## HAND DELIVERED

## WHENEVER. WHEREVER. We'll be there.



June 11, 2019

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

Attention:

G. Cheryl Blundon

Director of Corporate Services

and Board Secretary

Ladies and Gentlemen:

Re: NLH Application for Revisions to Cost of Service Methodology - Requests for Information

Please find enclosed the original and 9 copies of Newfoundland Power's Requests for Information NP-NLH-001 to NP-NLH-019 in relation to the above noted Application.

For convenience, the Requests for Information are provided on three-hole punched paper.

A copy of this letter, together with enclosures, has been forwarded directly to the parties listed below.

If you have any questions regarding the enclosed, please contact the undersigned at your convenience.

Yours very truly,

Gerard M. Hayes Senior Counsel

**Enclosures** 

c. Shirley Walsh

Newfoundland and Labrador Hydro

Dennis Browne, QC

Browne Fitzgerald Morgan Avis

Paul Coxworthy Stewart McKelvey Gregory Moores Stewart McKelvey

Dean Porter Poole Althouse Denis Fleming Cox & Palmer

Senwung Luk

Olthius Kleer Townshend LLP

## IN THE MATTER OF

the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 (the "*EPCA*") and the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the "*Act*"), as amended; and

IN THE MATTER OF an application from Newfoundland and Labrador Hydro for approval of revisions to its Cost of Service Methodology pursuant to section 3 of the EPCA for use in the determination of test year class revenue requirements reflecting the inclusion of the Muskrat Falls Project costs upon full commissioning.

Requests for Information by Newfoundland Power Inc.

NP-NLH-001 to NP-NLH-019

June 11, 2019

## **Requests for Information**

NP-NLH-001

Reference: Embedded and Marginal Cost of Service Review, May 3, 2019, The Brattle Group, Table 1, Pages 5-7.

For each of Brattle's recommendations that differs from Hydro's proposal, please quantify the change in the cost allocation to each customer class. Please provide the cost of service study and the principal assumptions used as the basis of Hydro's response.

NP-NLH-002

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 10, Lines 2-5.

"Hydro recommends the use of the equivalent peaker methodology for classification between demand and energy for the classification of power purchase costs resulting from the Muskrat Falls Project. CA Energy Consulting recommended the equivalent peaker approach rather than the other traditional cost of service classification approaches."

Please explain why Hydro recommends that the equivalent peaker method be used to classify the power purchase costs resulting from the Muskrat Falls Project (which includes both generation and transmission costs), but recommends keeping the load factor method for classifying existing hydraulic generation on the Island.

NP-NLH-003

Reference: Embedded and Marginal Cost of Service Review, May 3, 2019, The Brattle Group, Page 32, Lines 11-13.

"For the following reasons, we recommend extending Hydro's current system load factor approach to classification – that is, the approach Hydro is currently using for its hydraulic assets and purchase power agreements – to the Muskrat Falls purchase power agreement."

If the cost of Muskrat Falls generation is classified based on the load factor method, and the costs of the LIL and LTA are classified as 100% demand related, what would be the resulting unit cost of demand (per kW of coincident peak) on the Island Interconnected System? How would this compare to Hydro's proposal to classify these costs based on the equivalent peaker methodology?

NP-NLH-004

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 7, Lines 21-24.

"Hydro proposes to maintain separate cost of service studies for the Labrador Interconnected System and the Island Interconnected System for use in determining customer rates. This approach is consistent with the Government direction exempting customers on the Labrador Interconnected System from paying costs related to the Muskrat Falls Project."

Please provide an estimate of the cost to create a single integrated cost of service study in the future versus maintaining the separate studies now used for the Labrador Interconnected System and the Island Interconnected System.

NP-NLH-005

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 7, Lines 21-24.

"Hydro proposes to maintain separate cost of service studies for the Labrador Interconnected System and the Island Interconnected System for use in determining customer rates. This approach is consistent with the Government direction exempting customers on the Labrador Interconnected System from paying costs related to the Muskrat Falls Project."

Please provide a listing of Hydro's costs that are currently allocated to both the Island Interconnected System and the Labrador Interconnected System but are not specific to either system. In the response, please describe the method or methods now used to allocate these costs between the two systems.

NP-NLH-006

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 4, Lines 3-11.

"This development gives rise to the obligation for Hydro and its affiliated transmission owners to provide open, non-discriminatory access to transmission service on transmission lines used for inter-provincial trade by third parties. This requirement is established by the Federal Energy Regulatory Commission ("FERC"), which is an independent agency that regulates the transmission of electricity in the United States. To meet the FERC requirement of reciprocity, Hydro must provide comparable open access to transmission service over the interprovincial transmission system within Newfoundland and Labrador. From a cost of service perspective, FERC requires that Hydro record its transmission costs in a manner that can be used in the determination of open access transmission tariffs."

Is it Hydro's position that its cost of service methodology relating to the LIL and LTA is determined or limited by FERC requirements? If so, please explain.

NP-NLH-007

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 7, Lines 1-11.

"The NLSO transmission tariff defines the terms, conditions and rates under which a Transmission Customer is provided transmission service over the Newfoundland and Labrador Transmission System.

For Hydro's transmission assets, the NLSO applied the existing approach of determining if any of the high voltage transmission assets were either functionalized as a generator lead or specifically assigned. The addition of TL-269 from Granite Canal to Bottom Brook to support the import and export of energy over the Maritime Link requires a change to the functionalization of Hydro's TL-234 and TL-263 from generator leads to common high-voltage transmission."

Is it Hydro's position that FERC's reciprocity requirement prevents any portion of the cost of a transmission line included in an open access transmission tariff from being classified as energy?

NP-NLH-008

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 7, Lines 6-11.

"For Hydro's transmission assets, the NLSO applied the existing approach of determining if any of the high-voltage transmission assets were either functionalized as a generator lead or specifically assigned. The addition of TL-269 from Granite Canal to Bottom Brook to support the import and export of energy over the Maritime Link requires a change to the functionalization of Hydro's TL-234 and TL-263 from generator leads to common high-voltage transmission."

Does Hydro agree that the primary purpose of TL-269 from Granite Canal to Bottom Brook is to facilitate the export of firm power from the Muskrat Falls generating facility to Nova Scotia and that, once the Muskrat Falls generating facility is fully commissioned, imports utilizing TL-269 will be minimal?

NP-NLH-009

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 7, Lines 6-11.

"For Hydro's transmission assets, the NLSO applied the existing approach of determining if any of the high-voltage transmission assets were either functionalized as a generator lead or specifically assigned. The addition of TL-269 from Granite Canal to Bottom Brook to support the import and export of energy over the Maritime Link requires a change to the functionalization of Hydro's TL-234 and TL-263 from generator leads to common high-voltage transmission."

Please explain how causality is considered in the decision to reclassify TL-234 and TL-263 as 100% demand related.

NP-NLH-010

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, Page 10, Lines 12-15.

"The system load factor approach to cost classification attributes a share of generation investment cost to energy causation based on the ratio of average to system coincident peak production. This formulation assumes that generation investment to meet average load should be distinguished from generation investment designed to meet peak demand."

In its review, Christensen discusses the load factor and equivalent peaker methodologies for classifying the power purchase costs resulting from the Muskrat Falls Project, which are functionalized as generation. Did Christensen review any of the other ways of classifying generation costs (for example, the average and excess method)? If so, what other methods did Christensen review and why were they rejected?

NP-NLH-011

Reference: Newfoundland and Labrador Hydro Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, Page 16, Lines 1-7.

"The equivalent peaker method is viewed by some as giving formal recognition to the generation planner's selection of a range of plants to serve the system. (The argument is that generation planners must design their system to meet not only peak demand, but also the full range of load durations, and to do so at least cost. Costs not incurred to meet peak load are deemed to be incurred to supply energy.) Muskrat Falls is designed to operate as a baseload unit. The equivalent peaker approach would recognize that fact by treating much of its cost as being energy related."

In Christensen's opinion, would the system planning arguments on energy and demand inherent in the equivalent peaker method also apply to the LIL and LTA transmission lines, since they were built primarily to bring energy to the Island?

NP-NLH-012

Reference: Newfoundland and Labrador Hydro Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, Page 34, Line 26 to Page 35 Line 2.

"The LIL is a 1,100 km dc transmission line, stretching from Muskrat Falls in Labrador across the Strait of Belle Isle, then southeast to Soldiers Pond on the Avalon Peninsula. The LIL and MF constitute an integrated resource strategy where the net economic benefits of the strategy are

jointly determined. The incremental economic value of the LIL is compromised absent MF; and similarly for MF, absent LIL."

Would Christensen agree that it is not common to build long transmission lines, such as the LIL, simply for capacity needs? If agreed, please explain why that is the case.

NP-NLH-013

Reference: Newfoundland and Labrador Hydro Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, November 15, 2018, Page 22, Table 2.

Christensen shows, at Table 2, that SaskPower is using an equivalent peaker method to classify generation costs. How long has that method been in use, and why was that method adopted?

NP-NLH-014

Reference: Newfoundland and Labrador Hydro Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, November 15, 2018, Page 32, Lines 1-6.

"Generator Interconnection Facilities: Sometimes referred to as generator leads, interconnection facilities consist of a dedicated equipment bundle associated with the interconnection of generators to the Hydro transmission network. This equipment includes lines, substations, step-up transformers, switchgear, and monitoring equipment;"

From a cost causality perspective, could a very long transmission line built to connect a specific low cost energy source reasonably be considered a generator lead, even if the low cost energy source also connects to another transmission system? Why or why not?

NP-NLH-015

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 4, Lines 7-11.

"To meet the FERC requirement of reciprocity, Hydro must provide comparable open access to transmission service over the interprovincial transmission system within Newfoundland and Labrador. From a cost of service perspective, FERC requires that Hydro record its transmission costs in a manner that can be used in the determination of open access transmission tariffs."

In Christensen's opinion, are the Board's decisions with respect to the functionalization and classification of LIL and LTA costs practically required to conform to the cost allocation underlying open access transmission tariffs? If so, please explain. If not, why not?

NP-NLH-016

Reference: Hydro's 2018 Cost of Service Methodology Review Report, Appendix A – Cost of Service Methodology Review prepared by Christensen Associates Energy Consulting, November 15, 2018, Page 22, Lines Table 2.

To Christensen's knowledge, what other jurisdictions in North America, besides SaskPower, utilize an equivalent peaker methodology to classify generation?

NP-NLH-017

Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review Report, November 15, 2018, Page 6, Lines 21-26.

"Hydro forecasts that export revenues will result from available Recapture Energy, ponding activities, exports to avoid spill, and due to the fact that its current forecast load requirements from Muskrat Falls generation are less than its contacted (sic) entitlement provided in Schedule 2 of the Muskrat Falls PPA Schedule 2. The sharing of the net revenues from these exports need to be considered in the cost of service methodology. The cost of service methodology does not deal with other rate mitigation funds that may be provided from other sources."

Please identify other rate mitigation funds that may be provided, and provide Hydro's views on how consideration of these funds could: (i) impact the timing of the Cost of Service Methodology Review, and (ii) be incorporated into Hydro's proposed Cost of Service methodology.

NP-NLH-018

Order in Council OC2013-343 requires that the cost of supply from the Muskrat Falls Project (including the LIL and the LTA) be recovered in full through Island Interconnected rates charged to the appropriate classes of ratepayers. In Hydro's view, what implications does OC2013-343 have with regards to Hydro's Cost of Service?

NP-NLH-019

The Newfoundland and Labrador System Operator (NLSO), Methodology for the Development of Rates for Transmission Service (the "Methodology") was approved by the Board in Order No. P.U. 3(2018). At Page 19, Lines 21-23, the Methodology states:

"The important issues arising from the functional allocation is to determine the level of costs to be collected through each component of the transmission. This allocation is more often influenced by provincial regulation rather than market forces or FERC."

Has provincial regulation influenced the functional allocation of Hydro's transmission costs as presented in this proceeding? If so, how?

**RESPECTFULLY SUBMITTED** at St. John's, Newfoundland and Labrador, this 11<sup>th</sup> day of June, 2019.

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