

October 25, 2019

Board of Commissioners of Public Utilities  
Prince Charles Building  
120 Torbay Road, P.O. Box 21040  
St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon  
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

**Re: Cost of Service Methodology Review Settlement Agreement - Further Information**

On October 16, 2019, the Board of Commissioners of Public Utilities ("Board") provided correspondence to Newfoundland and Labrador Hydro ("Hydro") requesting additional information to assist the Board with its review of the Settlement Agreement entered into by the Parties to the Cost of Service Methodology Review Application. Specifically, the Board requested the quantification of the change in cost allocation to each customer class as a result of the Settlement Agreement, and the completion of a chart provided by the Board comparing the current Cost of Service Methodology with Hydro's proposals and the settled Cost of Service Methodology.

Enclosed please find the original and 13 copies of Hydro's reply to the Board's correspondence along with the requested information. Attachment 1 to this letter contains the quantification of the change in cost allocation by customer class, in the same format as Hydro's response to NP-NLH-001, referenced as Table 1. Table 1 provides a comparison of the 2021 illustrative revenue requirements reflecting the entirety of Hydro's methodology proposals (Column A) and a revised revenue requirement reflecting the settlements that differed from Hydro's proposals (Column B). Column C indicates the difference in revenue requirement between the proposal and the settlement. Column D provides the cumulative revenue requirement difference between Hydro's proposals and each of the settled positions referenced. The basis for comparison in each section is the revenue requirement for Hydro's proposals as presented in the Application. Sections 1 to 4 then indicate the change in revenue requirement for the specific settled issue indicated. The 5th section in Table 1, "All Issues Addressed in Settlement Agreement – Combined," compares the revenue requirement for the entirety of the settled issues in the Settlement Agreement (as indicated in Column B) with the revenue requirement for the entirety of Hydro's proposals (Column A). Column C in the 5th section indicates the difference between the revenue requirements.

Attachment 2 to this letter is the completed chart, as requested by the Board.

Should you have any questions or require further information, please contact the undersigned.

Ms. C. Blundon  
Public Utilities Board

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Yours truly,

**NEWFOUNDLAND AND LABRADOR HYDRO**



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Shirley A. Walsh  
Senior Legal Counsel, Regulatory  
SAW/las

Encl.

cc: **Newfoundland Power**  
Mr. Gerard M. Hayes

**Consumer Advocate**  
Mr. Dennis M. Browne, Q.C., Browne Fitzgerald Morgan & Avis

**Industrial Customer Group**  
Mr. Paul L. Coxworthy, Stewart McKelvey

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**Iron Ore Company of Canada**  
Mr. Gregory A.C. Moores, Stewart McKelvey

**Labrador Interconnected Group**  
Mr. Senwung Luk, Olthuis Kleer Townshend LLP  
Ms. Julia Brown, Olthuis Kleer Townshend LLP

