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June 11, 2019

Via Electronic Mail and Courier

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

Attention: Ms. G. Cheryl Blundon, Director of Corporate Services and Board Secretary

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro's- Application for Revisions to Cost of Service Methodology- Requests for Information IC-PUB-001 to 016 and IC-NLH-001 to 028

Further to the above, enclosed please find the original and eight (8) copies of the Island Industrial Customers Group Requests for Information dated June 11, 2019 IC-PUB-001 to IC-PUB-016 (directed to the Brattle Group) and IC-NLH-001 to IC-NLH-028 (directed to Hydro and CA Energy Consulting).

We trust this is in order.

Yours truly,

Stewart McKelvey

Paul L. Coxworthy PLC/tas

Enclosures

c: Shirley Walsh, Senior Legal Counsel- Regulatory, Newfoundland & Labrador Hydro Dennis M. Browne, Q.C., Consumer Advocate Gregory Moores, Iron Ore Company of Canada Gerard Hayes, Newfoundland Power Inc. Senwung Luk, Labrador Interconnected Group

HALIFAX

ecc: Newfoundland & Labrador Hydro NLH Regulatory, Email: NLHTegulatory@nlh.nl.ca Newfoundland Power Inc. NP Regulatory, Email: regulatory@newfoundlandpower.com Consumer Advocate Stephen Fitzgerald, Email: sfitzgerald@bfma-law.com

1 IN THE MATTER OF

- the Electrical Power Control Act, 1994
- 2 3 SNL 1994, Chapter E-5.1 (the "EPCA")
- and the Public Utilities Act, RSNL 1990,
- Chapter P-47 (the "Act"), as amended, and
- regulations thereunder; and
- 456789
- IN THE MATTER OF an application from Newfoundland and Labrador Hydro for approval of revisions to its Cost of Service Methodology 10
- 11 12 pursuant to section 3 of the EPCA for use in the
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- determination of test year class revenue requirements reflecting the inclusion of the Muskrat falls Project
- 14
- 15 costs upon full commissioning.
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REQUESTS FOR INFORMATION OF THE ISLAND INDUSTRIAL CUSTOMERS GROUP

IC-PUB-001 to IC-PUB-016 Issued: June 11, 2019

Newfoundland and Labrador Board of Commissioners of Public Utilities June 11, 2019 Page 2

> Sarah Fitzgerald, Email: sarah fitzgerald@bfma-law.com Bernice Bailey, Email: bbailey@bfma-law.com

Dean Porter: email: dporter@poolealthouse.ca Denis Fleming, Email: dfleming@coxand palmer.com

REQUESTS FOR INFORMATION OF THE ISLAND INDUSTRIAL CUSTOMERS GROUP

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The Brattle Group Report on Hydro's COS Methodology Review Application

4IC-PUB-001Please provide the Brattle Group's understanding of the purpose
and function of the Corner Brook Pulp and Paper (CBPP) Pilot
Agreement and of the distinct purpose and function of the CBPP
Capacity Assistance Agreement. As part of the response, please
comment on the differing functions of the Capacity Assistance
Agreement and the Pilot Agreement in relation to Hydro's
dispatchability of capacity.

11IC-PUB-002Paragraph 3(b)(i) of the Electrical Power Control Act, 199412provides

- 13 3. It is declared to be the policy of the province that
- 14(b) all sources and facilities for the production, transmission and distribution of15power in the province should be managed and operated in a manner
- 16 (i) that would result in the most efficient production, transmission and
 17 distribution of power,
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Please provide the Brattle Group's understanding of the extent to which a poorly designed rate for CBPP could result in incentives for CBPP to use its hydraulic generation in an inefficient manner, i.e. to avoid monthly peaks when instead a greater quantity of renewable energy could have been generated if CBPP was incented to dispatch their generation differently. Please confirm whether the Brattle Group did or did not review the extent to which the current CBPP supply contract (absent the Pilot Agreement) may in fact incent this precise inefficient behavior. If the Brattle Group did review the CBPP supply contract/rate design, please provide the Brattle Group's comments on this issue.

30 **IC-PUB-003** Page 60 of the Brattle Group report notes that "Hydro (at 18) 31 believes that the benefits to all customers arising from the fuel 32 cost savings that supported the pilot project implementation are 33 not expected to continue upon commissioning of the Muskrat Falls 34 Project. Hydro proposes to discontinue the generation credit 35 agreement between Hydro and CBPP upon full commissioning of 36 the Muskrat Falls Project. However, Hydro believes CBPP should 37 have the opportunity to manage its generation as efficiently as 38 possible and, to that end, proposes to work with CBPP in the rate 39 design review planned for 2019 to develop a proposal to achieve 40 this objective."

