TY
Consultants	\$ 126.0	\$ 146.0	\$ 272.0
<b>Prudency Adjustment</b>	<b>\$ 126.0</b>	<b>\$ 146.0</b>	<b>\$ 272.0</b>

14  
 15 **Consultants**

16 The balance in account 6264 Consultants represents the professional fees from various consultants  
 17 engaged by Hydro during 2015. Our procedures related to this balance were as follows:

- 18 • obtained a copy of Hydro’s allocation the 2015 test year and 2015 actual balance between phase  
 19 one and phase two costs;
- 20 • selected a sample of transactions in both 2015 test year and 2015 actuals and vouched to vendor  
 21 invoices for evidence of allocation; and
- 22 • when allocation details were not available on the vendor invoice we reviewed a summary schedule  
 23 prepared by the vendor suggesting the allocation and reconciled this schedule to Hydro’s  
 24 allocation.

25  
 26 Hydro has created a separate account to defer the phase two professional services-consulting fees until a  
 27 future order of the Board has been issued to dictate the appropriate treatment.

28  
 29 **Based on the procedures performed nothing has come to our attention which would suggest the**  
 30 **allocation of consultant fees to phase two is incorrect or incompliant with the relevant Board**  
 31 **Orders.**

1 Holyrood Black Start Capability

2 With regards to the Holyrood Black Start Capability P.U. 13(2016) states:

3

4 *“Hydro will not recover in the 2014 revenue requirement \$500,000 associated with its imprudence in managing black start*  
5 *capability at Holyrood.”*

6

7 **We have noted that Hydro has reduced the 2014 test year revenue requirement by \$500,000 in the**  
8 **Compliance Application. This disallowance is in accordance with P.U. 13 (2016). No further**  
9 **procedures were required.**

# 1 Operating Expenses

2 During the course of our review, we also performed a five year trend analysis for the following accounts:

3

6014	Intercompany Salary	6015	Temporary Salaries
6020	Overtime	6040	Overtime (In)
6041	Overtime (Out)	6105	Materials
6106	Contract Labor	6264	Consultants

4 The purpose of the five-year trend analysis was to enquire of Management on significant variances to  
5 determine if any responses were related to additional expenses on the imprudent projects. None of the  
6 responses provided related to the identification of additional expenses on imprudent projects. We did not  
7 independently verify the responses provided beyond the specific invoice testing discussed below.

8

## 9 Operating Expenditure Testing

10 To assess the accuracy and completeness of the Company's disclosures in the Compliance application we  
11 reviewed a sample of supplier invoices and internal allocations from the above noted operating expenditures  
12 accounts. To determine if an item was related to an imprudent project we obtained a listing of work orders  
13 by prudency project. During testing we were able to review supplier documentation and Hydro's coding and  
14 internal approval documentation to determine if the selected expenditure was prudency related. In total, we  
15 completed 145 random tests of invoices for 2014 actuals and 130 random tests for 2015 actuals. No  
16 exceptions were noted.

17

18 In addition to the above we also performed the following testing:

- 19
- 20 • Review of 100% of the items included in consultant fees allocated to phase one and phase two by  
21 Hydro. No exceptions were noted.
  - 22 • Review of all work orders deemed to be extraordinary work on transformers and breakers for  
23 consistency with the information filed with the Board in the "Board of Commissioners of Public Utilities  
24 Regarding Work to be performed on Transformers" or the "Board of Commissioners of Public Utilities Regarding  
25 Work to be performed on Air Blast Circuit Breakers" – dated June 2, 2014. During our review we noted  
26 the following inconsistencies with information previously provided to the Board. These items did  
27 not have an impact on test year 2014 or test year 2015 revenue requirement or average rate base  
28 disclosed in the Compliance Application.
    - 29 ○ In the report entitled "Board of Commissioners of Public Utilities Regarding Work to be Performed on  
30 Transformers" – dated June 2, 2014 there was an error in the Schedule to Complete Overdue  
31 Transformer PMS included in Appendix C. Per discussion with Hydro's management we  
32 understand that power transformer OPDTS, T3 should not have been included on this list.  
33 As a result, Hydro's management revised the maintenance schedule to include HDNTS, T1,  
34 XFMR; and

- 1                   ○ Maintenance on the STBTS, T2 Diverter Switch Leak has been categorized as extraordinary  
2                   by Hydro. We noted that this maintenance event was not included in either of the “*Board of*  
3                   *Commissioners of Public Utilities Regarding Work to be performed on Transformers*” or the “*Board of*  
4                   *Commissioners of Public Utilities Regarding Work to be performed on Air Blast Circuit Breakers*” –  
5                   dated June 2, 2014. We understand based on discussions with Hydro’s management that this  
6                   event was not included in the June 2nd reports as the preventative maintenance was overdue  
7                   at that time. However, these items relate to a critical transformer where maintenance was  
8                   unplanned.  
9

# 1 Average Rate Base and Return on Rate Base

2 The Company's re-calculation of its forecast average rate base and rate of return on rate base for the 2014  
3 and 2015 test years is included in Schedule 2 Page 2 of its Compliance Application. Our procedures with  
4 respect to the re-calculation of the average rate base were directed towards the assessment of the impact on  
5 average rate base and return on average rate base of the prudence review adjustments presented by the  
6 company in its Compliance Application. Specifically, the procedures which we performed included the  
7 following:

- 8
- 9 • agreed all carry-forward data to supporting documentation including the 2013 audited financial statements  
10 and internal accounting records, where applicable;
- 11 • agreed Compliance Application data (capital expenditures, depreciation, etc.) to supporting documentation  
12 to ensure it is internally consistent with the pre-filed evidence (see Capital Expenditures for specific  
13 procedures performed);
- 14 • checked the clerical accuracy of the continuity of the rate base as forecast in the Compliance Application  
15 for 2014 test year and 2015 test year;
- 16 • recalculated the Compliance Application average rate base and return on average rate base for 2014 and  
17 2015; and
- 18 • reviewed the methodology used in the calculation of the average rate base with reference to the Public  
19 Utilities Act, the Hydro Corporation Act and Board Orders.

1 Details of the 2014 test year and 2015 test year average rate base as filed in the amended GRA, prudence  
 2 review adjustments in accordance with P.U. 13 (2016), and the 2014 test year and 2015 test year average rate  
 3 base filed in Hydro's Compliance Application are presented in the following table:  
 4

5 **Table #13: Average Rate Base, Return on Rate Base and Rate of Return on Average Rate Base (Test**  
 6 **Year 2014, Test Year 2015, Compliance Application Test Year 2014 and Compliance Application Test**  
 7 **Year 2015)**

(000's)	Prudence			Prudence		
	Test Year 2014	Review Adjustments 2014	Compliance Application 2014	Test Year 2015 (Note 1)	Review Adjustments 2015	Compliance Application 2015
Plant investment	\$ 1,840,320	\$ (5,372) (1)	\$ 1,834,948	\$ 1,870,275	\$ (6,599) (1)	\$ 1,863,676
Less: Accumulated depreciation	(193,532)	13 (1)	(193,519)	(203,834)	167 (1)	(203,667)
CIAC's	(16,550)	-	(16,550)	(17,936)	-	(17,936)
ARO's	(14,442)	-	(14,442)	(12,169)	-	(12,169)
Net capital assets	1,615,796	(5,359) (1)	1,610,437	1,636,336	(6,432) (1)	1,629,904
Balance previous year	1,432,533	-	1,432,533	1,615,796	(5,359)	1,610,437
Average	1,524,165	(2,680) (1)	1,521,485	1,626,066	(5,896) (1)	1,620,171
Less: average net assets not in use	(2,941)	(5,273) (2)	(8,214)	(2,605)	(4,713) (2)	(7,318)
	1,521,224	(7,953)	1,513,271	1,623,461	(10,609)	1,612,853
Cash working capital allowance	9,207	-	9,207	7,037	-	7,037
Fuel inventory	65,110	-	65,110	66,633	-	66,633
Supplies inventory	25,823	-	25,823	27,402	-	27,402
Deferred charges	71,203	1,723 (3)	72,926	77,491	3,289 (3)	80,780
Less: deferred charges not in use	-	(1,955) (3)	(1,955)	-	(4,467) (3)	(4,467)
Average rate base	\$ 1,692,567	\$ (8,185)	\$ 1,684,382	\$ 1,802,024	\$ (11,787)	\$ 1,790,238

**Return on rate base:**

Unadjusted return on regulated equity	\$ 30,504	\$ (1,370) (4)	\$ 29,134	\$ 33,232	\$ (1,658) (4)	\$ 31,574
Cost of service exclusions	336	788 (4)	1,124	323	854 (4)	1,177
Net interest	89,723	- (4)	89,723	89,255	- (4)	89,255
Return on rate base	\$ 120,563	\$ (582) (4)	\$ 119,981	\$ 122,810	\$ (804) (4)	\$ 122,006

**Rate of return on average rate base**                      7.12%      7.12%                      7.12%                      6.82%      6.82%                      6.82%

Note 1: The 2015 test year Plant investment, Accumulated depreciation and CIACs filed in Finance Schedule V page 5 of 11 of the amended GRA and Schedule 2 Page 2 of 2 of the Compliance Application were misstated compared to prior year presentation. Hydro provided revised costs reflecting prior year's presentation as illustrated on Page 27 of our Financial Consultants Report dated June 12, 2015. The reclassification has no impact on Average Rate Base. The following table illustrates the revised costs:

	Amended GRA	Revised	Difference
Plant investment	\$ 1,870,275	\$ 1,921,632	\$ (51,357)
Less: Accumulated depreciation	(203,834)	(254,266)	50,432
CIAC's	(17,936)	(18,861)	925
Total	\$ 1,648,505	\$ 1,648,505	\$ -

8

9 As detailed above, the 2014 and 2015 test year average rate base in the Compliance Application has decreased  
 10 by \$8,185,000 in 2014 and \$11,787,000 in 2015, compared to the average rate base originally filed in the  
 11 amended GRA.



1 (1) The decrease in average rate base in 2014 test year and 2015 test year consists of prudence review  
 2 adjustments to remove net capital assets associated with imprudent plant investments and related  
 3 accumulated depreciation for the Western Avalon T5 Tap Changer and the Sunnyside Terminal  
 4 Station. The rate base impact of prudence review adjustments disclosed in the Company's  
 5 Compliance Application are presented in the following table:  
 6

7 **Table #14: Rate Base Impact of Prudency Review Adjustments of Net Capital Assets (Test**  
 8 **Year 2014 and Test Year 2015)**

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Test Year 2014	Average Test Year 2015
<b>Plant investment</b>					
Western Avalon T5 Tap Changer	\$ -	\$ (1,453)	\$ (1,453)	\$ (727)	\$ (1,453)
Sunnyside Terminal Station	-	(3,919)	(5,146)	(1,960)	(4,533)
	<u>\$ -</u>	<u>\$ (5,372)</u>	<u>\$ (6,599)</u>	<u>\$ (2,687)</u>	<u>\$ (5,986)</u>
<b>Accumulated depreciation</b>					
Western Avalon T5 Tap Changer	\$ -	\$ 4	\$ 44	\$ 2	\$ 24
Sunnyside Terminal Station	-	9	123	5	66
	<u>\$ -</u>	<u>\$ 13</u>	<u>\$ 167</u>	<u>\$ 7</u>	<u>\$ 90</u>
<b>Rate base impact of Prudence Review Adjustments</b>	<u>\$ -</u>	<u>\$ (5,359)</u>	<u>\$ (6,432)</u>	<u>\$ (2,680)</u>	<u>\$ (5,896)</u>

9  
 10  
 11 The removal of net plant investment related to Western Avalon T5 Tap Changer and the Sunnyside  
 12 Terminal Station has decreased average rate base by \$2,680,000 in 2014 test year and \$5,896,000 in  
 13 2015 test year. These adjustments are discussed in further detail in the Capital Expenditure section  
 14 of the report.

15  
 16 (2) The decrease in average rate base in 2014 test year and 2015 test year consists of an increase in  
 17 average net assets not in use (a deduction from average rate base) for prudence review adjustments to  
 18 remove imprudent capital expenditures and related accumulated depreciation associated with the  
 19 Sunnyside B1L03 breaker overhaul, the Holyrood B1L17 breaker overhaul, and the Holyrood Unit 1  
 20 turbine failure. The rate base impact of prudence review adjustments disclosed in the Company's  
 21 Compliance Application are presented in the following table:  
 22

23 **Table #15: Rate Base Impact of Prudency Review Adjustments of Assets Not in Use (Test**  
 24 **Year 2014 and Test Year 2015)**

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Test Year 2014	Average Test Year 2015
<b>Assets not in use</b>					
Sunnyside B1L03 Breaker	\$ -	\$ (161)	\$ (161)	\$ (81)	\$ (161)
Holyrood B1L17 Breaker	-	(361)	(361)	(181)	(361)
Holyrood Unit 1 Turbine Failure	(5,601)	(5,601)	(5,601)	(5,601)	(5,601)
	<u>(5,601)</u>	<u>(6,123)</u>	<u>(6,123)</u>	<u>(5,863)</u>	<u>(6,123)</u>
<b>Accumulated depreciation</b>					
Sunnyside B1L03 Breaker	-	2	24	1	13
Holyrood B1L17 Breaker	-	4	55	2	29
Holyrood Unit 1 Turbine Failure	196	977	1,759	587	1,368
	<u>196</u>	<u>983</u>	<u>1,838</u>	<u>590</u>	<u>1,410</u>
<b>Rate base impact of Prudence Review Adjustments</b>	<u>\$ (5,405)</u>	<u>\$ (5,140)</u>	<u>\$ (4,285)</u>	<u>\$ (5,273)</u>	<u>\$ (4,713)</u>

The increase in average net assets not in use to remove imprudent expenditures related to the Sunnyside B1L03 breaker overhaul, the Holyrood B1L17 breaker overhaul, and the Holyrood Unit 1 turbine failure, has decreased average rate base by \$5,273,000 in 2014 test year and \$4,173,000 in 2015 test year. These adjustments are discussed in further detail in the Capital Expenditure and Deferred Charges section of the report.

(3) The decrease in average rate base in 2014 test year and 2015 test year consists of increases in the deferred charges account for prudence review adjustments to reflect deferrals for prudent capital expenditures related to the Sunnyside Terminal Station, transfers of imprudent expenditures from average net capital assets for the Sunnyside Terminal Station, and Phase Two expenditures which will be addressed in future orders by the Board. These increases are offset by prudence review adjustments to remove imprudent capital expenditures transferred from net capital assets for the Sunnyside Terminal Station, imprudent fuel supply deferred charges and imprudent deferred charges associated with extraordinary transformer and breaker repairs. The rate base impacts of prudence review adjustments disclosed in the Company's Compliance Application are presented in the following table:

**Table #16: Rate Base Impact of Prudence Review Adjustments of Deferred Charges (Test Year 2014 and Test Year 2015)**

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Test Year 2014	Average Test Year 2015
<b>Deferred charges</b>					
Sunnyside Terminal Station - Transfer of plant investment (Note 1) \$	-	\$ 3,919	\$ 5,146	\$ 1,960	\$ 4,533
Sunnyside Terminal Station	425	425	425	425	425
Sunnyside Terminal Station (Note 2)	-	-	8	-	4
Phase 2 Deferred Charges	-	126	272	63	199
Extraordinary Maintenance Transformers and Breakers	-	-	(1,245)	-	(623)
Fuel Supply Deferred Charges	-	(1,422)	(1,422)	(711)	(1,422)
	<u>425</u>	<u>3,048</u>	<u>3,184</u>	<u>1,737</u>	<u>3,116</u>
<b>Deferred charges accumulated amortization</b>					
Sunnyside Terminal Station - Transfer of plant investment (Note 1)	-	(9)	(123)	(5)	(66)
Sunnyside Terminal Station	-	(18)	(38)	(9)	(28)
Phase 2 Deferred Charges	-	-	-	-	-
Extraordinary Maintenance Transformers and Breakers	-	-	249	-	125
Fuel Supply Deferred Charges	-	-	284	-	142
	<u>-</u>	<u>(27)</u>	<u>372</u>	<u>(14)</u>	<u>173</u>
<b>Deferred charges net of accumulated amortization</b>	<b>425</b>	<b>3,021</b>	<b>3,556</b>	<b>1,723</b>	<b>3,289</b>
<b>Deferred charges not in use</b>					
Sunnyside Terminal Station - Transfer of net capital assets (Note 1)	-	(3,910)	(5,023)	(1,955)	(4,467)
<b>Rate base impact of Prudence Review Adjustments</b>	<b>\$ 425</b>	<b>\$ (889)</b>	<b>\$ (1,467)</b>	<b>\$ (232)</b>	<b>\$ (1,178)</b>

Note 1: The deferred charges presented in Hydro's application reflect transfer and subsequent removal of Sunnyside Terminal Station, originally removed in net capital assets, and have a nil impact on average rate base.

Note 2: Hydro has presented the average impact on rate base in Schedule 3 of the Compliance Application as \$(401,000), versus the actual average impact on rate base of \$(397,000). The difference has no impact on return on rate base or revenue requirement presented in the Compliance Application.

The increase in average net assets not in use to remove imprudent expenditures related to deferred charges, has decreased average rate base by \$232,000 in 2014 test year and \$1,178,000 in 2015 test year. These adjustments are discussed in further detail in the Capital Expenditure section of the report.

- (4) Return on average rate base has decreased by \$582,000 in 2014 test year and \$804,000 in 2015 test year. The decrease is related to prudency review adjustments for imprudent operating expenses and amortization of assets which have decreased unadjusted return on regulated equity by \$1,370,000 in 2014 test year and \$1,658,000 in 2015 test year. The reductions in unadjusted regulated return on equity have been offset by an increase in cost of service exclusions of \$788,000 in 2014 test year and \$854,000 in 2015. The return on average rate base impacts of prudency review adjustments disclosed in the Company's Compliance Application are presented in the following table:

**Table #17: Return on Average Rate Base Impact of Prudency Review Adjustments (Test Year 2014 and Test Year 2015)**

	Test Year 2014	Prudence Review Adjustments 2014	Compliance Application 2014	Test Year 2015	Prudence Review Adjustments 2015	Compliance Application 2015
(000's)						
Revenue	\$ 562,855	\$ (6,119)	\$ 556,736	\$ 662,475	\$ (3,119)	\$ 659,356
Expenses before amortization	477,137	(4,755)	472,382	565,451	(1,326)	564,125
Amortization	55,214	6	55,220	63,792	(135)	63,657
Unadjusted return on regulated equity	30,504	(1,370)	29,134	33,232	(1,658)	31,574
Cost of service exclusions	336	788	1,124	323	854	1,177
Interest	89,723	-	89,723	89,255	-	89,255
Return on rate base	\$ 120,563	\$ (582)	\$ 119,981	\$ 122,810	\$ (804)	\$ 122,006
Average rate base	\$ 1,692,567	\$ (8,185)	\$ 1,684,382	\$ 1,802,024	\$ (11,787)	\$ 1,790,238
Rate of return on average rate base	7.12%	7.12%	7.12%	6.82%	6.82%	6.82%

The net reduction in return on rate base of \$582,000 for 2014 test year is comprised of prudency review adjustment of the net book value of imprudent assets totaling \$8,185,000 at a return on average rate base of 7.12% filed in Hydro's amended 2013 GRA. The net reduction in return on rate base of \$804,000 for 2015 test year is comprised of prudency review adjustments of the net book value of imprudent assets totaling \$11,787,000 at a return on average rate base of 6.82% filed in Hydro's amended 2013 GRA.

1 The return on average rate base impacts, by project, for prudence review adjustments in the  
 2 Compliance Application are presented in the following table:

3  
 4 **Table #18: Return on Average Rate Base Impact of Prudence Review Adjustments by Project**  
 5 **(Test Year 2014 and Test Year 2015)**

(000's)	NBV	NBV	NBV	Average	Return on	Average	Return on
	Actual	Test Year	Test Year	NBV	Average	NBV	Average
	2013	2014	2015	Test Year	Rate Base	Test Year	Rate Base
				2014	2014	2015	2015
Western Avalon T5 Tap Changer	\$ -	\$ (1,449)	\$ (1,409)	\$ (725)	\$ (51)	\$ (1,429)	\$ (97)
Sunnyside Terminal Station (Imprudent Costs)	-	(3,910)	(5,023)	(1,955)	(139)	(4,467)	(305)
Sunnyside B1L03 Breaker	-	(159)	(137)	(80)	(6)	(148)	(10)
Holyrood B1L17 Breaker	-	(357)	(306)	(179)	(13)	(332)	(23)
Holyrood Unit 1 Turbine Failure	(5,405)	(4,624)	(3,842)	(5,014)	(356)	(4,233)	(289)
Sunnyside Terminal Station (Prudent Costs)	425	407	387	416	30	397	27
Phase 2 Deferred Charges	-	126	272	63	4	199	14
Extraordinary Maintenance Transformers/Breakers	-	-	(996)	-	-	(498)	(34)
Fuel Supply Deferred Charges	-	(1,422)	(1,138)	(711)	(51)	(1,280)	(87)
<b>Total Prudence Review Adjustments</b>	<b>\$ (4,980)</b>	<b>\$ (11,388)</b>	<b>\$ (12,192)</b>	<b>\$ (8,185)</b>	<b>\$ (582)</b>	<b>\$ (11,791)</b>	<b>\$ (804)</b>

6  
 7

# 1 Capital Expenditures and Deferred Charges

2 The Company’s prudence review adjustments related to capital expenditures, deferred charges and related  
3 depreciation and amortization are presented in the following schedules (“the Capital Expenditure Schedules”)  
4 of the Compliance Application:

- 5
- 6 • Schedule 2 (Page 1 of 2 and Page 2 of 2);
- 7 • Schedule 3 (Page 1 of 1);
- 8 • Schedule 4 (Page 1 of 1);
- 9 • Schedule 5 (Page 1 of 2 and Page 2 of 2);
- 10 • Schedule 6 (Page 1 of 1);
- 11 • Schedule 7 (Page 1 of 1)
- 12 • Schedule 8 (Page 1 of 1);
- 13 • Schedule 10 (Page 1 of 1), and
- 14 • Schedule 11 (Page of 1 of 1)
- 15

16 Our procedures with respect to the assessment of the reasonableness of the prudence review adjustments  
17 were as follows:

- 18
- 19 • Reconcile capital expenditures on disallowed costs to the Liberty Report;
- 20
- 21 • Reconcile capital expenditures on imprudent projects to annual Capital Budget reports;
- 22
- 23 • Review supporting documentation for imprudent projects - vouch and test when determined  
24 necessary (procedures further detailed in the discussion of the individual projects in our report);  
25
- 26 • Test for certain suppliers (procedures further detailed in the discussion of the individual projects in  
27 our report);
- 28
- 29 • Ensure that the above noted imprudent capital expenditures are excluded from rate base, and
- 30
- 31 • Review Hydro's calculation of depreciation expense on imprudent projects and ensure the disallowed  
32 expense has been removed from revenue requirement.  
33

34 Findings of these procedures are discussed within the following projects and summarized at the end of this  
35 section under Results of Capital Expenditures Procedures.  
36

1 The following table summarizes the adjustments by project for prudency review adjustments presented by the  
 2 Company in the Capital Expenditure Schedules of the Compliance Application.

3  
 4 **Table #19: Summary of Prudency Review Adjustment for Capital Expenditures and Deferred**  
 5 **Charges**  
 6

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Rate Base Test Year 2014	Average Rate Base Test Year 2015
<b>Sunnyside B1L03 Breaker</b>					
Cost	\$ -	\$ (161)	\$ (161)	\$ (81)	\$ (161)
Accumulated depreciation	-	2	24	1	13
Net book value	<u>\$ -</u>	<u>\$ (159)</u>	<u>\$ (137)</u>	<u>\$ (80)</u>	<u>\$ (148)</u>
<b>Holyrood B1L17 Breaker</b>					
Cost	\$ -	(361)	(361)	\$ (181)	\$ (361)
Accumulated depreciation	-	4	55	2	29
Net book value	<u>\$ -</u>	<u>\$ (357)</u>	<u>\$ (306)</u>	<u>\$ (179)</u>	<u>\$ (332)</u>
<b>Sunnyside Terminal Station (Imprudent Costs)</b>					
Cost	\$ -	\$ (3,919)	\$ (5,146)	\$ (1,960)	\$ (4,533)
Accumulated depreciation	-	9	123	5	66
Net book value	<u>\$ -</u>	<u>\$ (3,910)</u>	<u>\$ (5,023)</u>	<u>\$ (1,955)</u>	<u>\$ (4,467)</u>
<b>Sunnyside Terminal Station (Recovery)</b>					
Cost	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425
Accumulated amortization (Note 1)	-	(18)	(38)	(9)	(28)
Net book value	<u>\$ 425</u>	<u>\$ 407</u>	<u>\$ 387</u>	<u>\$ 416</u>	<u>\$ 401</u>
<b>Western Avalon T5 Tap Changer</b>					
Cost	\$ -	\$ (1,453)	\$ (1,453)	\$ (727)	\$ (1,453)
Accumulated depreciation	-	4	44	2	24
Net book value	<u>\$ -</u>	<u>\$ (1,449)</u>	<u>\$ (1,409)</u>	<u>\$ (725)</u>	<u>\$ (1,429)</u>
<b>Deferred Charges - Extraordinary Breaker Repairs</b>					
Cost	\$ -	\$ -	\$ (1,245)	\$ -	\$ (623)
Accumulated amortization	-	-	249	-	125
Net book value	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (996)</u>	<u>\$ -</u>	<u>\$ (498)</u>
<b>Fuel Supply Deferred Charges (Note 2)</b>					
Cost	\$ -	\$ (1,422)	\$ (1,422)	\$ (711)	\$ (1,422)
Accumulated amortization	-	-	284	-	142
Net book value	<u>\$ -</u>	<u>\$ (1,422)</u>	<u>\$ (1,138)</u>	<u>\$ (711)</u>	<u>\$ (1,280)</u>
<b>Phase 2 Deferred Charges (Note 2)</b>					
Cost	\$ -	\$ 126	\$ 272	\$ 63	\$ 199
Accumulated amortization	-	-	-	-	-
Net book value	<u>\$ -</u>	<u>\$ 126</u>	<u>\$ 272</u>	<u>\$ 63</u>	<u>\$ 199</u>
<b>Holyrood Unit 1 Turbine Failure</b>					
Cost	\$ (5,601)	(5,601)	(5,601)	\$ (5,601)	\$ (5,601)
Accumulated depreciation	196	977	1,759	587	1,368
Net book value	<u>\$ (5,405)</u>	<u>\$ (4,624)</u>	<u>\$ (3,842)</u>	<u>\$ (5,014)</u>	<u>\$ (4,233)</u>
<b>Total Net Book Value of Prudency Review Adjustments</b>	<u>\$ (4,980)</u>	<u>\$ (11,388)</u>	<u>\$ (12,192)</u>	<u>\$ (8,185)</u>	<u>\$ (11,787)</u>

Note 1: Hydro has presented the average impact on rate base in Schedule 3 of the Compliance Application for 2015 test year as \$401,000, versus the actual average impact on rate base of \$397,000 presented in Schedule 5. The difference has no impact on return on rate base or revenue requirement presented in the Compliance Application.

7 Note 2: See Operating Expenses for discussion of these projects.

1 Holyrood B1L17 Breaker and Sunnyside B1L03 Breaker

2 Holyrood breaker B1L17, (“B1L17”) and Sunnyside breaker B1L03 (“B1L03”) malfunctioned on January 5,  
 3 2014 and were subsequently overhauled in January 2014. In April 2014, pursuant to P.U. 23 (2014), the  
 4 Board approved expenditures related to the B1L17 and B1L03 overhauls as incremental additions to the  
 5 previously approved budget in the Company’s Allowance for Unforeseen account which would be addressed  
 6 in a subsequent order by the Board. In February 2015, the Board ordered a prudence review of the  
 7 expenditures in relation to P.U. 23 (2014) and retained Liberty Consulting Group (“Liberty”) to complete the  
 8 review. Liberty completed its prudence review and submitted its findings in the Liberty Report.

9  
 10 Liberty’s Report concluded that Hydro’s work procedure used in an insulator coating project for B1L17 was  
 11 imprudent and resulted in the malfunction of the breaker. Liberty also concluded that Hydro imprudently  
 12 executed maintenance practices for B1L03 by deferring preventative maintenance. Liberty reported that  
 13 while Hydro’s post failure overhaul responses of B1L17 and B1L03 was sound, the costs required for  
 14 overhaul were the result of impudent decisions and actions by the Company.

15  
 16 In P.U. 13 (2016) the Board determined that Hydro’s decisions and actions with respect to maintenance of  
 17 breaker B1L17 were imprudent and that the imprudence caused the failure. The Board ordered that Hydro  
 18 will not recover capital costs associated with the B1L17 breaker associated with imprudence in the test years  
 19 2014 and 2015 revenue requirement. In P.U. 13 (2016), the Board determined that deferred preventative  
 20 maintenance caused the failure of B1L03 and ordered that Hydro will not recover the capital expenses for the  
 21 overhaul associated with imprudence in the test year 2014 and 2015 revenue requirement.

22  
 23 In response to P.U. 13 (2016) the Company filed its Compliance Application, reporting capital expenditures  
 24 of \$361,300 (rounded) for 2014 test year related to the overhaul of B1L17 and capital expenditures of  
 25 \$160,900 (rounded) for 2014 test year for the overhaul of B1L03 which it has removed as prudence review  
 26 adjustments.

27  
 28 As part of our assessment we reconciled the prudence review adjustments disclosed in Hydro’s Compliance  
 29 Application to the Liberty Report. Pages 37 and 44 of the Liberty Report summarize recommendations for  
 30 capital expenditure disallowances and related depreciation. The costs related to B1L17 and B1L03 were  
 31 specifically referenced in Liberty’s report in response to PR-PUB-NLH-037. The following tables compare  
 32 the disallowed capital expenditures disclosed in the Liberty Report to the imprudent capital expenditures  
 33 removed in the Compliance Application for test year 2014 and actual 2014:

34  
 35 **Table #20: Comparison of Disallowed Costs in the Compliance Application and Liberty Report for**  
 36 **Holyrood B1L17 Breaker and Sunnyside B1L03 Breaker (Test Year 2014)**

	<u>Compliance</u> <u>Application</u>	<u>Liberty</u> <u>Report</u>	<u>Variance</u>
Holyrood B1L17 Breaker	\$ 361,344	\$ 361,344	\$ -
Sunnyside B1L03 Breaker	160,899	160,899	-
Total	<u>\$ 522,243</u>	<u>\$ 522,243</u>	<u>\$ -</u>

37

38

1 **Table #21: Comparison of Disallowed Costs in the Compliance Application and Liberty Report for**  
 2 **Holyrood B1L17 Breaker and Sunnyside B1L03 Breaker (Actual 2014)**

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
Holyrood B1L17 Breaker	\$ 361,344	\$ 361,344	\$ -
Sunnyside B1L03 Breaker	160,899	160,899	-
Total	<u>\$ 522,243</u>	<u>\$ 522,243</u>	<u>\$ -</u>

3  
 4 As illustrated in the tables, the reconciliation of the capital expenditures in Compliance Application to the  
 5 Liberty Report did not result in any variances for B1L17 or B1L03 for test year 2014 or actual 2014.

6  
 7 The Liberty Report also referenced actual 2014 depreciation and disposal expenses as presented in the  
 8 following table.

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
Holyrood B1L17 Breaker - Depreciation	\$ 2,618		
Sunnyside B1L03 Breaker - Cost of Disposal	160,899		
Total	<u>\$ 163,517</u>	<u>\$ 164,000</u>	<u>\$ (483)</u>

9 Note: The table presents a comparison to the Liberty Report for actual 2014. The report did not reference test year 2014 related amounts.

10  
 11 As illustrated in the table, actual 2014 disposal and depreciation costs for B1L17 or B1L03 agree to the  
 12 amounts disclosed in the Liberty Report.

13  
 14 The capital expenditures disclosed in the Compliance Application have also been reconciled to the Capital  
 15 Expenditure and Carryover Reports (the “Capital Budget Report”) filed with the Board for 2014. The B1L17  
 16 breaker is disclosed in the 2014 Capital Budget report as a project within Allowance for Unforeseen  
 17 Expenditures along with other capital expenditures outside the scope of the Liberty prudence review. The  
 18 following table presents the actual 2014 capital expenditures for the B1L17 and B1L03 breakers within the  
 19 Allowance for Unforeseen expenditures in the Capital Budget Report:



1 **Table #22: Reconciliation of Holyrood B1L17 Breaker and Sunnyside B1L03 Breaker to Capital**  
 2 **Budget Report (Actual 2014)**

		[A]	[B]	[C = A-B]
	Compliance Application	Actual 2014	Budget 2014	Variance (Note 1)
Holyrood B1L17 Breaker	\$ 361,344	\$ 361,344		
Sunnyside B1L03 Breaker	160,899	160,899		
Forced Draft Fan Upgrade - Holyrood	-	76,407		
Replace Excitation Transformer, Unit # 6 - Bay d'Espoir	-	71,060		
<b>Allowance For Unforeseen</b>	<b>\$ 522,243</b>	<b>\$ 669,710</b>	<b>\$ 1,580,000</b>	<b>\$ (910,290)</b>

3 Note 1: On Page 32 of the 2014 Capital Expenditure and Carryover Report, the Company reported a variance of \$904,000 (rounded). This  
 4 represents a clerical error of \$6,000 (comparing the budget figure disclosed by the Company of \$1,580,000 to the actual expenditures  
 5 disclosed of \$669,700).

6 The prudence review adjustments disclosed by the Company in the Compliance Application agree to 2014  
 7 amounts filed in the Capital Budget Report. The Company initially requested and received budget approval  
 8 of \$1,000,000 in the Allowance for Unforeseen account in P.U. 42 (2013). On April 11, 2014 the Company  
 9 requested a supplemental increase in the account of \$680,000 in order to cover Unforeseen Items in 2014 as a  
 10 result of expenditures for: 1) the refurbishment of the Unit 3 east forced draft fan motor at the Holyrood  
 11 Thermal Generating Station; 2) the B1L03 230 kV breaker overhaul at the Sunnyside Terminal Station; 3) the  
 12 B1L17 230 kV breaker overhaul at the Holyrood Terminal Station; and, 4) the replacement of the transformer  
 13 at Bay d'Espoir Unit 6. It was further noted in the request that the supplemental increase was to permit the  
 14 Company to maintain an Allowance for Unforeseen Items of \$1,000,000 to address unforeseen events during  
 15 the remainder of 2014. In P.U. 23 (2014) the Board approved a \$580,000 increase in the Allowance for  
 16 unforeseen account to be addressed in a further order of the Board.

17 The majority of the variance of actual 2014 costs compared to budget relates to the original Allowance for  
 18 Unforeseen account of \$1,000,000, which remained unused outside of supplemental amounts incurred in  
 19 relation to P.U. 23 (2014).

20  
 21 The Company's disclosure of the prudence review adjustments related to the B1L17 and B1L03 breakers is  
 22 presented on Schedule 4 Page 1 of 1 of the Compliance Application. As part of our assessment of the  
 23 prudence review adjustments, we reviewed the Company's supporting documentation for the capital  
 24 expenditures related to B1L17 and B1L03 (as well as other net capital assets subject to prudency review).  
 25 Supporting documentation received from the Company for net capital assets consisted of the following items  
 26 ("the Supporting Documents"):

- 27 1) Capital asset continuity schedules (2013, 2014 and 2015 actuals; 2014 and 2015 test years);
- 28 2) Capital expenditure detailed transaction files by project (2013, 2014 and 2015 actuals);
- 29 3) Capital expenditure files detailing actual period and forecast period expenditures by project (2014 and  
 30 2015 test years);
- 31 4) Detailed depreciation schedules by project (2013, 2014 and 2015 actuals; 2014 and 2015 test years);  
 32 and
- 33 5) Detailed schedule of dispositions by project (2014 and 2015 actuals; 2014 and 2015 test years).

1 The following tables summarize the capital expenditures reviewed for B1L17 and B1L03:  
 2

3 **Table #23: Capital Expenditure Prudence Review Adjustments for Holyrood B1L17 Breaker (Test**  
 4 **Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
Opening Cost	\$ -	\$ 361,344	\$ -	\$ 361,344
Capital Expenditures	361,344	-	361,344	-
Disposal	-	-	-	-
Cost	<u>\$ 361,344</u>	<u>\$ 361,344</u>	<u>\$ 361,344</u>	<u>\$ 361,344</u>
Prudence Review Adjustment	<u>(361,344)</u>	<u>(361,344)</u>		
Cost Compliance Application	<u>\$ -</u>	<u>\$ -</u>		

5  
 6  
 7 **Table #24: Capital Expenditure Prudence Review Adjustments for Sunnyside B1L03 Breaker (Test**  
 8 **Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
Opening Cost	\$ -	\$ 160,899	\$ -	\$ -
Capital Expenditures	160,899	-	160,899	-
Disposal	-	-	(160,899)	-
Cost	<u>\$ 160,899</u>	<u>\$ 160,899</u>	<u>\$ -</u>	<u>\$ -</u>
Prudence Review Adjustment	<u>(160,899)</u>	<u>(160,899)</u>		
Cost Compliance Application	<u>\$ -</u>	<u>\$ -</u>		

9  
 10  
 11 To assess accuracy of the prudence review adjustments disclosed in the Compliance Application for B1L03  
 12 and B1L17, we compared test years to actual expenditures and selected a set of actual capital expenditures for  
 13 actual 2014 using a standardized random sampling procedure. The samples selected were vouched to  
 14 supporting documentation provided by the Company. Of the \$361,344 presented in the table for B1L17, we  
 15 vouched 6 randomly selected capital expenditures totaling \$169,208 to supporting documentation and found  
 16 no exceptions regarding the accuracy for the samples selected. Of the \$160,899 presented in the table for  
 17 B1L03, we vouched 5 randomly selected capital expenditures totaling \$52,703 to supporting documentation  
 18 and found no exceptions regarding the accuracy for the samples selected.

19  
 20 We also examined the Company's prudence adjustments for depreciation disclosed in the Compliance  
 21 Application. Our procedures with respect to assessment of disallowed depreciation on B1L17 and B1L03  
 22 focused on reviewing the rates of depreciation incorporated in the 2014 test year, 2015 test year, actual 2014  
 23 and actual 2015 to ensure compliance with the Gannett Fleming Depreciation Study dated November 2012  
 24 and compliance with Board Order P.U. 40 (2012) and recalculating the depreciation on the disallowed costs  
 25 disclosed in the Compliance Application. We also assessed the Company's adjustments to revenue

1 requirement for test years 2014 and 2015 to ensure the disclosed disallowances for depreciation were  
 2 removed.  
 3 The depreciation of B1L17 and BL103 as well as prudence review adjustments disclosed by the Company in  
 4 the Compliance Application is presented in the following tables:

5 **Table #25: Depreciation Holyrood B1L17 Breaker (Test Year 2014, Test Year 2015, Actual 2014 and**  
 6 **Actual 2015)**

	Test Year 2014	Test Year 2015	Actual 2014	Actual 2015
Opening Accumulated Depreciation	\$ -	\$ 4,200	\$ -	\$ 2,618
Depreciation	4,200	50,400	2,618	10,474
Accumulated Depreciation - Disposals	-	-	-	-
Accumulated Depreciation	<u>\$ 4,200</u>	<u>\$ 54,600</u>	<u>\$ 2,618</u>	<u>\$ 13,092</u>
Prudence Review Adjustment	<u>(4,200)</u>	<u>(54,600)</u>		
Accumulated Depreciation Compliance Application	<u>\$ -</u>	<u>\$ -</u>		

8 **Table #26: Depreciation Holyrood B1L03 Breaker (Test Year 2014, Test Year 2015, Actual 2014 and**  
 9 **Actual 2015)**

	Test Year 2014	Test Year 2015	(Note 1) Actual 2014	(Note 1) Actual 2015
Opening Accumulated Depreciation	\$ -	\$ 1,900	\$ -	\$ -
Depreciation	1,900	22,500	-	-
Accumulated Depreciation - Disposals	-	-	-	-
Accumulated Depreciation	<u>\$ 1,900</u>	<u>\$ 24,400</u>	<u>\$ -</u>	<u>\$ -</u>
Prudence Review Adjustment	<u>(1,900)</u>	<u>(24,400)</u>		
Accumulated Depreciation Compliance Application	<u>\$ -</u>	<u>\$ -</u>		

10 Note 1: Hydro disposed of the asset in 2014. No depreciation was presented by Hydro for actual 2014 and actual 2015.

11 Based on the depreciation procedures performed, we found no exceptions for the calculation of disallowed  
 12 depreciation and accumulated depreciation disclosed in the Company's Compliance Application. Our review  
 13 of the revised revenue requirement for test year 2014 shows that \$4,200 of disallowed depreciation for B1L17  
 14 and \$1,900 of disallowed depreciation for B1L03 has been removed from the original revenue requirement  
 15 filed in the amended GRA. For 2015 test year \$54,600 of disallowed depreciation for B1L17 and \$24,400 of  
 16 disallowed depreciation for B1L03 has been removed from the original revenue requirement filed in the  
 17 amended GRA.

18  
 19 To complete our capital expenditure assessment of B1L17 and B1L03 we ensured the cost and depreciation  
 20 adjustments were removed from average rate base in the Compliance Application. B1L17 and B1L03  
 21 prudence review disallowances have been removed as a part of the overall increase in assets not in use (a  
 22 deduction from average rate base) which were removed from average rate base on Schedule 2 Page 2 of 2 of

1 the Company's Compliance Application. The following table presents the impact of the Company's prudence  
 2 review adjustment of disallowed expenditures for B1L17 and B1L03 from average rate base:  
 3

4 **Table #27: Prudency Review Adjustments to Average Rate Base for Holyrood B1L17 Breaker (Test**  
 5 **Year 2014 and Test Year 2015)**

(000's)	Test Year 2014	Test Year 2015	Average Rate Base Test Year 2014	Average Rate Base Test Year 2015
<b>Holyrood B1L17 Breaker</b>				
Cost	\$ (361)	\$ (361)	\$ (181)	\$ (361)
Accumulated Depreciation	4	55	2	29
Net Book Value	<u>\$ (357)</u>	<u>\$ (306)</u>	<u>\$ (179)</u>	<u>\$ (332)</u>
<b>Sunnyside B1L03 Breaker</b>				
Cost	\$ (161)	\$ (161)	\$ (81)	\$ (161)
Accumulated Depreciation	2	24	1	13
Net Book Value	<u>\$ (159)</u>	<u>\$ (137)</u>	<u>\$ (80)</u>	<u>\$ (148)</u>

6

**Sunnyside Terminal Station Replacement Equipment (Imprudent)**

The Sunnyside Terminal Station was damaged on January 4, 2014. On June 19, 2014, Hydro filed an application with the Board requesting approval of a supplemental capital expenditure in the amount of \$7,197,800 in 2014 and \$1,266,400 in 2015 for the purchase and installation of the Sunnyside T1 transformer and associated equipment, modification to the protection relay system and addition of a 230 kV breaker. The Board approved the request in P.U. 29 (2014) and ordered the recovery of the expenditures to be addressed in a subsequent order. In February 2015, the Board ordered a prudence review of the expenditures in relation to P.U. 29 (2014) and retained Liberty to complete the review. Liberty completed its prudence review and submitted its findings on the Sunnyside Terminal Station concluding that Hydro did not adhere to appropriate maintenance practices and imprudently deferred maintenance on Sunnyside transformer T1 (“T1”) and breaker B1L03 causing equipment damage at the Sunnyside Terminal Station.

In P.U. 13 (2016) the Board found that Hydro’s decisions and actions with respect to the maintenance of T1 and B1L03 at the Sunnyside Terminal Station were imprudent and this imprudence caused its failure, resulting in a transformer fire and damage to the Sunnyside Terminal Station equipment. The Board ordered that Hydro will not recover capital costs for Sunnyside Terminal Station equipment repairs and replacement associated with imprudence.

In response to P.U. 13 (2016) the Company filed its Compliance Application, reporting capital expenditures of \$3,919,400 (rounded) for 2014 test year and \$1,226,400 for 2015 test year which it has removed as prudence review adjustments.

As part of our assessment we reconciled the prudence review adjustments disclosed in Hydro’s Compliance Application to the Liberty Report. Pages 24 and 44 of the Liberty Report summarize Liberty’s recommendations for capital expenditure disallowances for the Sunnyside Terminal Station. These amounts were specifically referenced in the Liberty Report in response to PR-PUB-NLH-152 Revised, PR-PUB-NLH-154 and PR-PUB-NLH-70. The following table compares the disallowed capital expenditures disclosed in the Liberty Report to the imprudent capital expenditures removed in the Compliance Application:

**Table #28: Comparison of Disallowed Costs in the Compliance Application and Liberty Report for Sunnyside Terminal Station Replacement Equipment (Test Year 2014 and Test Year 2015)**

	<b>Compliance Application</b>	<b>Liberty Report (Note 1)</b>	<b>Variance</b>
Total Test Year 2014 and 2015	\$ 5,145,800	\$ 5,145,800	\$ -
Test Year 2014 and 2015 (Not Related to Imprudence)	-	(1,234,494)	(1,234,494)
Test Year 2014 and 2015 Imprudent Capital Expenditures	<u>\$ 5,145,800</u>	<u>\$ 3,911,306</u>	<u>\$(1,234,494)</u>

Note 1: 2014 test year expenditures were not disclosed separately in the Liberty Report. The \$5,145,800 was cross-referenced in the Liberty Report to PR-NLH-154 which provided the 2014 and 2015 test year allocation presented in the table.

The Liberty Report shows a variance of \$1,234,494 compared to the Compliance Application. The variance consists of capital expenditures for breaker B1T1 which Liberty concluded were prudent equipment expenditures for the Sunnyside Terminal. In our review of the variance with Hydro, the Company noted that

1 the Compliance Application was incorrectly filed based on their initial analysis of P.U. 13 (2016) Page 65 and  
 2 66 where they initially interpreted the Board’s order as excluding all component costs related to Sunnyside  
 3 Terminal Station.

4  
 5 In our review of P.U. 13 (2016) Page 65 we interpret Lines 5 and 6 as representing conclusions on imprudent  
 6 components of the Sunnyside Terminal Station disclosed in Liberty’s Report. P.U. 13 (2016) directly  
 7 references \$3,911,306 of imprudent costs which as illustrated in our analysis excludes expenditures for B1T1  
 8 not associated with imprudence.

9  
 10 In our review of the variance with Hydro it was also noted that the initial costs submitted for B1T1 were  
 11 subsequently updated from figures disclosed in the Liberty Report. In response to PR-PUB-NLH-70  
 12 Revision 3 and PR-PUB-NLH-203, Hydro has revised costs for B1T1 from \$1,234,494, referenced in the  
 13 Liberty Report, to \$1,053,755. In discussion with Hydro, it was noted that the B1T1 costs initially referenced  
 14 in the Liberty Report are not a test year based figure and therefore not a comparable deduction from the  
 15 \$5,145,800 test year costs disclosed in the report.

16  
 17 In conclusion, the results of our variance analysis of the Compliance Application to the Liberty Report show  
 18 an error in the Compliance Application which is not correctly recording prudent portions of capital  
 19 expenditures for B1T1 within the Sunnyside Terminal Station. The impact of the error is illustrated in the  
 20 conclusions of our report.

21  
 22 We also compared imprudent capital expenditures disclosed in the Liberty Report for 2014 to expenditures  
 23 disclosed in the Company’s Supporting Documents (there was no discussion on 2015 actual costs in the  
 24 Liberty Report). The following table presents a comparison of Hydro’s 2014 imprudent costs to the Liberty  
 25 Report:

26  
 27 **Table #29: Comparison of Actual 2014 Capital Expenditures to Liberty Report for Sunnyside**  
 28 **Terminal Station Replacement Equipment**

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
2014 Capital Expenditures (Note 1)	\$ 3,236,684	\$ 3,236,684	\$ -
2014 Capital Expenditures (Not Related to Imprudence)	(199,438)	(87,500)	111,938
2014 Imprudent Capital Expenditures	<u>\$ 3,037,246</u>	<u>\$ 3,149,184</u>	<u>\$ 111,938</u>

29 Note 1: The Liberty Report only references gross capital expenditures provided in response to PR-PUB-NLH-70. Hydro's Supporting  
 30 Documents also show subsequent disposals of \$25,595 of related to the Sunnyside Terminal Station Replacement Equipment which were not  
 31 disclosed to Liberty.

32 The 2014 variance to the Liberty Report is the result of updated costs provided by the Company for B1T1  
 33 not related to imprudence. In PR-PUB-NLH-70, the Company initially disclosed the costs at \$87,500 which  
 34 were included in the Liberty Report. Hydro revised the costs to \$199,438 in an updated response PR-PUB-  
 35 NLH-70 in October 2015 which occurred subsequent to the release of the Liberty Report.

1 We reconciled the capital expenditure disallowances disclosed in the Compliance Application for test year  
 2 2014 as well as the 2014 capital expenditures to the 2014 Capital Budget Report filed with the Board as  
 3 presented in the following table:

4  
 5 **Table #30: Reconciliation of Sunnyside Terminal Station Replacement Equipment to Capital**  
 6 **Budget Report (Test Year 2014 and Actual 2014)**

	[A]	[B]	[C = A-B]
	Compliance	Actual	Budget
	<u>Application</u>	<u>2014</u>	<u>2014</u>
			<u>Variance</u>
Capital Expenditures	\$ 7,197,800	\$ 5,062,700	\$ 7,197,800
Insurance Proceeds	(3,278,400)	(1,826,000)	-
Total	<u>\$ 3,919,400</u>	<u>\$ 3,236,700</u>	<u>\$ 7,197,800</u>
			<u>\$(3,961,100)</u>

7  
 8 Capital expenditures for imprudent projects disclosed in the Compliance Application match the \$7,197,800  
 9 budget filed in the Capital Budget Report. Insurance proceeds disclosed in the Compliance Application of  
 10 \$3,278,400 were not included in the budget disclosed in the Capital Budget Report. Actual expenditures  
 11 reported by the Company for 2014 of \$3,236,800 matched the amounts disclosed in the Capital Budget  
 12 Report which included gross capital expenditures of \$5,062,500 net of insurance proceeds of \$1,826,000.  
 13 According to the Company the variance of budget to actual of \$2,135,000, as described by the Company in  
 14 the Capital Budget report, was due to lower than estimated material and construction contract pricing, lower  
 15 than planned project management and engineering costs, deferral of the initial portion of the purchase of  
 16 B1T1, and unutilized contingency funds. In addition the total variance was also the result of \$1,826,000  
 17 insurance proceeds that were not included in the budget.

18  
 19 The Company's 2015 Capital Budget Report summarizes Sunnyside Terminal Station Replacement  
 20 Equipment for the cumulative capital expenditures incurred for 2014 and 2015. We reconciled the  
 21 incremental capital expenditure disallowances disclosed in the Compliance Application for test year 2015 as  
 22 well as the actual 2015 expenditures to the 2015 Capital Budget Report as presented in the following table:

23  
 24 **Table #31: Reconciliation of Sunnyside Terminal Station Replacement Equipment to Capital**  
 25 **Budget Report (Test Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	Compliance	[A]	[B]	[C = A-B]
	<u>Application</u>	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>
Capital Expenditures 2014	7,197,800	5,062,700	7,197,800	(2,135,100)
Insurance Proceeds 2014	(3,278,400)	(1,826,000)	-	(1,826,000)
Total 2014	3,919,400	3,236,700	7,197,800	(3,961,100)
Capital Expenditures 2015	1,226,400	1,549,700	1,226,400	323,300
Total 2014 and 2015	<u>\$ 5,145,800</u>	<u>\$ 4,786,400</u>	<u>\$ 8,424,200</u>	<u>\$(3,637,800)</u>

26  
 27 Capital expenditures for imprudent projects disclosed in the Compliance Application for test year 2015 match  
 28 the budget filed in Hydro's Capital Budget Report at \$1,226,400. Actual 2015 imprudent expenditures of  
 29 \$1,549,700 also match the amounts filed in the 2015 Capital Budget Report.

1 The Company has described the variance of total actual 2014 and actual 2015 capital expenditures from  
 2 budget as due to lower than estimated materials and installation costs as well as insurance proceeds received  
 3 which were not budgeted. These variances were fairly consistent with the variances it reported in the 2014  
 4 Capital Budget Report.

5  
 6 The Company’s disclosure of the prudence review adjustment for the Sunnyside Terminal Station  
 7 Replacement Equipment is presented on Schedule 5 Page 1 of 2 and Page 2 of 2 of the Compliance  
 8 Application. As part of our assessment of the prudence review adjustments disclosed by the Company in the  
 9 Compliance Application, we reviewed capital expenditures in the Company’s Supporting Documents. The  
 10 following table summarizes the capital expenditures reviewed for the Sunnyside Terminal Station  
 11 Replacement Equipment:

12 **Table #32: Capital Expenditure Prudence Review Adjustments for the Sunnyside Terminal Station**  
 13 **Replacement Equipment (Test Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	Test Year 2014	Test Year 2015	Actual 2014	Actual 2015
Opening Cost	\$ -	\$ 3,417,900	\$ -	\$ 851,910
Capital Expenditures	3,919,400	1,226,400	3,236,700	3,908,913
Less: Work in Progress	-	-	(2,359,195)	-
Less: Capital Expenditures Not Related to Imprudence (Note 1)	(501,500)	(552,300)	-	(1,180,392)
Disposal	-	-	(25,595)	-
Cost	<u>\$ 3,417,900</u>	<u>\$ 4,092,000</u>	<u>\$ 851,910</u>	<u>\$ 3,580,431</u>
Prudence Review Adjustment	<u>(3,919,400)</u>	<u>(5,145,800)</u>		
Cost Compliance Application (Note 2)	<u>\$ (501,500)</u>	<u>\$ (1,053,800)</u>		

Note 1: Prudent capital expenditures of \$199,438 related to B1T1 are recorded in work in progress for actual 2014.

14 Note 2: The Compliance Application does not reflect prudent capital expenditures for Breaker B1T1. The result is an understatement of cost in the Compliance Application of \$501,500 for test year 2014 and \$1,053,800 for test year 2015.

15 To assess accuracy of the prudence review adjustments in the Compliance Application, we compared test  
 16 years to actual expenditures and selected a set of actual capital expenditures for 2014 and 2015 using a  
 17 standardized random sampling procedure. The samples selected were vouched to supporting documentation  
 18 provided by the Company. Of the \$3,236,700 net capital expenditures for actual 2014 (\$5,062,700 gross  
 19 expenditures less \$1,826,000 insurance proceeds) we vouched 60 samples totaling \$3,027,894 to supporting  
 20 documentation provided by the Company. We also vouched the \$1,826,000 insurance proceeds to  
 21 supporting documentation provided by the Company. For actual 2015, we vouched 64 items totaling  
 22 \$820,097 to supporting documentation provided by the Company. We found no exceptions for accuracy of  
 23 the samples selected in actual 2014 and actual 2015. As presented in the previous table, the only exception  
 24 we note is the exclusion of prudent capital expenditures for breaker B1T1 resulting in an understatement of  
 25 cost in the Compliance Application of \$501,500 for test year 2014 and \$1,053,800 for test year 2015.



1 We also examined the Company’s prudence adjustments for depreciation disclosed in its Compliance  
 2 Application. Our procedures with respect to assessment of disallowed depreciation on the Sunnyside  
 3 Terminal Station Replacement equipment focused on reviewing the rates of depreciation incorporated in the  
 4 2014 test year, 2015 test year, actual 2014 and 2015 to ensure compliance with the Gannett Fleming  
 5 Depreciation Study dated November 2012, compliance with Board Order P.U. 40 (2012) and recalculating the  
 6 depreciation on disallowed costs disclosed in the Compliance Application. We also assessed the Company’s  
 7 adjustments to revenue requirement for test years 2014 and 2015 to ensure the disclosed disallowances for  
 8 depreciation were removed. The depreciation recorded for the Sunnyside Terminal Station Replacement  
 9 Equipment and the prudence review adjustments disclosed by the Company in the Compliance Application  
 10 are presented in the following table:

11  
 12 **Table #33: Depreciation Sunnyside Terminal Station Replacement Equipment (Test Year 2014, Test**  
 13 **Year 2015, Actual 2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
Opening Accumulated Depreciation	\$ -	\$ 8,000	\$ -	\$ 3,859
Depreciation	9,200	113,300	3,859	76,674
Less: Accumulated Depreciation Not Related to Imprudence	<u>(1,200)</u>	<u>(23,200)</u>	<u>-</u>	<u>(14,207)</u>
Accumulated Depreciation	<u>\$ 8,000</u>	<u>\$ 98,100</u>	<u>\$ 3,859</u>	<u>\$ 66,326</u>
Prudence Review Adjustment	<u>(9,200)</u>	<u>(122,500)</u>		
Accumulated Depreciation Compliance Application (Note 1)	<u>\$ (1,200)</u>	<u>\$ (24,400)</u>		

14 Note 1: The Compliance Application does not reflect prudent capital expenditures for Breaker B1T1. The result is an understatement of accumulated depreciation in the Compliance Application of \$1,200 for test year 2014 and \$24,400 for test year 2015.

15 Based on the depreciation procedures performed, we found no exceptions for the calculation of disallowed  
 16 depreciation and accumulated depreciation disclosed in the Company’s Compliance Application except for  
 17 the removal of depreciation for prudent expenditures for breaker B1T1 in test year 2014 and test year 2015.  
 18 Our review of the revised revenue requirement for test year 2014 shows that \$9,200 of disallowed  
 19 depreciation for the Sunnyside Terminal Station Replacement Equipment has been removed from the original  
 20 revenue requirement filed in the amended GRA. For 2015 test year \$113,300 of disallowed depreciation has  
 21 been removed from the original revenue requirement filed in the amended GRA. As a result of the removal  
 22 of depreciation for prudent expenditures for breaker B1T1 there has been an insignificant understatement of  
 23 revenue requirement for test year 2014 and test year 2015 in the Compliance Application.

24

1 To complete our capital expenditure assessment of the Sunnyside Terminal Station Replacement Equipment  
 2 we ensured the cost and depreciation adjustments were removed from average rate base in the Compliance  
 3 Application.

4  
 5 The following table presents the impact of the Company’s prudence review adjustment of disallowed  
 6 expenditures for the Sunnyside Terminal Station Replacement Equipment on average rate base:  
 7

8 **Table #34: Prudency Review Adjustments to Average Rate Base for Sunnyside Terminal Station**  
 9 **Replacement Equipment (Test Year 2014 and Test Year 2015)**

(000's)	Test Year 2014	Test Year 2015	Average Rate Base Test Year 2014	Average Rate Base Test Year 2015
<b>Net Capital Assets</b>				
Plant Investment	\$ 3,919	\$ 5,146	\$ 1,960	\$ 4,533
Accumulated Deprecation	(9)	(123)	(5)	(66)
Net Book Value	3,910	5,023	1,955	4,467
Transfer of Net Capital Assets to Deferred Charges	(3,910)	(5,023)	(1,955)	(4,467)
Total Net Capital Assets	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Deferred Charges</b>				
Transfer from Net Capital Assets	\$ 3,910	\$ 5,023	\$ 1,955	\$ 4,467
Less: Net Capital Assets Not Related to Imprudence	(500)	(1,029)	(250)	(765)
Prudence Review Adjustment (Deferred Charges Not in Use)	(3,910)	(5,023)	(1,955)	(4,467)
Total Net Deferred Charges Compliance Application (Note 1)	<u>\$ (500)</u>	<u>\$ (1,029)</u>	<u>\$ (250)</u>	<u>\$ (765)</u>

10 Note 1: The Compliance Application does not reflect prudent capital expenditures for Breaker B1T1. The result is an understatement of average  
 11 rate base in the Compliance Application of \$250,000 for test year 2014 and \$765,000 for test year 2015.

12 As illustrated in the table, average rate base in the Compliance Application is understated by \$250,000 in test  
 13 year 2014 and \$765,000 for test year 2015 due to the Company’s removal of prudent expenditures for breaker  
 14 B1T1.  
 15

1 Sunnyside Terminal Replacement Equipment (Recovery)

2 In P.U. 13 (2016) Page 66, the Board ordered Hydro to continue to recover the capital costs of the Sunnyside  
3 Terminal Station equipment for the remainder of the expected lives as determined by Hydro prior to the  
4 failure in January 2014, and the recovery of the capital costs to be included in 2014 revenue requirement and  
5 2015 test year costs. The Board further ordered that the revenue requirement for 2014 and 2015 should be  
6 based on the depreciated cost of the equipment before replacement and repair.

7  
8 In response to P.U. 13 (2016), Hydro has reversed a loss on disposal of \$425,000 and included a deferred  
9 charge to recover cost for the Sunnyside Terminal Station presented on Schedule 5 of the Compliance  
10 Application. The deferred charge has been depreciated at \$19,000 per year for test year 2014 and 2015.  
11 Hydro has disclosed a remaining expected life prior to failure of the assets of 22.4 years, citing Appendix A -  
12 Table 1 of the Company's August 7, 2015 NLH -Reply to Liberty's Report. The table referenced was  
13 developed by Gannett Fleming and summarizes a discussion of service value of retired assets for the  
14 Sunnyside Terminal station to be used in betterment calculations. In Hydro's interpretation of P.U. 13 (2016)  
15 Page 66, they have used this 22.4 year life as representative of the expected lives of these assets as were  
16 determined by Hydro prior to the failure of the assets.

17  
18 To assess the accuracy of Hydro's Compliance Application disclosures we traced the loss on disposal of the  
19 Sunnyside Terminal Station, consisting of the depreciated value prior to replacement of the assets, to the  
20 Company's Supporting Documents. We also recalculated depreciation recorded on the recovery based on the  
21 22.4 year methodology disclosed in the Compliance Application and compared it to the system rates in effect  
22 in the Company's Supporting Documents at the time of disposal.

23  
24 Based on the procedures performed we note the net book value prior to disposal of the Sunnyside Terminal  
25 Station asset, disclosed in the Company's Supporting documents, was \$421,589 compared to \$425,000  
26 presented in the Compliance Application. Hydro has noted that this amount was rounded to \$425,000 for  
27 purposes for the Compliance Application.

28  
29 We note that the 22.4 expected life estimate used by Hydro varies from the rates used in the Supporting  
30 Documents prior to failure of the assets. In follow up discussions of the variance, Hydro provided specific  
31 explanation and disclosure from Gannett Fleming who noted the "actual depreciation rate developed in the  
32 last depreciation study, also included a number of inherent adjustments such as a true-up mechanism of  
33 historic over/under depreciation to date, historic changes in life estimates, etc. As such, determination of a  
34 remaining life based solely on the depreciation rate ignores the additional inherent adjustments within the  
35 depreciation rate that precludes reasonableness of a remaining life calculated on the basis of 100% by the  
36 depreciation rate. The only correct procedure to determine the actual physical remaining life of the asset  
37 investment is through a remaining life calculated in accordance with a determination of the average achieved  
38 life and the average estimated remaining life as presented in the attachment to this response".

39  
40 As part of our follow up procedures we cross checked the asset identifiers of the Sunnyside Terminal Station  
41 Recovery Assets disclosed in the Supporting Documents for test year 2014 and actual 2014 to the Gannett  
42 Fleming attachment to verify they were considered in the assessment of the 22.4 year service life and found  
43 no exceptions. We note the individual costs of each asset identifier in the Gannett Fleming attachment did  
44 not match those in the Supporting Documents of the Compliance Application. However, the Gannett  
45 Fleming total remaining value calculated of \$490,681 as of January 2014 was comparable to the 2014 test year  
46 net book value prior to disposal of \$421,589 and the actual 2014 net book value prior to disposal of \$489,173.

1 Based on the Gannet Fleming support provided we found no exceptions to the use of the 22.4 year remaining  
 2 service life and the depreciation expense of \$19,000 recorded in the Compliance Application for test year  
 3 2014 and 2015.

4  
 5 To complete our capital expenditure assessment of the Sunnyside Terminal Station Replacement Equipment  
 6 (Recovery) we ensured the cost and depreciation adjustments were included in average rate base in the  
 7 Compliance Application. The following table presents the prudence review adjustments for recovery of costs  
 8 for Sunnyside Terminal Station recorded as deferred charges in the Compliance Application:  
 9

10 **Table #35: Prudency Review Adjustments to Average Rate Base for Sunnyside Terminal Station**  
 11 **Replacement Equipment (Recovery) (Actual 2013, Test Year 2014 and Test Year 2015)**

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Rate Base Test Year 2014	Average Rate Base Test Year 2015
Sunnyside Terminal Station Cost Recovery	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425
Accumulated amortization	-	(19)	(38)	(9)	(29)
Deferred Charges	<u>\$ 425</u>	<u>\$ 406</u>	<u>\$ 387</u>	<u>\$ 416</u>	<u>\$ 396</u>

12  
 13 As a result of our procedures we note Hydro did not use the correct actual 2013 amount for purposes of  
 14 determining Compliance Application adjustments to average rate base for test year 2014. Hydro has averaged  
 15 a cost and net book value of \$425,000 for the actual 2013 to test year 2014 period. The Company's  
 16 Supporting Documents show that the actual 2013 cost prior to disposal was \$516,018 with a corresponding  
 17 net book value of \$501,471. The impact is an understatement of average rate base of \$38,000 for test year  
 18 2014.

**Western Avalon T5 Tap Changer Replacement**

The Western Avalon T5 Tap Changer (“the T5 Tap Changer”) was damaged on January 4, 2015. On June 19, 2014 Hydro filed an application with the Board requesting approval of a supplemental capital expenditure in the amount of \$1,452,500 to replace the on load tap changer on transformer T5 at the Western Avalon Terminal Station. In P.U. 32 (2014) the Board approved the expenditure with the recovery of the expenditure to be addressed in a subsequent order of the Board. In February 2015, the Board ordered a prudence review of the expenditures in relation to P.U. 32 (2014) and retained Liberty to complete the review. Liberty completed its prudence review and submitted its findings on the T5 Tap Changer in the Liberty Report concluding that Hydro did not adhere to appropriate maintenance practices and imprudently deferred maintenance on breaker B1L37 which failed, resulting in damage to the T5 Tap Changer.

In P.U. 13 (2016) the Board found that Hydro’s decisions and actions with respect to the maintenance of breaker B1L37 at the Western Avalon Terminal Station were imprudent and this imprudence caused its failure, resulting in damage to the T5 Tap Changer. The Board ordered that Hydro will not recover capital costs for the T5 Tap Changer replacement and transformer repairs associated with imprudence. In response to P.U. 13 (2016) the Company filed its Compliance Application, reporting capital expenditures of \$1,452,500 for 2014 test year which it removed as prudency review adjustments.

As part of our assessment we reconciled the prudency review adjustments disclosed in Hydro’s Compliance Application to the Liberty Report. Pages 34 and 44 the Liberty Report summarize Liberty’s recommendations for capital expenditure disallowances for the T5 Tap Changer. The costs related to the T5 Tap Changer were specifically referenced in Liberty’s report in response to PR-PUB-NLH-35. The following tables compare the T5 Tap Changer disallowed capital expenditures disclosed in the Liberty Report to the imprudent capital expenditures removed in the Compliance Application for test year 2014 and 2014 actual costs:

**Table #36: Comparison of Compliance Application Disallowed Capital Expenditures and the Liberty Report for Western Avalon T5 Tap Changer Replacement (2014 Test Year)**

	<u>Compliance Application</u>	<u>Liberty Report</u>	<u>Variance</u>
Western Avalon T5 Tap Changer Replacement (Test Year 2014)	\$ 1,452,500	\$ 1,452,500	\$ -

**Table #37: Comparison Capital Expenditures and Liberty Report for Western Avalon T5 Tap Changer Replacement (2014)**

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
Western Avalon T5 Tap Changer Replacement	\$ 1,013,900	\$ 1,013,900	\$ -

1 The reconciliation of T5 Tap Changer capital expenditures to the Liberty Report did not result in variances  
 2 compared to the Company's Compliance Application and Supporting Documents.

3  
 4 The Liberty Report also referenced depreciation for the T5 Tap Changer on Page 34 of the report for actual  
 5 2014 expenses and 2015 test year expenses as presented in the following table:  
 6

7 **Table #38: Comparison of Compliance Application Disallowed Depreciation and the Liberty Report**  
 8 **for Western Avalon T5 Tap Changer Replacement (2015 Test Year)**

	<u>Compliance Application</u>	<u>Liberty Report</u>	<u>Variance</u>
Western Avalon T5 Tap Changer Replacement (Test Year 2015)	\$ 41,000	\$ 41,000	\$ -

9  
 10

11 **Table #39: Comparison of Depreciation to Liberty Report for Western Avalon T5 Tap Changer**  
 12 **Replacement (Actual 2014)**

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
Western Avalon T5 Tap Changer Replacement	\$ 8,068	\$ 41,000	\$ (32,932)

13  
 14

15 There is no variance to the 2015 test year depreciation presented in the Compliance Application compared to  
 16 the Liberty Report. The actual 2014 depreciation disclosed in the Company's Supporting Documents was  
 17 \$8,068 compared to \$41,000 referenced in the Liberty Report for a variance of \$32,932. In follow up  
 18 discussions with Hydro, it was noted that the variance relates to disposal and removal costs which Liberty  
 19 grouped as part of the depreciation expense referenced in their report (these costs were provided to Liberty in  
 20 response to PR-P.U.B.-NLH-156). This presentation did not affect revenue requirement disclosed in the  
 21 Compliance Application for test year 2014.

22

23 The capital expenditure disallowances disclosed in the Compliance Application have also been reconciled to  
 24 the Capital Budget Report filed with the Board for 2014 as presented in the following table:  
 25

26 **Table #40: Reconciliation of Western Avalon T5 Tap Changer to Capital Budget Report (Test Year**  
 27 **2014 and Actual 2014)**

	<u>[A] Compliance Application</u>	<u>[B] Budget 2014</u>	<u>[C = A-B] Variance</u>
Western Avalon T5 Tap Changer	<u>\$ 1,452,500</u>	<u>\$ 1,013,900</u>	<u>\$ (438,600)</u>

28  
 29

30 The prudence review adjustments disclosed by the Company in the Compliance Application match the 2014  
 31 budget of \$1,452,500 filed in the Capital Budget Report. The variance of actual 2014 to budget described by  
 32 Hydro in the Capital Budget Report is due to lower than estimated material and construction contract pricing,  
 33 unutilized contingency funds and savings in lower than planned project management and engineering costs.  
 34

1 The Company’s disclosure of the prudence review adjustment for the T5 Tap Changer is presented on  
 2 Schedule 6 Page 1 of 1 of the Compliance Application. As part of our assessment of the prudence review  
 3 adjustments disclosed by the Company in the Compliance Application, we reviewed capital expenditures in  
 4 the Company’s Supporting Documents. The following table summarizes the capital expenditures reviewed for  
 5 the T5 Tap Changer:  
 6

7 **Table #41: Capital Expenditure Prudency Review Adjustments for the Western Avalon T5 Tap**  
 8 **Changer Replacement (Test Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
Opening Cost	\$ -	\$ 1,452,500	\$ -	\$ 1,013,900
Capital Expenditures	1,452,500	-	1,013,900	-
Disposal (Note 1)	-	-	-	(1,013,900)
Cost	<u>\$ 1,452,500</u>	<u>\$ 1,452,500</u>	<u>\$ 1,013,900</u>	<u>\$ -</u>
Prudency Review Adjustment	<u>(1,452,500)</u>	<u>(1,452,500)</u>		
Cost Compliance Application	<u>\$ -</u>	<u>\$ -</u>		

9 Note 1: The Disposal figure includes \$31,980 of direct reductions to opening cost in 2015 to remove over accrued capital  
 10 expenditures in 2014. The T5 Tap Changer is recorded in assets not in use for actual 2014 and has no impact on rate base.

11 To assess accuracy of the prudency review adjustments disclosed in the Compliance Application for the T5  
 12 Tap Changer, we compared test years to actual expenditures and selected a random sample of actual capital  
 13 expenditures for actual 2014 (actual 2015 had no capital expenditures for the T5 Tap Changer). The samples  
 14 selected were vouched to supporting documentation provided by the Company. Of the \$1,013,900 of capital  
 15 expenditures presented for actual 2014, we vouched 15 samples totaling \$480,127 to supporting  
 16 documentation and found no exceptions regarding the accuracy for the samples selected for the T5 Tap  
 17 Changer.  
 18

19 We examined the Company’s prudency adjustments for depreciation disclosed in its Compliance Application.  
 20 Our procedures with respect to assessment of disallowed depreciation on the T5 Tap Changer focused on  
 21 reviewing the rates of depreciation incorporated in the 2014 and 2015 test years to ensure compliance with  
 22 the Gannett Fleming Depreciation Study dated November 2012 and compliance with Board Order P.U. 40  
 23 (2012) and recalculating the depreciation on the disallowed costs disclosed in the Compliance Application.  
 24 We also performed these procedures to assess depreciation recorded in actual 2014 (the asset was disposed in  
 25 actual 2015 and had no depreciation recorded). We also assessed the Company’s adjustments to revenue  
 26 requirement for test years 2014 and 2015 to ensure the disclosed disallowances for depreciation were  
 27 removed.  
 28

29 The depreciation of the T5 Tap Changer as well as prudency review adjustments in the Compliance  
 30 Application is presented in the following table:

1 **Table #42: Depreciation Western Avalon T5 Tap Changer (Test Year 2014, Test Year 2015, Actual**  
 2 **2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
Opening Accumulated Depreciation	\$ -	\$ 3,400	\$ -	\$ 8,068
Depreciation	3,400	41,000	8,068	29,583
Accumulated Depreciation - Disposals	-	-	-	(37,651)
Accumulated Depreciation	<u>\$ 3,400</u>	<u>\$ 44,400</u>	<u>\$ 8,068</u>	<u>\$ -</u>
Prudency Review Adjustment	<u>(3,400)</u>	<u>(44,400)</u>		
Accumulated Depreciation Compliance Application	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>		

3  
 4  
 5 Based on the depreciation procedures performed, we found no exceptions for the calculation of disallowed  
 6 depreciation and accumulated depreciation disclosed in the Company's Compliance Application. Our review  
 7 of the revised revenue requirement for test year 2014 shows that \$3,400 of disallowed depreciation for the T5  
 8 Tap Changer has been removed from the original revenue requirement filed in the amended GRA. For 2015  
 9 test year \$44,400 of disallowed depreciation has been removed from the original revenue requirement filed in  
 10 the amended GRA.

11  
 12 To complete our capital expenditure assessment of the T5 Tap Changer we ensured the cost and depreciation  
 13 adjustments were removed from average rate base in the Compliance Application. The T5 Tap Changer  
 14 prudency review disallowances have been removed as part of the total reduction in net capital assets of  
 15 \$5,359,000 in 2014 test year and \$6,432,000 in 2015 test year which were removed from average rate base on  
 16 Schedule 2 Page 2 of 2 of the Company's Compliance Application. The following table presents the impact  
 17 of the Company's prudency review adjustment of disallowed expenditures for the T5 Tap Changer on average  
 18 rate base:

19  
 20 **Table #43: Prudency Review Adjustments to Average Rate Base for Western Avalon T5 Tap Changer**  
 21 **(Test Year 2014 and Test Year 2015)**

<b>(000's)</b>	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Average</u> <u>Rate Base</u> <u>Test Year</u> <u>2014</u>	<u>Average</u> <u>Rate Base</u> <u>Test Year</u> <u>2015</u>
Cost	\$ (1,453)	\$ (1,453)	\$ (727)	\$ (1,453)
Accumulated Depreciation	4	44	2	24
Net Book Value	<u><u>\$ (1,449)</u></u>	<u><u>\$ (1,409)</u></u>	<u><u>\$ (725)</u></u>	<u><u>\$ (1,429)</u></u>



1 **Western Avalon T5 Tap Changer Replacement (Recovery of Cost)**

2 In P.U. 13 (2016) page 66, the Board ordered Hydro to continue to recover the capital costs of replaced T5  
 3 Tap Changer equipment for the remainder of the expected lives as determined by Hydro prior to the failure  
 4 in January 2014 and the recovery the capital costs to be included in 2014 revenue requirement and 2015 test  
 5 year costs. The Board further ordered that the revenue requirement for 2014 and 2015 should be based on  
 6 the depreciated cost of the equipment before replacement and repair.

7  
 8 On Schedule 6 Page 1 of 1 Hydro disclosed that the T5 Tap Changer replacement assets subsequently failed  
 9 in 2015. Hydro noted, for simplicity, it did not reverse the loss on disposal for portions of the original asset  
 10 of \$27,890 in 2014 test year or set up a regulatory asset of the replaced asset in 2014 test year. Hydro also  
 11 noted it recorded a full loss on disposal of the T5 Tap Changer in 2015.

12  
 13 To assess the accuracy of the Compliance Application disclosures for the T5 Tap Changer, we traced Hydro's  
 14 disclosures to the Supporting Documents. The following table illustrates Hydro's treatment of the original  
 15 assets of the T5 Tap Changer as disclosed in the Compliance Application:

16  
 17 **Table #44: Western Avalon T5 Tap Changer Original Assets (Test Year 2014, Test Year 2015, Actual**  
 18 **2014 and Actual 2015)**

	<u>Test Year</u> <u>2014</u>	<u>Test Year</u> <u>2015</u>	<u>Actual</u> <u>2014</u>	<u>Actual</u> <u>2015</u>
<b>Cost</b>				
Opening Cost	\$ 29,928	\$ 189,315	\$ 29,506	\$ 189,315
Capital Expenditures	189,315	-	189,315	-
Disposal	<u>(29,928)</u>	<u>-</u>	<u>(29,506)</u>	<u>(189,315)</u>
Cost	<u>\$ 189,315</u>	<u>\$ 189,315</u>	<u>\$ 189,315</u>	<u>\$ -</u>
<b>Accumulated Depreciation</b>				
Opening Accumulated Depreciation	\$ 1,265	\$ 11,307	\$ 843	\$ 11,307
Depreciation	12,150	5,180	12,080	5,180
Accumulated Depreciation - Disposals	<u>(2,108)</u>	<u>-</u>	<u>(1,616)</u>	<u>(16,487)</u>
Accumulated Depreciation	<u>\$ 11,307</u>	<u>\$ 16,487</u>	<u>\$ 11,307</u>	<u>\$ -</u>
<b>Net Book Value</b>	<u>\$ 178,008</u>	<u>\$ 172,828</u>	<u>\$ 178,008</u>	<u>\$ -</u>
<b>Loss on Disposal</b>	<u>\$ 27,820</u>	<u>\$ -</u>	<u>\$ 27,890</u>	<u>\$ 172,828</u>

19  
 20  
 21 Based on our procedures, we note Hydro has treated recovery of the T5 Tap Changer original assets  
 22 inconsistently in 2014 and 2015 test years, leaving certain components of the original assets for recovery in  
 23 rate base while removing other components. Hydro has included original T5 Tap Changer assets in rate base  
 24 with a net book value of \$178,008 for test year 2014 and a net book value of \$172,828 for test year 2015 and  
 25 disposed of certain components of original T5 Tap Changer assets with a net book value of \$27,890 for test  
 26 year 2014. The impact is an overstatement of revenue requirement of \$27,890 for test year 2014 versus the  
 27 recovery treatment applied to the other components of the original T5 Tap Changer assets.

**Holyrood Unit 1 Turbine Failure 2013**

The Holyrood Unit 1 Turbine (“Unit 1”) failed in January 2013. On April 2, 2013 Hydro filed an application with the Board requesting approval of a capital expenditure in the amount of \$13,154,700 to refurbish and repair Unit 1. The Board approved expenditures of \$12,809,700 in P.U. 14 (2013) and ordered the amounts not to be included in rate base until further order of the Board. In February 2015, the Board ordered a prudence review of the expenditures in relation to P.U. 14 (2013) and retained Liberty to complete the review. Liberty completed its prudence review and submitted its findings on Unit 1 concluding Hydro’s actions were imprudent in several circumstances. As a result of Hydro’s imprudence, a DC lube oil system failed to function as intended and was the primary cause of the failure of Unit 1. In P.U. 13 (2016) the Board did not make a prudence finding with respect to Unit 1 but noted Hydro accepted responsibility for the cost consequences of its actions and that customers would not bear any costs of their actions. The Board ordered that Hydro will not recover capital costs related to the failure of Unit 1.

In response to P.U. 13 (2016) the Company filed its Compliance Application, reporting imprudent capital expenditures of \$5,601,200 (rounded) for 2014 and 2015 test year which it has removed as prudency review adjustments. These costs were carryover of capital expenditures originating in 2013. No further expenditures were reported in 2014 or 2015 test year or actual 2014 and 2015.

As part of our assessment we reconciled the prudency review adjustments disclosed in Hydro’s Compliance Application to the Liberty Report. Pages 44 and 58 of the Liberty Report summarize Liberty’s recommendations for capital expenditure disallowances for Unit 1. These amounts were specifically referenced in Liberty’s report in response to PR-PUB-NLH-129 Revised.

**Table #45: Comparison of Compliance Application Disallowed Costs to the Liberty Report for Holyrood Unit 1 Turbine Failure**

	<u>Compliance Application</u>	<u>Liberty Report</u>	<u>Variance</u>
2015 Test Year (Note 1)	\$ 4,624,200	\$ 4,600,000	\$ (24,200)
Note 1: The Liberty Report discloses opening net book value of costs for test year 2015 on Page 58 which were taken from PR-PUB-NLH-129 (Revision 2), and consist of the following amounts:			
Capital Expenditures 2013	\$ 5,715,965		
Less: Work in Progress		(114,765)	
Cost 2013	5,601,200		
Depreciation 2013		(195,400)	
Depreciation Test Year 2014		(781,600)	
2015 Test Year	4,624,200		
Rounding Adjustment		(24,200)	
Total	<u>\$ 4,600,000</u>		

The variance of the Compliance Application is due to rounding presentation in the Liberty Report. Liberty has only disclosed opening net book value of costs for 2015 test year on page 58 of their report.

1 The following table presents the costs for actual 2014 presented in the Liberty Report compared to Hydro's  
 2 actual 2014 costs for Unit 1:

3  
 4 **Table #46: Comparison of 2014 Capital Expenditures to Liberty Report for Holyrood Unit 1 Turbine**  
 5 **Failure**

	<u>Actual 2014</u>	<u>Liberty Report</u>	<u>Variance</u>
Capital Expenditures (Note 1)	\$ 5,520,565	\$ 5,500,000	\$ (20,565)

Note 1: Costs on Page 44 of the Liberty Report consist of 2013 opening net book value and 2014 capital expenditures as follows:

Capital Expenditures 2013	\$ 5,715,965
Less: Work in Progress	<u>(114,765)</u>
Cost 2013	5,601,200
Depreciation 2013	<u>(195,400)</u>
Net Book Value 2013	5,405,800
Capital Expenditures 2014	<u>114,765</u>
Actual 2014	5,520,565
Rounding adjustment	<u>(20,565)</u>
Total (Liberty Report)	<u>\$ 5,500,000</u>

6  
 7

8 The Liberty Report cross-referenced PR-PUB-NLH -129 and PR-PUB-NLH -129 (Revised) which presented  
 9 net book values for actual 2013, actual 2014 and 2015 test year. These RFI's were further updated  
 10 subsequent to the Liberty Report release (July 2015) with PR-PUB-NLH -129 (Revision 2) in September  
 11 2015. We examined these responses and traced them to the Company's Supporting Documents. Based on  
 12 our examination we found only rounding differences as presented in the following table:

13

14 **Table #47: Comparison of Capital Expenditures to Liberty Report PR-P.U.B-NLH-129 for Holyrood**  
 15 **Unit 1 Turbine Failure (2013)**

	<u>PR-PUB Supporting Documents</u>	<u>-NLH-129 (Revision 2)</u>	<u>Variance</u>
Actual 2013 Net Book Value	\$ 5,405,800	\$ 5,400,000	\$ 5,800
Actual 2014 Net Book Value	<u>\$ 4,691,065</u>	<u>\$ 4,700,000</u>	<u>\$ (8,935)</u>
2015 Test Year Net Book Value (Note 1)	<u>\$ 3,842,600</u>	<u>\$ 3,800,000</u>	<u>\$ 42,600</u>

Note 1: Liberty disclosed depreciation of \$1.0 million on Page 58 of their report referencing PR-PUB-NLH-129 (Revision 1). The amount was revised to \$0.8 million in PR-PUB-NLH-129 (Revision 2).

16  
 17

18 The variances in the Supporting Documents versus PR-PUB-NLH-129 (Revision 2) are due to rounding  
 19 differences.

20

21 We reconciled the capital expenditure disallowances for Unit 1 disclosed in the Compliance Application for  
 22 test year 2013 to the 2013 Capital Budget Report filed with the Board as presented in the following table:

1 **Table #48: Reconciliation of Holyrood Unit 1 Turbine Failure Capital Expenditures to the 2013**  
 2 **Capital Budget Report**

	<u>Actual 2013</u>	<u>Budget 2013</u>	<u>Variance</u>
Capital Expenditures in Service	\$ 8,924,768		
Work in Progress (Note 1)	<u>114,765</u>		
Total Capital Expenditures	<u>\$ 9,039,533</u>	<u>\$ 12,809,700</u>	<u>\$ (3,770,167)</u>
Less: Insurance Proceeds	(3,323,568)	-	(3,323,568)
Less: Work in Progress	<u>(114,765)</u>	-	<u>(114,765)</u>
Total Capital Expenditures Compliance Application (Note 2)	<u>\$ 5,601,200</u>	<u>\$ 12,809,700</u>	<u>\$ (7,208,500)</u>

Note 1: Work in progress is excluded from average rate base. The 2013 work in progress disclosed in the Company's Supporting Documents carry forward for 2014 and 2015 test years and has not been included in average rate base in the Compliance Application.

Note 2: 2013 balance comprises the opening cost balances used in 2014 and 2015 test years as disclosed by the Company in Schedule 11 of the Compliance Application.

3  
 4  
 5 The Company's 2013 Budget Report disclosed a variance of \$3,770,200 (rounded) for Unit 1. The Company  
 6 noted this was due to significant savings on welding and machining costs on bearing journals than was  
 7 originally budgeted. As illustrated in the table the Company did not reference insurance proceeds received on  
 8 the project in the 2013 Capital Budget Report which produced further savings of \$3,323,568.

9  
 10 The 2014 and 2015 Capital Budget Reports did not reference Unit 1. Based on our examination of the  
 11 Company's Supporting Documents no further capital expenditures were incurred in these years. The 2013  
 12 work in progress balance transferred to net capital assets in service in actual 2014 was referenced in the  
 13 Company's variance commentary on the gross expenditures of \$9,039,500 (rounded) in the 2013 Capital  
 14 Budget Report.

1 The Company’s disclosure of the prudence review adjustment for Unit 1 is presented on Schedule 11  
 2 Compliance Application. As part of our assessment of the prudence review adjustments disclosed in the  
 3 Compliance Application, we reviewed capital expenditures in the Company’s Supporting Documents. The  
 4 following table summarizes the capital expenditures reviewed for Unit 1:  
 5

6 **Table #49: Capital Expenditure Prudency Review Adjustments for Holyrood Unit 1 Turbine Failure**  
 7 **(Actual 2013, Test Year 2014, Test Year 2015, Actual 2014 and Actual 2015)**

	Actual 2013	Test Year 2014	Test Year 2015	Actual 2014	Actual 2015
Opening Cost	\$ -	\$ 5,601,200	\$ 5,601,200	\$ 5,601,200	\$ 5,715,965
Capital Expenditures	5,715,965	-	-	114,765	-
Less: Work in Progress	(114,765)	-	-	-	-
Disposal	-	-	-	-	-
Cost	<u>\$ 5,601,200</u>	<u>\$ 5,601,200</u>	<u>\$ 5,601,200</u>	<u>\$ 5,715,965</u>	<u>\$ 5,715,965</u>
Prudency Review Adjustment	<u>-</u>	<u>(5,601,200)</u>	<u>(5,601,200)</u>		
Cost Compliance Application (Note 1)	<u>\$ 5,601,200</u>	<u>\$ -</u>	<u>\$ -</u>		

8 Note 1: The cost of Unit 1 has been removed by increasing net assets not in use (a deduction from average rate base).  
 9

10 To assess accuracy of the prudency review adjustments for Unit 1, we compared test years to actual  
 11 expenditures and selected a set of actual capital expenditures for 2013 using a standardized random sampling  
 12 procedure (actual 2014 and 2015 capital costs consisted of carry forward of amounts from 2013). The  
 13 samples selected were vouched to supporting documentation provided by the Company. Of the \$5,715,953  
 14 net capital expenditures for 2013 (\$9,039,521 gross expenditures less \$3,323,568 insurance proceeds) we  
 15 vouched 111 samples totaling \$6,631,607 to supporting documentation provided by the Company. We also  
 16 vouched the \$3,323,568 insurance proceeds to supporting documentation provided by the Company. We  
 17 found no exceptions for accuracy of the samples selected for 2013.  
 18

19 We also examined the Company’s prudency adjustments for depreciation disclosed in its Compliance  
 20 Application. Our procedures with respect to assessment of disallowed depreciation on the Sunnyside  
 21 Terminal Station Replacement equipment focused on reviewing the rates of depreciation incorporated in the  
 22 2014 test year, 2015 test year, actual 2014 and 2015 to ensure compliance with the Gannett Fleming  
 23 Depreciation Study dated November 2012, compliance with Board Order P.U. 40 (2012) and recalculating the  
 24 depreciation on disallowed costs disclosed in the Compliance Application. We also assessed the Company’s  
 25 adjustments to revenue requirement for test years 2014 and 2015 to ensure the disclosed disallowances for  
 26 depreciation were removed.  
 27

1 The depreciation recorded for Unit 1 and the prudence review adjustments disclosed in the Compliance  
 2 Application are presented in the following table:

3  
 4 **Table #50: Depreciation Holyrood Unit 1 Turbine Failure (Actual 2013, Test Year 2014, Test Year**  
 5 **2015, Actual 2014 and Actual 2015)**

	Actual 2013	Test Year 2014	Test Year 2015	Actual 2014	Actual 2015
Opening Accumulated Depreciation	\$ -	\$ 195,400	\$ 977,000	\$ 195,400	\$1,024,900
Depreciation	195,400	781,600	781,600	829,500	792,900
Accumulated Depreciation - Disposals	-	-	-	-	-
Accumulated Depreciation	<u>\$ 195,400</u>	<u>\$ 977,000</u>	<u>\$ 1,758,600</u>	<u>\$ 1,024,900</u>	<u>\$1,817,800</u>
Prudence Review Adjustment	-	(977,000)	(1,758,600)		
Accumulated Depreciation Compliance Application (Note 1)	<u>\$ 195,400</u>	<u>\$ -</u>	<u>\$ -</u>		

6 Note 1: The accumulated depreciation of Unit 1 has been removed by decreasing net assets not in use (an increase in average rate base).  
 7

8 Based on the depreciation procedures performed, we found no exceptions for the calculation of disallowed  
 9 depreciation and accumulated depreciation disclosed in the Company's Compliance Application for Unit 1  
 10 for test years. Our review of the revised revenue requirement for test year 2014 and 2015 shows that \$781,600  
 11 of disallowed depreciation for Unit 1 has been removed from the original revenue requirement filed in the  
 12 amended GRA.

13  
 14 Based on the depreciation procedures performed we found one exception for actual 2014 depreciation.  
 15 Hydro has overstated depreciation by \$31,298 due to exclusion of a journal entry credit balance of \$216,484  
 16 in the calculation of depreciation for actual 2014.

17  
 18 To complete our capital expenditure assessment of Unit 1 we ensured the cost and depreciation adjustments  
 19 were excluded from average rate base in the Compliance Application. The following table presents the  
 20 prudence review adjustments for recovery of costs for Unit 1 recorded as an increase in assets not in use (a  
 21 reduction from average rate base) in the Compliance Application:

22  
 23 **Table #51: Prudence Review Adjustments to Average Rate Base for Holyrood Unit 1 Turbine Failure**  
 24 **(2014 and 2015 test year)**

(000's)	Actual 2013	Test Year 2014	Test Year 2015	Average Rate Base Test Year 2014	Average Rate Base Test Year 2015
Cost	\$ (5,601)	\$ (5,601)	\$ (5,601)	\$ (5,601)	\$ (5,601)
Accumulated Depreciation	196	977	1,759	587	1,368
Total	<u>\$ (5,405)</u>	<u>\$ (4,624)</u>	<u>\$ (3,842)</u>	<u>\$ (5,014)</u>	<u>\$ (4,233)</u>

25  
 26

**Deferred Charges – Extraordinary Breaker Repairs**

The Board issued action items to complete repair work related to Hydro’s air circuit breakers and transformers in an interim report dated May 13, 2014 addressing supply issues and power outages on the Island Interconnected System. In the November 2014 amended GRA, Hydro forecasted 2015 extraordinary repair costs of \$1.2 million for air blast circuit breakers and transformers which it requested to be deferred and amortized over a 5 year period. In February 2015 the Board ordered a prudence review of these expenditures. Liberty completed the prudence review and concluded that extraordinary transformer and breaker repairs in excess of \$411,870 were imprudent. In P.U. 13 (2016) the Board ordered that Hydro will not recover expenditures related to extraordinary breaker and transformer repairs.

In response to P.U. 13 (2016) the Company filed its Compliance Application, reporting imprudent deferred charges of \$1,245,000 for 2015 test year which it removed as prudence review adjustments on Schedule 7. To assess accuracy of the prudency review adjustments we reconciled the deferred charges for extraordinary breaker repairs to the Liberty report. We also reconciled the expenditures to the November 2014 amended GRA to ensure the deferred charges for extraordinary breaker maintenance reconciled to the prudence review adjustments disclosed in the Compliance application. The following tables compare the deferred charges in the Compliance Application to the Liberty Report and the November 2014 amended GRA.

**Table #52: Comparison of Compliance Application Disallowed Costs for Deferred Charges of Extraordinary Breaker Repairs to the Liberty Report**

	<u>Compliance Application</u>	<u>Liberty Report</u>	<u>Variance</u>
Deferred Charges (2015 Test Year)	\$ 1,245,000	\$ 1,200,000	\$ (45,000)

**Table #53: Comparison of Compliance Application Disallowed Costs for Deferred Charges of Extraordinary Breaker Repairs to the November 2014 Amended GRA**

	<u>Compliance Application</u>	<u>Amended GRA</u>	<u>Variance</u>
Deferred Charges (2015 Test Year)	\$ 1,245,000	\$ 1,245,000	\$ -

As a result of our procedures for prudence review adjustments of deferred charges for extraordinary breaker repairs we noted variances of \$45,000 due to rounding presentation in the report versus that used in the Compliance Application. There were no variances in the deferred charges disclosed in the Compliance Application compared to the November 2014 amended GRA.

We also recalculated the amortization of \$249,000 disclosed in the Compliance Application. Based on our recalculation we note Hydro has reported prudence review adjustment of amortization using a 5 year period and the amortization matches the amounts reported in the November 2014 amended GRA. Our review of the revised revenue requirement for test year 2015 shows that \$249,000 of disallowed amortization for Unit 1 has been removed from the original revenue requirement filed in the amended GRA.

1 To complete our assessment of deferred charges for extraordinary breaker repairs we ensured the cost and  
 2 amortization disallowances were excluded from average rate base in the Compliance Application. The  
 3 following table presents the prudence review adjustments recorded as reductions to deferred charges in the  
 4 Compliance Application:

5  
 6 **Table #54: Prudency Review Adjustments to Average Rate Base for Sunnyside Terminal Station**  
 7 **Replacement Equipment (2014 and 2015 test year)**

(000's)	Test Year	Test Year	Average	Average
	2014	2015	Rate Base	Rate Base
	Test Year	Test Year	Test Year	Test Year
	2014	2015	2014	2015
Deffered Charges	\$ -	\$ (1,245)	\$ -	\$ (623)
Accumulated Amortization	-	249	-	125
Total	<u>\$ -</u>	<u>\$ (996)</u>	<u>\$ -</u>	<u>\$ (498)</u>

8  
 9



1 **Capital Expenditure Supplier Testing**

2 To assess the completeness of the Company’s disclosures in the Compliance Application we isolated the  
 3 suppliers for imprudent capital projects which crossed over to the Company’s other capital projects. We  
 4 sampled the crossover suppliers to verify the approved capital project code assigned to the project. For  
 5 crossover vendors with purchases totaling \$5,000,000 or greater we tested 100% of the crossover portion  
 6 recorded in other capital projects outside the scope of the prudence review. For the remaining crossover  
 7 vendors recorded in other projects outside the scope of the prudence review we selected a random sample of  
 8 suppliers. The following tables summarize the crossover vendor testing performed:  
 9

10 **Table #55: Capital Expenditure Crossover Supplier Testing 2013**

	<b>Prudence Review Project</b>	<b>Other Project</b>	<b>Total</b>
Crossover Suppliers	\$ 7,648,996	\$ 23,079,481	\$ 30,728,477
No Crossover Suppliers (Note 1)	(1,933,043)	51,719,957	49,786,914
Total	<u>\$ 5,715,953</u>	<u>\$ 74,799,438</u>	<u>\$ 80,515,391</u>

11 Note 1: Balance consists of gross capital expenditures of \$1,390,525 net of insurance proceeds of \$3,323,568.  
 12

13 Of the \$23,079,481 recorded for crossover suppliers in other capital projects outside the scope of the  
 14 prudence review, we sampled 74 crossover supplier transactions totaling \$2,733,151 and found no exceptions  
 15 of imprudent project coding for supplier costs.  
 16

17 **Table #56: Capital Expenditure Crossover Supplier Testing 2014**

	<b>Prudence Review Project</b>	<b>Other Project</b>	<b>Total</b>
Crossover Suppliers	\$ 5,761,090	\$ 84,540,519	\$ 90,301,609
No Crossover Suppliers	(988,284)	115,368,862	114,380,578
Total	<u>\$ 4,772,806</u>	<u>\$ 199,909,381</u>	<u>\$ 204,682,187</u>

18 Note 1: Balance consists of gross capital expenditures of \$837,176 net of insurance proceeds of \$1,826,000.  
 19

20 Of the \$84,540,519 recorded for crossover suppliers in other capital projects outside the scope of the  
 21 prudence review, we sampled 191 crossover supplier transactions totaling \$41,875,917 and found no  
 22 exceptions of imprudent project coding for supplier costs.  
 23

1 **Table #57: Capital Expenditure Crossover Supplier Testing 2015**

	<b>Prudency Review Project</b>	<b>Other Project</b>	<b>Total</b>
Crossover Suppliers	\$ 1,424,920	\$ 32,382,033	\$ 33,806,953
No Crossover Suppliers	124,798	91,347,951	91,472,749
Total	<u>\$ 1,549,718</u>	<u>\$ 123,729,984</u>	<u>\$ 125,279,702</u>

2  
 3 Of the \$32,382,033 recorded for crossover suppliers in other capital projects outside the scope of the  
 4 prudency review, we sampled 208 crossover supplier transactions totaling \$7,753,905 and found no  
 5 exceptions of imprudent project coding for supplier costs.

# 1 Restrictions, qualifications and independence

## 2 Purpose

3 This report was prepared for the Board of Commissioners of Public Utilities in Newfoundland and Labrador.  
4 The purpose of our engagement was to review the Application submitted by Hydro related to Prudency  
5 matters considering if the adjustments reflected were in accordance with P.U. 13 (2016).  
6

## 7 Restrictions and Limitations

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

13 Our scope of work is as set out in our engagement letter, which is referenced throughout this report. The  
14 procedures undertaken in the course of our review do not constitute an audit of Hydro's financial  
15 information and consequently, we do not express an opinion on the financial information provided by Hydro.  
16

17 In preparing this report, we have relied upon information provided by Hydro. We acknowledge that the  
18 Board is bound by the Freedom of Information and Protection of Privacy Act and agree that the Board may  
19 use its sole discretion in any determination of whether and, if so, in what form, this Report may be required  
20 to be released under this Act.  
21

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



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