**Table 1: Summary of 2021 Illustrative Revenue Requirements resulting from the Settlement Agreement <sup>1</sup>**  
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Issue / Customer Class	Hydro Proposal (A)	Settlement Agreement (B)	Difference (C)	Cumulative (D)
<b>1 Muskrat Falls Generation - Only</b>				
	Generation	Generation		
	Classification: Equivalent Peaker	Classification: System Load Factor		
Newfoundland Power (before Rural Deficit)	878,406	881,969	3,563	3,563
<b>Total Rural Deficit allocated to NP</b>	<b>67,257</b>	<b>66,890</b>	<b>(367)</b>	<b>(367)</b>
Newfoundland Power (after Rural Deficit)	945,662	948,859	3,197	3,197
Island Industrial	92,814	89,365	(3,449)	(3,449)
Hydro Rural Labrador Interconnected Deficit Allocation	1,485	1,471	(14)	(14)
<b>2 Labrador Island Link - Only</b>				
	Generation	Generation		
	Classification: Equivalent Peaker	Classification: System Load Factor		
Newfoundland Power (before Rural Deficit)	878,406	883,025	4,619	8,182
<b>Total Hydro Rural Deficit</b>	<b>67,257</b>	<b>66,781</b>	<b>(476)</b>	<b>(843)</b>
Newfoundland Power (after Rural Deficit)	945,662	949,806	4,143	7,340
Island Industrial	92,814	88,343	(4,471)	(7,920)
Hydro Rural Labrador Interconnected Deficit Allocation	1,485	1,467	(18)	(32)
<b>3 Labrador Transmission Assets - Only</b>				
	Generation	Generation		
	Classification: Equivalent Peaker	Classification: System Load Factor		
Newfoundland Power (before Rural Deficit)	878,406	879,049	643	8,826
<b>Total Hydro Rural Deficit</b>	<b>67,257</b>	<b>67,190</b>	<b>(66)</b>	<b>(909)</b>
Newfoundland Power (after Rural Deficit)	945,662	946,239	577	7,917
Island Industrial	92,814	92,191	(623)	(8,543)
Hydro Rural Labrador Interconnected Deficit Allocation	1,485	1,482	(3)	(35)
<b>4 Net Export Revenues - Only</b>				
	Generation	Generation		
	Classification: Equivalent Peaker	Classification: System Load Factor		
Newfoundland Power (before Rural Deficit)	878,406	877,757	(649)	8,176
<b>Total Hydro Rural Deficit</b>	<b>67,257</b>	<b>67,323</b>	<b>66</b>	<b>(842)</b>
Newfoundland Power (after Rural Deficit)	945,662	945,079	(583)	7,334
Island Industrial	92,814	93,442	628	(7,914)
Hydro Rural Labrador Interconnected Deficit Allocation	1,485	1,488	3	(32)
<b>5 All Issues Addressed in Settlement Agreement - Combined</b>				
Newfoundland Power (before Rural Deficit)	878,406	886,582	8,176	
<b>Total Hydro Rural Deficit</b>	<b>67,257</b>	<b>66,415</b>	<b>(842)</b>	
Newfoundland Power (after Rural Deficit)	945,662	952,997	7,334	
Island Industrial	92,814	84,899	(7,914)	
Hydro Rural Labrador Interconnected Deficit Allocation	1,485	1,453	(32)	

<sup>1</sup> Illustrative Revenue Requirements also include forecast specifically assigned charges.



	Current Cost of Service Methodology	Hydro's Proposals	Settled Cost of Service Methodology
<b>Systemization</b>			
Labrador Interconnected System and Island Interconnected System.	Separate Labrador Interconnected System and Island Interconnected System systems for cost of service purposes.	Separate Labrador Interconnected System and Island Interconnected System systems for cost of service purposes.	Separate Labrador Interconnected System and Island Interconnected System systems for cost of service purposes.
<b>Functionalization of:</b>			
Power purchase costs from Muskrat Falls Power Purchase Agreement ("PPA") and Transmission Funding Agreement ("TFA").	N/A	Muskrat Falls PPA and TFA functionalized as generation.	Muskrat Falls PPA and TFA functionalized as generation.
Existing Generation and Transmission Assets functionalized as generator leads (identify those transmission lines that are functionalized as generator leads and any proposed changes accepted by parties in settlement agreement).	Existing Generation and Transmission Assets functionalized as generator leads (TL 247 and TL 243) as generation.	Existing Generation and Transmission Assets functionalized as generator leads (TL 247 and TL 243) as generation.	Existing Generation and Transmission Assets functionalized as generator leads (TL 247 and TL 243) as generation.
Existing Transmission Assets except those functionalized as generator leads.	Functionalized as transmission.	Hydro recommended no changes in the functionalization of existing (non-generator lead) transmission assets.	Except for TL 234 and TL 263 and the Holyrood Thermal Generating Station ("Holyrood TGS") Unit 3, the functionalization of Newfoundland and Labrador Hydro's ("Hydro") existing generation and transmission assets shall remain the same.
TL 234 and TL 263.	TL 234 and TL 263 as generation.	TL 234 and TL 263 as transmission.	TL 234 and TL 263 as transmission.
Holyrood TGS Unit 3 after permanent conversion to synchronous condenser.	N/A	Holyrood TGS Unit 3 functionalized as transmission following permanent conversion to synchronous condenser.	Holyrood TGS Unit 3 shall be functionalized as transmission following permanent conversion to synchronous condenser.
Contributions from customers for network additions.	Contribution from customers for new network additions be deducted from rate base.	Contribution from customers for new network additions be deducted from rate base.	Contribution from customers for new network additions be deducted from rate base.
Specifically Assigned Transmission Assets.	Some transmission assets are currently specifically assigned.	Transmission assets currently specifically assigned to customers continue to be specifically assigned.	Transmission assets currently specifically assigned to customers continue to be specifically assigned.

