

1 Q. **Reference: Responses to PUB-NLH-102(c), (d), and (e); IIC-NLH-022(b) and (c) and Attachment**
2 **1; CA-NLH-154; CA-NLH-159(a) and (c); PUB-NLH-084, Attachment 1; PUB-NLH-005, Table 3**

3 IIC-NLH-022(b) states that approximately 455 GWh of Holyrood TGS production is forecast in the
4 2027 Test Year. The minimum generation commitment is 424 GWh annually and 31 GWh can be
5 dispatched above that commitment to meet peaking demand. PUB-NLH-102(c) states that the
6 Holyrood TGS forecast production in the 2027 Test Year is directly attributable to operating the
7 units at minimum stable output for reliability purposes only.

8 a) Reconcile the two statements and explain if 100 percent of Test Year Holyrood TGS fuel
9 consumption is caused by the requirement to keep units available for reliability.

10 b) Provide the barrels of No. 6 fuel and the fuel cost corresponding to the 424 GWh and to
11 the 31 GWh separately, by month, and state the heat rate assumed for each.

12 c) Provide a detailed breakdown of the minimum generation commitment schedule in CA-
13 NLH-159(a) showing the derivation of the 424 GW and confirming that the residual 31.6
14 GWh is dispatch above minimum stable output.

15 d) Provide a revised Schedule F classifying the fuel associated with the minimum
16 generation commitment as demand-related and the balance as energy-related, with the
17 resulting class cost of service and class revenue requirement, and with rate mitigation
18 recalculated.

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20
21 A. a) In order to meet the unit commitments outlined in Newfoundland and Labrador Hydro's
22 ("Hydro") response to CA-NLH-159 of this proceeding, 423.6 GWh of Holyrood Thermal
23 Generating Station ("Holyrood TGS") production is required. Once Holyrood TGS is
24 committed online for this period, the plant is able to be dispatched at higher load levels if
25 the system conditions require. Given that production from this facility is cheaper than
26 alternatives such as combustion turbines, the model chooses to dispatch the plant higher
27 than the minimum commitment in some hours. Due to the Labrador-Island Link ("LIL") being

1 limited to 700 MW as well as the stochastic nature of the analysis, hours when Holyrood
2 TGS is above minimum is predominately due to instances of supply constraints elsewhere on
3 the system. The LIL was modelled at 700 MW due to the timing of the preparation of the
4 2026 General Rate Application forecast; however, as discussed in Hydro's response to
5 IIC-NLH-034 of this proceeding, increasing the LIL capacity from 700 MW to 900 MW, in
6 isolation of other changes, does not have a material impact on the forecast.

7 **b)** The information requested is provided in Table 1.

Table 1: No. 6 Fuel by Month¹

	kWh per Barrel	Generation (GWh)			Minimum	Barrels Above Minimum		Direct Production Costs (Million)			Total Cost Including Fees
		Minimum	Above Minimum	Total		Above Minimum	Total	Minimum	Above Minimum	Total	
January	563	104.2	8.5	112.7	185009	15171	200180	\$14.38	\$1.18	\$15.56	\$15.60
February	563	94.1	8.5	102.6	167105	15153	182258	\$13.29	\$1.21	\$14.50	\$14.54
March	563	43.9	3.7	47.7	78011	6660	84671	\$6.21	\$0.53	\$6.74	\$6.77
April	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.03
May	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.03
June	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.04
July	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.02
August	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.03
September	563	0.0	0.0	0.0	0	0	0	\$0.00	\$0.00	\$0.00	\$0.03
October	563	26.9	1.5	28.4	47744	2727	50471	\$3.80	\$0.22	\$4.01	\$4.05
November	563	50.4	2.2	52.6	89521	3911	93432	\$7.26	\$0.32	\$7.58	\$7.62
December	563	104.2	7.1	111.2	185009	12550	197559	\$15.19	\$1.03	\$16.22	\$16.26
Total	563	423.6	31.6	455.2	752398	56173	808571	\$60.13	\$4.48	\$64.61	\$65.01

¹ Numbers may not add due to rounding.

c) The breakdown of the minimum unit commitment and associated energy is presented in Table 2.