1 2 3 4 5 6 7		The Brattle Group is asked to confirm that absent the Pilot Agreement, CBPP is effectively economically incented (by way of its supply contract with Hydro and rate design) to operate its hydro generation in a manner that would be inefficient, and to purchase excess quantities of power from Hydro ("non-firm" power) that would be unnecessary under a properly structured rate such as the one provided by the Pilot Agreement?
8 9 10 11 12	IC-PUB-004	With reference to IC-PUB-003 above, the Brattle Group is asked to confirm that, absent a new agreement between Hydro and CBPP, cancellation of the CBPP Pilot Agreement would be premature and could lead to inefficient management and operation of hydraulic generation.
13 14 15	IC-PUB-005	The Brattle Group is asked to confirm that there is no incremental cost to Hydro customers from continuing the CBPP Pilot Agreement.
16 17 18 19 20 21 22	IC-PUB-006	Page 33 of the Brattle Group report notes that "our experience is that the equivalent peaker method has more commonly found use in thermal generation-dominated systems." Is the Brattle Group aware of any hydro generation dominated system using the equivalent peaker method? If yes, what is the proportion of the cost classified using the equivalent peaker method?
23 24 25 26 27	IC-PUB-007	Is the Brattle Group aware of whether any of the utilities that use the equivalent peaker method have power purchase arrangements similar to those which will be applicable to Hydro in relation to Muskrat Falls Project, i.e., Hydro's payments are fixed regardless of the amount of energy used?
28 29 30 31 32	IC-PUB-008	Page 38 of the Brattle Group report recommends that "that the capital additions and operations and maintenance costs associated with Holyrood 3's use as a synchronous generator be classified as energy, since those costs are largely dependent on kWh production."
33 34 35		The Brattle Group is asked to confirm that absent requirement for its use as a synchronous condenser, Hydro would not use Holyrood Unit 3 for energy generation purposes.
36 37 38 39 40	IC-PUB-009	With reference to page 38 of the Brattle Group report, if it was determined that the O&M costs of Holyrood Unit 3 were driven primarily by maintaining the condition and readiness of the Unit, and not by the incremental kWh that the Unit enabled, would this change the Brattle Group's recommendation that new costs

41 including O&M should be classified as energy?

1IC-PUB-010Page 9 of the Brattle Group report recommends that "LIS and2IIS diesel and gas turbine units be classified as demand with3variable fuel costs as energy".

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13 14 Hydro, in its 2017 GRA, at page 3.25, stated that "there are peaking requirements assumed for the Island Interconnected System gas turbines in order to maintain minimum generation reserve requirements. The requirements for the gas turbines are determined in consideration of thermal and hydraulic forced outage rates, and in consideration of the peak load forecast and Hydro's typical load duration curve." and that "The Island Interconnected System gas turbines and diesel production also assumes that each plant is exercised at rated output for one hour per month during the non-winter period for testing and for ensuring availability."

- 15Based on the above, in the cost of service study Hydro16classifies fuel costs for diesel and gas turbine units as demand.17However, in addition Hydro maintains the Energy Supply Cost18Variance Deferral Account which captures variances in the19price and volume of Hydro's own diesel and gas turbine20generation, and these variances are allocated to customer21classes based on energy ratios.
- 22Considering all of the above, does Brattle Group agree that the23continuation of the existing practice is more appropriate than24the reclassification of fuel costs for diesel and gas turbine units25as energy?
- 26IC-PUB-011The use of diesel units or gas turbines to produce energy is tied27to peak loadings during winter periods. Although the fuel28produces energy, it is energy tied to use in a specific high load29hour. Absent a high load in this hour, the turbines and diesel30units would not be used.
- 31Please discuss whether these facts would lead the Brattle32Group to conclude that, for diesel units and gas turbines fuel33costs, a CP allocator is more appropriate, or alternatively a34classification to 100% energy, but with allocation based on, for35example, relative energy use over only the key winter months.
- 36IC-PUB-012If Hydro's load was all high load factor, such that energy usage37was the same but peaks were much lower during the winter,38what conclusions would the Brattle Group reach on (a) whether39the gas turbines and diesel units on the IIS would be required40and (b) whether the energy produced by burning fuel in those41turbines and units would be required?
- 42IC-PUB-013Page 64 of the Brattle Group report notes that "rates based43upon marginal costs provide good economic price signals for44consumers and producers and help ensure that scarce

resources are being utilized efficiently." In the view of the Brattle Group, how does the fact that most of the Muskrat Fall costs for Hydro will be fixed impact upon economic price signals and marginal cost?

5 **IC-PUB-014** CA Energy Consulting report, page 19 states that "marginal costs have not been widely used for cost allocation in the past 6 7 due to their computational challenges and the fact that total 8 marginal costs do not necessarily equal the embedded costs 9 that are the object of revenue recovery, subject to regulatory 10 approval". Is the Brattle Group aware of any Canadian major 11 utility that uses marginal cost of service, or marginal cost for 12 cost allocation purposes, in its cost of service study? If so, 13 please provide details on the jurisdiction, the approach to using 14 marginal costs in the cost of service study, and reference the 15 most recent decision by each regulator that approved this 16 approach.

17IC-PUB-015At page 61 of its report, the Brattle Group recommends "that18the export credit be classified and allocated in the same19manner as the Muskrat Falls generation, as discussed above,20namely classified between demand and energy using the21system load factor and allocated using the 1-CP for demand22and the energy allocator for energy."

Hydro will gain revenue from exports that may arise due to energy sales (tied to payments for each kW.h exported) or capacity sales (tied to each kW made available to the export markets). What is the Brattle Group's view on whether it would be more appropriate to classify export revenues based on the relative weighting of these two export products, rather than the system load factor? Please explain the Brattle Group's view on whether or not this approach would be more in line with the classification of export revenue's value.

32IC-PUB-016On page 23 of its report, the Brattle Group notes "Setting rates33based on each classes' relative peak demand reflects the costs34that each class imposes on the utility and provides appropriate35economic signals for customers to make purchases at the peak36that is commensurate with the value of the service.

37Under the cost causation approach to classification and38allocation, the general focus is on the utility planner's39investment decisions to add capacity to meet reliability criteria40such as loss of load probability, reserve margin, loss of load41hours or other measures."

42If the IIS investment in capacity is based not only on the P5043expected load of each class, but on a low probability high44impact peak loading (such as P90 or greater), what is the view

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- of the Brattle Group on whether the CP allocator should take into account the variability in each customer classes' loads between the expected (P50) peak and the planning peak (e.g., P90).
- 6 DATED at St. John's, Newfoundland and Labrador this 11th day of June, 2019.

Island Industrial Customer Group

Per:

Paul Coxworthy, Stewart McKelvey

Denis Fleming, Cox & Palmer

Dean Porter, Poole Althouse

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