	Current Cost of Service Methodology	Hydro's Proposals	Settled Cost of Service Methodology
Net Export Revenues.	N/A	Net export revenues to be functionalized as generation, in the same manner as the functionalization of the Muskrat Falls Project Costs.	Net export revenues shall be functionalized as generation, which is the same manner as the functionalization of the Muskrat Falls Project Costs.
<b>Classification of:</b>			
Embedded cost of service vs marginal cost .	Based on embedded costs.	Continue to be based on Embedded Costs.	Continue to be based on Embedded Costs.
Existing hydraulic based generation and other power purchases on the island (excluding wind and capacity assistance purchases).	System load factor.	System load factor.	System load factor.
Capacity Assistance Purchases.	100% Demand.	100% Demand.	100% Demand.
Classification between demand and energy for power purchase costs from Muskrat Falls PPA and TFA.	N/A	Classification between demand and energy for the power purchase costs resulting from the Muskrat Falls PPA and the TFA to be 20% demand-related and 80% energy-related based on the equivalent peaker methodology.	Classification between demand and energy for the power purchase costs resulting from the Muskrat Falls PPA and the TFA shall be based on system load factor.
Holyrood TGS generation costs (excluding fuel)	Holyrood TGS using 5 year average capacity factor.	Holyrood TGS generation costs, excluding fuel, should be functionalized as generation and classified using a test year forecast capacity factor.	Holyrood TGS generation costs, excluding fuel shall be functionalized as generation and classified using a test year forecast capacity factor.
Labrador Interconnected System and Island Interconnected System gas turbine and diesel assets and fuel costs.	Labrador Interconnected System and Island Interconnected System diesel and gas turbine units and associated fuel costs as 100% demand.	Labrador Interconnected System and Island Interconnected System diesel and gas turbine units and associated fuel costs as 100% demand.	Labrador Interconnected System and Island Interconnected System diesel and gas turbine units and associated fuel costs as 100% demand.
Isolated Diesel Systems (excluding L'Anse-au-Loup) Generation Assets and associated fuel cost.	Isolated diesel units (excluding L'Anse-au-Loup) using system load factor with associated fuel costs as 100% energy.	Isolated diesel units (excluding L'Anse-au-Loup) using system load factor with associated fuel costs as 100% energy.	Isolated diesel units (excluding L'Anse-au-Loup) using system load factor with associated fuel costs as 100% energy.
L'Anse-au-Loup Generation Assets.	L'Anse-au-Loup generation assets as 100% demand with associated fuel costs as 100%	L'Anse-au-Loup generation assets as 100% demand with associated fuel costs as 100%	L'Anse-au-Loup generation assets as 100% demand with associated fuel costs as 100% energy.

	Current Cost of Service Methodology	Hydro's Proposals	Settled Cost of Service Methodology
	energy.	energy.	
Power Purchase costs on diesel systems.	Power Purchase costs on diesel Systems as 100% energy.	Power Purchase costs on diesel Systems as 100% energy.	Power Purchase costs on diesel Systems as 100% energy.
Power Purchase costs for wind on Island Interconnected System.	Power purchase costs for wind as 100% energy.	Power purchase costs for wind as 22% demand and 78% energy.	Power purchase costs for wind as 22% demand and 78% energy.
Functionalized transmission costs.	100% Demand Related.	100% Demand Related.	100% Demand Related.
Conservation and Demand Management ("CDM") costs.	CDM classified as energy in determining annual recovery by customer class.	CDM classified as energy in determining annual recovery by customer class.	CDM classified as energy in determining annual recovery by customer class. Hydro shall identify any projects and spending in its CDM plan that are justified in whole or in part based on demand related savings, review how demand related CDM is classified in other jurisdictions, provide options regarding establishing a materiality threshold to assess if a change in approach is appropriate, and file a report with recommendations with its next General Rate Application.
Net export revenues and Muskrat Falls Project costs.	N/A	Net export revenues should be classified in the same manner as the classification of the Muskrat Falls Project costs in the cost of service Study.	Net export revenues shall be classified using system load factor, which is the same manner as the classification of the Muskrat Falls Project costs.
<b>Allocation of:</b>			
Production/generation demand costs and transmission among customer classes.	Demand-related costs using 1-CP allocator.	Demand-related costs using 1-CP allocator.	Demand-related costs using 1-CP allocator. Hydro agreed to further review the contribution of different customer classes to the uncertainty parameters in its planning studies (e.g. P50 vs P90), to ensure the calculation of peaks used in the Cost of Service study appropriately reflect the contribution of the different customer classes to the coincident peak used for planning purposes, and file a report with the results of that review with its next General Rate Application.