Table 2: Minimum Generation Commitment Breakdown

Start	End	Units	Minimum Commitment	Energy From Minimum Commitment (GWh)	Energy from Generation above Minimum (GWh)
1/1/2027	2/28/2027	2	70	198.2	17.1
3/1/2027	3/14/2027	1	70	23.5	2.1
3/15/2027	3/31/2027	1	50	20.4	1.6
10/16/2027	11/30/2027	1	70	77.3	3.7
12/1/2027	12/31/2027	2	70	104.2	7.1
Total Generation				423.6	31.6

d) PUB-NLH-168, Attachment 1 provides the relative impacts of a revised schedule F, classifying the fuel associated with the minimum generation commitment as demand-related and the balance as energy-related, with the resulting class cost of service and class revenue requirement and with rate mitigation recalculated. The recalculation assumes a split of 6.94% energy and 93.06% demand.² The result of this analysis is an increase in rate mitigation of (\$2,492,027), from (\$501,963,983) to (\$504,456,010).

PUB-NLH-168, Attachment 2 provides a revised Schedule F 1.2 based on the requested scenario.

² Minimum generation commitment of 424 GWh and 31.6 GWh residual is a total of 455.6 GWh. Analysis assumes that the residual is all energy-related; the energy split is 6.94% energy (31.6 GWh/455.6 GWh) and 93.06% for demand.

Schedule F Comparison: Amended Cost of Service Table (Holyrood Fuel Allocation Based on Minimum Generation Commitment) vs Proposed

NEWFOUNDLAND AND LABRADOR HYDRO

2027 Test Year Cost of Service Study

Total System

Comparison of Revenue & Allocated Revenue Requirement

Line No.	Rate Class	1	2	3	4	5	6	7	
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credits	Deficit	RSP Activity	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5) (\$)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)		
Total System									
1	Newfoundland Power ¹		-	293,554	-	(293,555)	-	-	-
2	RSP Activity		-	-	-	-	-	-	-
3	Subtotal Newfoundland Power		-	293,554	-	(293,555)			
4	Island Industrial		(2,484,599)	(2,480,664)	-	-		(2,480,664)	-
5	Unallocated RSP Hydraulic Variation		-	-	-	-		-	-
6	Labrador Industrial		-	-	-	-		-	(0.00)
7	CFB - Goose Bay Secondary		-	-	-	-		-	-
8	Rural Labrador Interconnected		-	-	-	(11,363)		(11,363)	-
Rural Deficit Areas									
9	Island Interconnected		-	-	-	-		-	-
10	Island Isolated		-	(304,917)	-	304,917		-	-
11	Labrador Isolated		-	-	-	-		-	-
12	L'Anse au Loup		-	-	-	-		-	-
13	CFB Revenue Credit Applied to Deficit		-	-	-	-		-	-
14	Subtotal		-	(304,917)	-	304,917		-	-
15	Total		(2,484,599)	(2,492,027)	-	-		(2,492,027)	0.00

¹ This analysis increased Rate Mitigation by \$2,492,027 (from -\$501,963,983 to -\$504,456,010). Analysis also adjusted the Island Industrial revenue requirement.

