

1 Q. **Reference: Response to Request for Information NP-NLH-006.**

2 Please update the analysis provided in the response to Request for Information NP-NLH-006 to  
3 include the operation of all of the components of Hydro's proposed deferral account. The  
4 analysis should demonstrate that the overall effect on Hydro's net income is the same under  
5 both the existing and proposed scenarios. Please explain any differences.

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8 A. To demonstrate the overall effect on Newfoundland and Labrador Hydro's ("Hydro") net income  
9 under both the existing and proposed scenarios requires a comparison of an illustrative  
10 December month energy sales and supply costs for 2021 compared to the 2019 Test Year for the  
11 Island Interconnected System. The net income impact for both scenarios was estimated by  
12 calculating the margin for both scenarios after the deferral account activity.

13 The following assumptions were made to provide a comparison of the net income impact:

- 14 • Under the existing deferral accounts Muskrat Falls Project costs, net revenue from  
15 exports, transmission tariff revenue and greenhouse gas credits are not included in the  
16 current definitions. These costs and revenues were not included in the existing scenario,  
17 but to provide the comparison energy delivered from Muskrat Falls was included in the  
18 calculation of the Revised Energy Supply Cost Variance to capture the fuel effects (no  
19 power purchase costs included).
- 20 • The thresholds of +/- \$500,000 in a calendar year, applicable under both the current and  
21 existing deferral accounts, are not included.
- 22 • Holyrood Conversion Rate Deferral Account activity was not calculated since the  
23 Holyrood Thermal Generating Station is no longer required to supply generation upon  
24 commissioning of the Muskrat Falls Project. The difference in the test year fuel costs  
25 and actual costs for the month will be credited to the Supply Cost Variance Deferral  
26 Account.

- Transmission energy losses are assumed to equal the test year forecast under the existing scenario. The variance in transmission energy losses from the test year forecast under the existing scenario impacts net income<sup>1</sup> (valued at the test year cost of fuel). Transmission energy losses on the Island Interconnected System will change materially post-commissioning as a result of the delivery of the Nova Scotia Block and the exporting of excess energy for the Muskrat Falls Corporation. The variance from test year forecast transmission losses under the proposed scenario impacts the energy available for exports (i.e., impacts net revenues from exports).

A summary of the results are provided in Table 1 and detailed entries are provided in NP-NLH-021, Attachment 1.

**Table 1: Margin Impact Example**

	2019 TY	Actual	Deferral Account Activity	Actuals (Incl. Deferral Acct. Activity)	Margin Impact
<b>Existing Supply Deferral Accounts</b>					
Revenue	71,717,104	66,458,686	5,251,395	71,710,081	(7,023)
Supply Cost	37,183,056	11,833,315	25,575,220	37,408,534	225,478
Margin	34,534,048	54,625,371	(20,323,825)	34,301,547	(232,501)
<b>Proposed Supply Cost Variance Deferral Account</b>					
Revenue	71,717,104	70,371,686	1,160,984	71,532,670	(184,434)
Supply Cost	37,183,056	79,336,372	(42,143,269)	37,193,103	10,046
Margin	34,534,048	(8,964,686)	43,304,253	34,339,567	(194,480)

The Existing Supply Deferral Accounts result in a reduction in sales margin of \$232,501 compared to the test year compared to a reduction of \$194,480 in sales margin under the proposed Supply Cost Variance Deferral Account. The difference of \$38,021 is primarily due to the inclusion of the load variation for the Hydro Rural interconnected sales variance in the proposed Supply Cost Variance Deferral Account.

<sup>1</sup> A variance of 1% from test year transmission losses impacts net income by approximately ±\$31,000 per month.

Existing Supply Deferral Accounts  
Margin Impact Example

	2019TY	Actual	Variance	Revised Energy Supply Cost Variance Account			Holyrood Conversion Rate Deferral		Rate Stabilization Plan Activity		Actual (incl. Deferral Acct. Activity)	Margin Impact
				Supply Cost Variance Account	Conversion Rate Deferral	Hydraulic Production Variation	No. 6 Fuel Variation	Load Variation				
<b>Revenue</b>												
<b>Newfoundland Power</b>												
Demand	6,318,445	6,255,260	(63,185)							6,255,260	(63,185)	
Firm Energy	56,177,665	51,036,970	(5,140,695)						5,140,695	56,177,665	-	
Secondary Energy												
<b>Industrials</b>												
Demand	1,035,445	914,196	(121,249)							914,196	(121,249)	
Energy	2,825,064	2,714,364	(110,700)						110,700	2,825,064	-	
Specifically Assigned	26,511	26,511	-							26,511	-	
<b>Rural</b>	5,333,974	5,511,385	177,411							5,511,385	177,411	
	71,717,104	66,458,686	(5,258,418)						5,251,395	71,710,081	(7,023)	
<b>Supply Costs</b>												
<b>Island Thermal</b>												
Holyrood Combustion Turbine	851,255	318,385	(532,870)							532,870	-	
Hardwoods Gas Turbine	179,920	7,602	(172,318)							179,920	-	
Stephenville Gas Turbine	84,827	9,103	(75,724)							84,827	-	
St. Anthony Diesel Plant	-	19,489	19,489							-	-	
Hawkes Bay Diesel Plant	-	12,596	12,596							-	-	
Holyrood Diesels	3,203	10,470	7,267							10,470	7,267	
	1,119,205	377,645	(741,560)							1,126,472	7,267	
<b>On-Island Power Purchases (\$)</b>												
Nalcor Explorts	2,187,360	2,115,820	(71,540)							2,187,360	-	
Star Lake	473,779	468,000	(5,779)							473,779	-	
Rattle Brook	114,868	111,636	(3,232)							115,976	1,108	
CBPP Cogeneration	1,177,500	941,228	(236,272)							1,179,742	2,242	
St. Lawrence Wind	778,316	674,029	(104,287)							782,952	4,636	
Fermeuse Wind	673,188	773,999	100,811							671,108	(2,080)	
CBPP Curtailable Load	498,750	498,750	-							498,750	-	
Vale - Capacity Assistance Diesel	53,200	53,200	-							53,200	-	
Vale Curtailable Load	42,000	-	(42,000)							-	(42,000)	
New World Dairies	-	38,873	38,873							38,873	38,873	
Island Wheeling Charges	64,088	64,088	-							64,088	-	
	6,063,049	5,739,624	(323,426)							6,065,829	2,779	
<b>Off-Island Power Purchases</b>												
Maritime Link	2,052,451	-	(2,052,451)							2,052,451	-	
LL (incl pre-comm)	112,324	-	(112,324)							112,324	-	
	2,164,775	-	(2,164,775)							2,164,775	-	
<b>Holyrood Thermal Generation Costs</b>												
Bunker C	27,836,027	5,716,046	(22,119,981)							28,051,459	215,432	
										1,083,528	2,851,866	
										2,851,866	5,594,717	
	37,183,056	11,833,315	(25,349,741)							37,408,534	225,478	
Margin	34,534,048	54,625,371	20,091,323							34,301,547	(232,501)	

Proposed Supply Cost Variance Deferral Account  
Margin Impact Example

2019TY	Actual	Variance	Other Island		Hollyrood Thermal	Project Cost Variances		Net Revenue from Exports Variance	Transmission Tariff Revenue Variance	Rural Rate Alteration (Load Adj)	Load Variation	Actual (incl. Deferral Acct. Activity)	Margin Impact
			Interconnected System Supply Cost Variance	Supply Cost Variance		Musktrat Falls PPA	TFA Charges						
<b>Revenue (\$)</b>													
<b>Newfoundland Power</b>													
Demand	6,318,445	6,255,260 (63,185)										6,255,260	(63,185)
Firm Energy	56,177,665	51,036,970 (5,140,695)									5,140,695	56,177,665	-
Secondary Energy		-										-	-
<b>Industrials</b>													
Demand	1,035,445	914,196 (121,249)										914,196	(121,249)
Energy	2,825,064	2,714,364 (110,700)									110,700	2,825,064	-
Specifically Assigned	26,511	26,511										26,511	-
<b>Rural</b>	5,333,974	5,511,385 177,411						(1,725,000)		(177,411)		5,333,974	-
Net Revenue from Exports	-	1,725,000 1,725,000							(2,188,000)			-	-
Transmission Tariff Revenue	-	2,188,000 2,188,000										-	-
Greenhouse Gas Credits	-	-										-	-
	71,717,104	70,371,686 (1,345,418)						(1,725,000)	(2,188,000)	(177,411)	5,251,395	71,532,670	(184,434)
<b>Supply Costs (\$)</b>													
<b>Island Thermal</b>													
Hollyrood Combustion Turbine	851,255	318,385 (532,870)		532,870								851,255	-
Hardwoods Gas Turbine	179,920	7,602 (172,318)		172,318								179,920	-
Stephenville Gas Turbine	84,827	9,103 (75,724)		75,724								84,827	-
St. Anthony Diesel Plant	-	19,489 (19,489)		(19,489)								-	-
Hawkes Bay Diesel Plant	-	12,596 (12,596)		(12,596)								-	-
Hollyrood Diesels	3,203	10,470 7,267										10,470	7,267
	1,119,205	377,645 (741,560)										1,126,472	7,267
<b>On-Island Power Purchases</b>													
Nalcor Exploits	2,187,360	2,115,820 (71,540)		71,540								2,187,360	-
Star Lake	473,779	468,000 (5,779)		5,779								473,779	-
Rattle Brook	114,868	111,636 (3,232)		4,341								115,976	1,108
CBPP Cogeneration	1,177,500	941,228 (236,272)		236,514								1,179,742	2,242
St. Lawrence Wind	778,316	674,029 (104,287)		108,922								782,952	4,636
Fermeuse Wind	673,188	773,999 100,811		(102,891)								671,108	(2,080)
CBPP Curtailable Load	498,750	498,750										498,750	-
Vale - Capacity Assistance Diesel	53,200	53,200										53,200	-
Vale Curtailable Load	42,000	- (42,000)										-	(42,000)
New World Dairies	-	38,873 38,873										38,873	38,873
Island Wheeling Charges	64,088	64,088										64,088	-
	6,063,049	5,739,624 (323,426)										6,065,829	2,779
<b>Off-Island Power Purchases</b>													
Maritime Link	2,052,451	- (2,052,451)		2,052,451								2,052,451	-
UL (excl Musktrat)	112,324	- (112,324)		112,324								112,324	-
	2,164,775	- (2,164,775)										2,164,775	-
Hollyrood Thermal Generating Facility	27,836,027	5,716,046 (22,119,981)		22,119,981								27,836,027	-
<b>Musktrat Falls Project ("Project") Costs</b>													
Musktrat Falls PPA Charges	-	32,854,767 32,854,767										-	-
TFA Charges	-	34,648,290 34,648,290										-	-
	37,183,056	79,336,372 42,153,315		3,239,807	22,119,981	(32,854,767)	(34,648,290)					37,183,103	10,046
<b>Margin</b>	34,534,048	(8,364,686) (43,498,733)		(3,239,807)	(22,119,981)	32,854,767	34,648,290	(1,725,000)	(2,188,000)	(177,411)	5,251,395	34,339,567	(194,480)