	<b>Current Cost of Service Methodology</b>	<b>Hydro's Proposals</b>	<b>Settled Cost of Service Methodology</b>
Energy Costs.	Energy-related costs using energy allocator.	Energy-related costs continue to be allocated based on annual energy use by customer class.	Energy-related costs continue to be allocated based on annual energy use by customer class.
Rural Deficit between Newfoundland Power Inc. ("Newfoundland Power") and the Hydro Rural customers on the Labrador Interconnected System.	Rural deficit allocated using revenue requirement method.	Rural deficit allocated using revenue requirement method.	Rural deficit allocated using revenue requirement method.
Operating and Maintenance costs in determination of specifically assigned charges.	Use of indexed asset costs in operating and maintenance cost allocations in the determination of specifically assigned charges.	Use of indexed asset costs in operating and maintenance cost allocations in the determination of specifically assigned charges, subject to a further review in the next General Rate Application.	Use of indexed asset costs in operating and maintenance cost allocations in the determination of specifically assigned charges, until a reasonable alternative is developed. Hydro agreed to provide, in the next General Rate Application following this Settlement Agreement, details of the results of its cost tracking for specifically assigned assets and its assessment of the feasibility of using actual expenses in the calculation of specifically assigned charges.
Generation credit for Newfoundland Power for hydraulic and thermal generation.	Newfoundland Power generation credit provided for both hydraulic and thermal generation.	Newfoundland Power generation credit provided for both hydraulic and thermal generation.	Newfoundland Power generation credit provided for both hydraulic and thermal generation. Hydro agreed to review the methodology for the calculation of the megawatt credit provided to ensure its reasonableness and to report on its review in its next General Rate Application.
Net Export Revenues.	N/A	<p>Net export revenues should be used to reduce the Muskrat Falls supply costs to be recovered through the rates of customers on the Island Interconnected System.</p> <p>Net export revenues should be included in the Test Year Cost of Service Study for rate making with variations from forecast net export revenues to be dealt with through a deferral account mechanism.</p>	<p>Net export revenues shall be included in the cost of service to reduce the supply costs related to the Muskrat Falls Project (inclusive of Muskrat Falls generation, the Labrador Island Link and the Labrador Transmission Assets) to be recovered through the rates of customers on the Island Interconnected System.</p> <p>Net export revenues shall be included in the Test Year Cost of Service Study for rate making with variations from forecast net export revenues dealt with through</p>

	<b>Current Cost of Service Methodology</b>	<b>Hydro’s Proposals</b>	<b>Settled Cost of Service Methodology</b>
<p>Existing Corner Brook Pulp and Paper (“CBPP”) Pilot Agreement.</p>	<p>Since 2009 CBPP has been operating under a piloted generation credit service contract that permits CBPP to maximize the efficiency of its 60 Hz Deer Lake Power generation. The agreement allows Hydro to call on CBPP to maximize its 60 Hz generation prior to increasing generation at Holyrood TGS for system reasons and prior to starting its standby units (i.e., Hydro may make a capacity request to CBPP). Savings are provided to CBPP for providing this additional capacity to the system by permitting CBPP to exceed its firm power requirements without being required to pay a non-firm energy rate.</p>	<p>Hydro proposed to discontinue the generation credit agreement between Hydro and CBPP upon full commissioning of the Muskrat Falls Project. However, Hydro believes CBPP should have the opportunity to manage its generation as efficiently as possible and, to that end, proposes to work with CBPP in the rate design review planned for 2019 to develop a proposal to achieve this objective.</p>	<p>a deferral account mechanism. Hydro agreed to propose the specific deferral account mechanism in its next General Rate Application.</p> <p>The existing CBPP pilot agreement regarding generation credits and the associated cost of service treatment shall continue. Any future changes will be addressed in the review of the industrial rate structure and/or the existing capacity assistance agreement between Hydro and CBPP.</p>