Schedule F Comparison: Proposed Cost of Service Table

NEWFOUNDLAND AND LABRADOR HYDRO

2027 Test Year Cost of Service Study

Total System

Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7	
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credits	Deficit	RSP Activity	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
Total System									
1	Newfoundland Power		636,811,717	574,037,014	-	62,778,788	-	636,815,801	
2	RSP Activity		-	-	-	-	-	-	
3	Subtotal Newfoundland Power		636,811,717	574,037,014	-	62,778,788	-	636,815,801	1.11
4	Island Industrial		42,815,529	42,815,548	-	-	-	42,815,548	1.00
5	Unallocated RSP Hydraulic Variation		-	-	-	-	-	-	-
6	Labrador Industrial		9,171,998	9,172,200	-	-	-	9,172,200	1.00
7	CFB - Goose Bay Secondary		-	-	-	-	-	-	-
8	Rural Labrador Interconnected		22,231,036	20,039,020	-	2,191,541	-	22,230,560	1.11
Rural Deficit Areas									
9	Island Interconnected		68,909,058	87,315,429	-	(18,406,371)	-	68,909,058	0.79
10	Island Isolated		1,717,949	10,404,402	-	(8,686,453)	-	1,717,949	0.17
11	Labrador Isolated		11,969,343	44,165,488	-	(32,196,145)	-	11,969,343	0.27
12	L'Anse au Loup		4,077,137	9,758,496	-	(5,681,359)	-	4,077,137	0.42
13	CFB Revenue Credit Applied to Deficit		-	-	-	-	-	-	-
14	Subtotal		86,673,487	151,643,815	-	(64,970,328)	-	86,673,487	0.57
15	Total		797,703,766	797,707,596	-	-	-	797,707,596	1.00

¹ Numbers may not add due to rounding.

Schedule F Comparison: Amended Cost of Service Table (Holyrood Fuel Allocation Based on Minimum Generation Commitment)

NEWFOUNDLAND AND LABRADOR HYDRO

2027 Test Year Cost of Service Study

Total System

Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7	
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credits	Deficit	RSP Activity	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	
Total System									
1	Newfoundland Power		636,811,717	574,330,568	-	62,485,233	-	636,815,801	
2	RSP Activity		-	-	-	-	-	-	
3	Subtotal Newfoundland Power		636,811,717	574,330,568	-	62,485,233	-	636,815,801	1.11
4	Island Industrial		40,330,930	40,334,884	-	-	-	40,334,884	1.00
5	Unallocated RSP Hydraulic Variation		-	-	-	-	-	-	-
6	Labrador Industrial		9,171,998	9,172,200	-	-	-	9,172,200	1.00
7	CFB - Goose Bay Secondary		-	-	-	-	-	-	-
8	Rural Labrador Interconnected		22,231,036	20,039,020	-	2,180,178	-	22,219,198	1.11
Rural Deficit Areas									
9	Island Interconnected		68,909,058	87,010,512	-	(18,101,454)	-	68,909,058	0.79
10	Island Isolated		1,717,949	10,404,402	-	(8,686,453)	-	1,717,949	0.17
11	Labrador Isolated		11,969,343	44,165,488	-	(32,196,145)	-	11,969,343	0.27
12	L'Anse au Loup		4,077,137	9,758,496	-	(5,681,359)	-	4,077,137	0.42
13	CFB Revenue Credit Applied to Deficit		-	-	-	-	-	-	-
14	Subtotal		86,673,487	151,338,897	-	(64,665,411)	-	86,673,487	0.57
15	Total		795,219,167	795,215,569	-	-	-	795,215,569	1.00

¹ Numbers may not add due to rounding.

NEWFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service StudyTotal System
Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credits	Deficit	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5) (\$)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	
Total System								
1	Newfoundland Power		636,811,717	574,330,568	-	62,485,233	636,815,801	
2	RSP Activity		-	-	-	-	-	
3	Subtotal Newfoundland Power		636,811,717	574,330,568	-	62,485,233	636,815,801	1.11
4	Island Industrial		40,330,930	40,334,884	-	-	40,334,884	1.00
5	Unallocated RSP Hydraulic Variation		-	-	-	-	-	-
6	Labrador Industrial		9,171,998	9,172,200	-	-	9,172,200	1.00
7	CFB - Goose Bay Secondary		-	-	-	-	-	-
8	Rural Labrador Interconnected		22,231,036	20,039,020	-	2,180,178	22,219,198	1.11
Rural Deficit Areas								
9	Island Interconnected		68,909,058	87,010,512	-	(18,101,454)	68,909,058	0.79
10	Island Isolated		1,717,949	10,404,402	-	(8,686,453)	1,717,949	0.17
11	Labrador Isolated		11,969,343	44,165,488	-	(32,196,145)	11,969,343	0.27
12	L'Anse au Loup		4,077,137	9,758,496	-	(5,681,359)	4,077,137	0.42
13	CFB Revenue Credit Applied to Deficit		-	-	-	-	-	-
14	Subtotal		86,673,487	151,338,897	-	(64,665,411)	86,673,487	0.57
15	Total		795,219,167	795,215,569	-	-	795,215,569	1.00

¹ Numbers may not add due to rounding.

NEFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service Study
Island Interconnected
Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credit	Deficit Allocation	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5) (\$)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	
1	Island Interconnected							
2	Newfoundland Power		636,811,717	574,330,568	-	62,485,233	636,815,801	
	NLP RSP Activity		-				-	
3	Subtotal Newfoundland Power		636,811,717	574,330,568	-	62,485,233	636,815,801	1.11
4	Industrial - Firm							
5	Industrial - Non-Firm		40,330,930	40,334,884	-		40,334,884	
6	Industrial RSP Activity		-	-	-	-	-	
7	Subtotal Industrial		40,330,930	40,334,884	-	-	40,334,884	1.00
8	Unallocated RSP Hydraulic Variation							
			-					
	Rural							
9	1.1 Domestic		18,788,948	28,324,755	-	(9,535,807)	18,788,948	0.66
10	1.12 Domestic All Electric		23,929,645	31,346,106	-	(7,416,461)	23,929,645	0.76
11	1.3 Special		21,704	88,365	-	(66,661)	21,704	0.25
12	2.1 General Service 0-100 kW		12,084,583	13,448,133	-	(1,363,550)	12,084,583	0.90
13	2.3 General Service 110-1,000 kVa		7,645,700	7,726,463	-	(80,763)	7,645,700	0.99
14	2.4 General Service Over 1,000 kVa		5,260,869	4,619,377	-	641,493	5,260,869	1.14
15	4.1 Street and Area Lighting		1,177,608	1,457,313	-	(279,705)	1,177,608	0.81
16	Subtotal Rural		68,909,058	87,010,512	-	(18,101,454)	68,909,058	0.79
17	Total Island Interconnected		746,051,705	701,675,964	-	44,383,779	746,059,743	1.06

¹ Numbers may not add due to rounding.

NEWFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service Study
Island Isolated
Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	2	3	4	5	6	7
		Revenues (\$)	Cost of Service Before Deficit and Revenue Credit Allocation (\$)	Revenue Credit (\$)	Deficit (\$)	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5) (\$)	Revenue to Cost Coverage (Col.2/3)
Island Isolated							
1	1.2 Domestic Diesel	809,510	7,704,844		(6,895,334)	809,510	0.11
2	1.2G Government Domestic Diesel	-	55,464		(55,464)	-	-
3	1.23 Churches, Schools & Com Halls	54,843	367,319		(312,476)	54,843	0.15
4	2.1 General Service 0-10 kW	285,054	823,425		(538,370)	285,054	0.35
5	2.2 GS 10-100 kW	535,299	1,290,296		(754,997)	535,299	0.41
6	2.3 GS 110-1,000 kVa	-	-		-	-	-
7	2.4 General Service Over 1,000 kVa	-	-		-	-	-
8	4.1 Street and Area Lighting	26,859	163,053		(136,195)	26,859	0.16
9	4.1G Gov't Street and Area Lighting	6,384	-		6,384	6,384	-
10	Total	1,717,949	10,404,402		(8,686,453)	1,717,949	0.17

¹ Numbers may not add due to rounding.

NEWFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service Study
Labrador Isolated
Comparison of Revenue & Allocated Revenue Requirement

Line No.	Rate Class	2	3	4	5	6	7
		Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credit	Deficit	Revenue Requirement After Deficit and Revenue Credit Allocation	Revenue to Cost Coverage (Col.2/3)
		(\$)	(\$)	(\$)	(\$)	(\$)	
Labrador Isolated							
1	1.2 Domestic Diesel	4,669,502	25,171,515		(20,502,013)	4,669,502	0.19
2	1.2G Government Domestic Diesel	945,104	894,393		50,711	945,104	1.06
3	1.23 Churches, Schools & Com Halls	328,742	1,337,649		(1,008,907)	328,742	0.25
4	2.1 General Service 0-10 kW	1,505,530	3,692,362		(2,186,832)	1,505,530	0.41
5	2.2 GS 10-100 kW	3,760,679	9,555,598		(5,794,920)	3,760,679	0.39
6	2.3 GS 110-1,000 kVa	364,087	1,830,407		(1,466,319)	364,087	0.20
7	2.4 General Service Over 1,000 kVa	245,160	1,373,675		(1,128,515)	245,160	0.18
8	4.1 Street and Area Lighting	144,155	309,889		(165,734)	144,155	0.47
9	4.1G Gov't Street and Area Lighting	6,384	-		6,384	6,384	-
10	Total	11,969,343	44,165,488		(32,196,145)	11,969,343	0.27

NEWFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service Study
L'Anse au Loup
Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credit	Deficit	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	
L'Anse au Loup								
1	1.1 Domestic		828,511	2,224,304		(1,395,792)	828,511	0.37
2	1.12 Domestic All Electric		1,782,547	4,421,637		(2,639,090)	1,782,547	0.40
3	2.1 General Service 0-100 kW		1,046,118	2,332,950		(1,286,832)	1,046,118	0.45
4	2.2 General Service 10-100 kW		-	-		-	-	-
5	2.3 General Service 110-1,000 kVa		354,037	690,869		(336,832)	354,037	0.51
6	4.1 Street and Area Lighting		65,923	88,737		(22,814)	65,923	0.74
7	Total L'Anse-au-Loup		4,077,137	9,758,496		(5,681,359)	4,077,137	0.42

¹ Numbers may not add due to rounding.

NEWFOUNDLAND AND LABRADOR HYDRO
2027 Test Year Cost of Service Study
Labrador Interconnected

Comparison of Revenue & Allocated Revenue Requirement¹

Line No.	Rate Class	1	2	3	4	5	6	7
			Revenues	Cost of Service Before Deficit and Revenue Credit Allocation	Revenue Credit	Deficit Allocation	Revenue Requirement After Deficit and Revenue Credit Allocation (Col.3+4+5)	Revenue to Cost Coverage (Col.2/3)
			(\$)	(\$)	(\$)	(\$)	(\$)	
1	Labrador Interconnected							
1	Labrador Industrial Firm		9,171,998	9,172,200	-	-	9,172,200	1.00
2	Labrador Industrial Non-Firm		-	-	-	-	-	-
3	Subtotal Industrial		9,171,998	9,172,200	-	-	9,172,200	
4	CFB - Goose Bay Secondary		-	-	-	-	-	-
5	Rural							
5	1.1 Domestic		106,057	206,448	-	22,461	228,908	0.46
6	1.1A Domestic All Electric		11,783,491	12,172,687	-	1,324,347	13,497,035	0.87
7	2.1 General Service 0-10 kW		302,008	302,668	-	32,929	335,597	0.90
8	2.2 General Service 10-100 kW		2,488,347	1,963,429	-	213,614	2,177,043	1.14
9	2.3 General Service 110-1,000 kVa		4,254,476	2,864,082	-	311,602	3,175,684	1.34
10	2.4 General Service Over 1,000 kVa		2,903,849	2,090,121	-	227,398	2,317,519	1.25
11	4.1 Street and Area Lighting		392,808	439,585	-	47,825	487,410	0.81
12	Subtotal Rural		22,231,036	20,039,020	-	2,180,178	22,219,198	
13	Total Labrador Interconnected		31,403,034	29,211,220	-	2,180,178	31,391,398	

¹ Numbers may not add due to rounding.

Line No.	1	2
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ALLOCATION OF DEFICIT:

CUSTOMER DEFICIT ALLOCATION:

Island Interconnected:

Labrador Interconnected: