NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 37(2019)

1	IN THE MATTER OF the Electrical Power
2	Control Act, 1994, SNL 1994, Chapter E-5.1
3	(the "EPCA") and the Public Utilities Act,
4	RSNL 1990, Chapter P-47 (the "Act"), as
5	amended, and regulations thereunder; and
6	,
7	IN THE MATTER OF an application from
8	Newfoundland and Labrador Hydro for approval
9	of revisions to its Cost of Service Methodology for
10	use in the determination of test year class revenue
11	requirements reflecting the inclusion of the Muskrat
12	Falls Project costs upon full commissioning, pursuant
13	to section 3 of the <i>EPCA</i> .
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Background

In its general rate application filed by Newfoundland and Labrador Hydro ("Hydro") on July 30, 2013 and amended on November 10, 2014 Hydro proposed to conduct a cost of service methodology review prior to its next general rate application to address the expected material change in the forecast supply costs with the commissioning of the Muskrat Falls Project. In the settlement agreements arising from the 2013 general rate application the parties agreed that Hydro would file a report on its review of the cost of service methodology with the Board by March 31, 2016 which would include a review of all matters related to the functionalization, classification and allocation of transmission and generation assets and power purchases. Hydro filed its Cost of Service Methodology Review Report on March 31, 2016.

In June 2016 a delay in the commissioning of the Muskrat Falls Project to 2020 was announced which removed the requirement to address recovery of the costs of the project in Hydro's 2017 general rate application. The settlement agreements to the 2017 general rate application provided that Hydro would file an application for a cost of service and rate design methodology review no later than November 15, 2018. This requirement was confirmed by the Board by letter to Hydro on October 23, 2018.

Application

On November 15, 2018 Hydro filed an application for revisions to its cost of service methodology for use in the determination of test year class revenue requirements reflecting the inclusion of the Muskrat Falls Project costs upon full commissioning (the "Application"). The Application requested that the Board approve the following changes to the cost of service methodology to reflect the inclusion in the test year class revenue requirements of the Muskrat Falls Project costs upon full commissioning:

- a) functionalization of Hydro's TL-234 and TL-263 change from generator leads to common high-voltage transmission;
- b) functionalization of Holyrood Unit 3 as transmission after the unit is permanently converted into the role of synchronous condenser;
- c) power purchase costs resulting from the Muskrat Falls Power Purchase Agreement and the Transmission Funding Agreement be functionalized as generation;
- d) classification between demand and energy for the power purchase costs resulting from the Muskrat Falls Power Purchase Agreement and the Transmission Funding Agreement to be 20% demand-related and 80% energy-related based on the equivalent peaker methodology;
- e) classification between demand and energy for the power purchase costs to the Island Interconnected system for Recapture Energy be based on system load factor;
- classification between demand and energy for the Holyrood Thermal Generation asset costs should be based on a forecast test year capacity factor and its fuel cost would continue to be classified as an energy cost;
- g) classification of the cost of wind purchases be 22% demand-related and 78% energy-related:
- h) the 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;
- i) to discontinue the generation credit agreement between Hydro and Corner Brook Pulp and Paper Limited upon full commissioning of the Muskrat Falls Project;
- j) that net export revenues available will:
 - i) be used to reduce the Muskrat Falls supply costs to be recovered through the rates of customers on the Island Interconnected System;
 - ii) be classified in the same manner as the classification of the charges from the Transmission Funding Agreement and the Muskrat Falls Power Purchase Agreement included in the cost of service study; and
 - iii) be included in the test year cost of service study for rate making with variations from forecast net revenues be dealt with through a deferral account mechanism to be developed by Hydro for the Board's review at the next general rate application.

Application Process

The Application was circulated to the intervenors to Hydro's 2017 general rate application: Newfoundland Power Inc.; the government appointed Consumer Advocate Dennis Browne, Q.C.; the Industrial Customer Group (Corner Brook Pulp and Paper Limited, NARL Refining Limited

- 1 Partnership and Vale Newfoundland and Labrador Limited) and the Labrador Interconnected
- 2 Group (the communities of Sheshatshui, Happy Valley-Goose Bay, Wabush and Labrador City).
- 3 The Board engaged The Brattle Group ("Brattle") to review the Application. The Board issued 32
- 4 requests for information ("RFIs") to Hydro. Brattle's report was filed with the Board on May 3,
- 5 2019 and provided to the parties on May 10, 2019.

On May 29, 2019 a schedule was established for the issuing of RFIs by the parties on the evidence filed to date. A further 150 RFIs to Hydro and Brattle were filed by the Board and parties. On June 21, 2019 the Board established a schedule for the hearing of the Application, including the filing of expert reports by the parties and RFIs arising as well as the opportunity for settlement discussions and a public hearing.

The following expert reports were filed during the proceeding:

- 1. Cost-of-Service Methodology Review Revised Version, Christensen Associates Energy Consulting, LLC, November 15, 2018 (on behalf of Hydro) which updated the report filed on March 31, 2016.
- 2. *Embedded and Marginal Cost of Service Review Amended Report*, The Brattle Group, June 27, 2019 (on behalf of the Board)
- 3. *Pre-filed Evidence of Larry Brockman*, Brockman Consulting, August 5, 2019 (on behalf of Newfoundland Power)
- 4. *Pre-filed Testimony of Andrew McLaren*, Intergroup Consultants, August 5, 2019 (on behalf of the Industrial Customer Group)
- 5. *Pre-filed Evidence of C. Douglas Bowman*, August 5, 2019 (on behalf of the Consumer Advocate)
- 6. Newfoundland and Labrador Hydro's Proposed Cost of Service Methodology, Philip Raphals, Executive Director, Helios Centre, August 9, 2019 (on behalf of the Labrador Interconnected Group)

A total of 111 RFIs were filed on the expert reports which were responded to in full by August 30, 2019. The parties filed issues for settlement discussions by September 6, 2019.

Settlement Agreement

In accordance with the established schedule the parties engaged in settlement discussions during the week of September 16, 2019 which were facilitated by Board hearing counsel. On October 4, 2019 a settlement agreement was filed with the Board setting out the agreement of the parties to the Application on all issues arising from the Application (the "Settlement Agreement"). The Settlement Agreement stated:

The Parties agree that the Cost of Service Methodology approved by the Board in this Cost of Service Methodology Application shall be the accepted methodology for use in the first General Rate Application filed to address recovery of Muskrat Falls Project costs upon full commissioning of, except for any particular issues identified in this Settlement Agreement for further review in the GRA, after which a Cost of Service Methodology Review may be conducted upon request of any of the Parties and approval by the Board for such review. ¹

¹ Settlement Agreement, October 4, 2019, page 2

The Settlement Agreement also set out that the agreement removes the requirement for the experts retained by the Board and the parties to appear before the Board in regards to the Application and recommended that the Board implement the agreement regarding the settled issues in its Order on the Application.

Following the filing of the Settlement Agreement the Board requested additional information from Hydro in relation to the Settlement Agreement, including customer impacts. The additional information was provided by Hydro on October 25, 2019 and revised on October 30, 2019. Comments from Newfoundland Power and the Industrial Customer Group were filed by October 31, 2019. The Consumer Advocate and the Labrador Interconnected Group did not file comments.

The Board advised the parties by letter on November 5, 2019 that a public hearing was not necessary and that the record for the Application was closed.

Board Findings

The commissioning of the Muskrat Falls Project will result in fundamental changes to the electrical system in the province which will result in material changes in the forecast supply costs. The Settlement Agreement sets out the recommendations of the parties as to the cost of service methodology to be used by Hydro in the preparation of its next general rate application following the commissioning of the Muskrat Falls Project. These recommendations were reached through the negotiation of all the parties following the exchange of expert reports and supporting information and, according to the Settlement Agreement, the individual issues are not intended to be severable.

The most significant changes to the cost of service methodology agreed to by the parties address the changing system configuration and cost recovery requirements associated with the interconnection of the Muskrat Falls Project, including proposals for the treatment of Holyrood Unit 3 after conversion to synchronous condenser mode and for the functionalization and classification of net export revenues and for power purchase costs from the Muskrat Falls Power Purchase Agreement and the Transmission Funding Agreement. The Application proposal to include net export revenues in the cost of service to reduce the supply costs related to the Muskrat Falls Project to be recovered through the rates of customers, with any variations from the test year costs to be dealt with through a deferral account, was also agreed upon. It was also agreed that future changes in the existing Corner Brook Pulp and Paper Pilot Generation Credit Agreement will be addressed in the review of the industrial rate structure and/or the existing capacity assistance agreement between Hydro and Corner Brook Pulp and Paper.

The Settlement Agreement also set out the following to be filed by Hydro as part of the next general rate application:

1. A report with recommendations of a review by Hydro to i) identify any projects and spending in its Conservation and Demand Management ("CDM") plan that are justified in whole or in part based on demand related savings, ii) assess how demand related CDM is classified in other jurisdictions, and iii) provide options regarding establishing a materiality threshold to assess if a change in approach is appropriate.

- 2. A report of a review by Hydro of 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.
- 3. Details of the results of Hydro's cost tracking for specifically assigned assets and its assessment of the feasibility of using actual expenses in the calculation of specifically assigned charges.
- 4. A report of a review by Hydro of the methodology for the calculation of the megawatt credit provided to Newfoundland Power to ensure its reasonableness.
- 5. A proposal for the specific deferral mechanism to account for variations from forecast net export revenues in the test year cost of service study.

The Settlement Agreement stated that further review of the above issues will occur in the next general rate application following which a review of the cost of service methodology may be conducted upon request of any of the parties and approval of the Board. It was also agreed that in certain circumstances Hydro may file a request to the Board to delay the filing of its next general rate application.

The Board notes that all the parties and Board counsel signed the Settlement Agreement and Newfoundland Power and the Industrial Customer Group filed additional comments in support of the agreement. According to Newfoundland Power the agreement represents the reasoned consensus and compromise of the parties and should be accepted by the Board. The Industrial Customer Group also stated that the agreement reflects the compromises of the parties and further commented that if it is accepted it would provide certainty to Hydro and the parties.

The Board has reviewed the evidence filed in this proceeding, including the expert reports and the responses to requests for information, and is satisfied that the recommendations in the Settlement Agreement are fully supported by the evidence and are consistent with the provisions of the legislation and generally accepted sound utility practice, including established cost of service principles. In addition, the approach recommended in the Settlement Agreement to address recovery of the costs of the Muskrat Falls Project upon commissioning is reasonable and consistent with the principles of Hydro's currently approved cost of service methodology. The Board is satisfied that the Settlement Agreement should be accepted as it represents a reasoned consensus and compromise and the recommendations reflect an equitable balance between the interests of Hydro and its customers as well as its classes of customers.

IT IS THEREFORE ORDERED:

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1. The recommendations in the Settlement Agreement, as set out in Schedule A, are accepted for use in the preparation of the cost of service study to be filed in Hydro's general rate application upon the commissioning of the Muskrat Falls Project.

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2. Hydro shall pay the expenses of the Board associated with this matter, including the expenses of the Consumer Advocate in incurred by the Board, pursuant to section 117 of the Act.

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10 3. Leave is granted to the intervenors to apply for an award of costs within 30 days of the date of this Order.

DATED at St. John's, Newfoundland and Labrador, this 20th day of November, 2019.

Darlene Whalen, P. Eng., FEC Chair and Chief Executive Officer

Dwanda Newman, LL.B.

Vice-Chair

John O'Brien, FCPA, FCA, CISA

Commissioner

Sara Kean

Assistant Board Secretary

SETTLEMENT AGREEMENT

WHEREAS Newfoundland and Labrador Hydro ("Hydro") has applied to the Board of Commissioners of Public Utilities (the "Board") for approval of revisions to Hydro's Cost of Service Methodology for use in the determination of test year class revenue requirements reflecting the inclusion of the Muskrat Falls Project costs upon full commissioning (the "Cost of Service Methodology Application"); and

WHEREAS the Consumer Advocate; Newfoundland Power Inc. ("Newfoundland Power"); Corner Brook Pulp and Paper Limited, NARL Refining LP and Vale Newfoundland and Labrador Limited (the "Island Industrial Customer Group"); and the customers on the Labrador Interconnected System ("Labrador Interconnected Group") filed expert evidence and issued and answered Requests for Information regarding the Cost of Service Methodology Application; and

WHEREAS Hydro, the Consumer Advocate, Newfoundland Power, the Island Industrial Customer Group and the Labrador Interconnected Group (the "Parties"), with participation by Board Hearing Counsel, have engaged in negotiations regarding the revisions to Hydro's Cost of Service Methodology.

TERMS OF AGREEMENT

- 1. The Parties jointly advise the Board that all issues arising from the Cost of Service Methodology Application have been settled by negotiations between them in accordance with this Settlement Agreement (the "Settled Issues").
- 2. The Parties recommend that the Board implement the agreement of the Parties regarding the Settled Issues in its Order.
- 3. The Parties consent to the admission in the record of this Cost of Service Methodology Application of all pre-filed testimony, exhibits and responses to requests for information pertaining to the Settled Issues. At the hearing of the Cost of Service Methodology Application, the Parties do not intend to present evidence, examine, cross-examine or present argument in relation to the Settled Issues beyond that which is reasonably necessary to assist the Board's understanding, and to explain or clarify the Parties' agreement concerning the Settled Issues.
- 4. This Settlement Agreement represents a reasoned consensus on the Settled Issues and the agreements on individual issues are not intended to be severable.
- 5. This Settlement Agreement disposes of all issues arising from the Cost of Service Methodology Application.

6. Except as provided in paragraph 7 hereof, this Settlement Agreement is without prejudice to the positions the Parties may take in proceedings other than this Cost of Service Methodology Application. It sets no precedent for any issue addressed in this Settlement Agreement in any future proceeding or forum, including, for greater certainty, in future reviews of the Cost of Service Methodology.

MATTERS AGREED UPON

7. The Parties agree that the Cost of Service Methodology approved by the Board in this Cost of Service Methodology Application shall be the accepted methodology for use in the first General Rate Application filed to address recovery of Muskrat Falls Project costs upon full commissioning, except for any particular issues identified in this Settlement Agreement for further review in the GRA, after which a Cost of Service Methodology Review may be conducted upon request of any of the Parties and approval by the Board for such review.

Systemization

8. The Parties agree that the Labrador Interconnected System and Island Interconnected System shall continue to be treated as separate systems for Cost of Service purposes.

Functionalization

- 9. The Parties agree that the power purchase costs resulting from the Muskrat Falls Power Purchase Agreement and the Transmission Funding Agreement shall be functionalized as generation.
- 10. Except as provided for in paragraphs 11 and 12 hereof, the Parties agree that the functionalization of Hydro's existing generation and transmission assets shall remain the same.
- 11. The Parties agree that TL-234 and TL-263 shall be functionalized as transmission.
- 12. The Parties agree that the Holyrood Thermal Generating Station ("Holyrood TGS") Unit 3 shall be functionalized as transmission after the unit is permanently converted into the role of synchronous condenser.
- 13. The Parties agree that any contributions from customers as a result of new network additions be deducted from rate base consistent with the current approach.
- 14. The Parties agree that the transmission assets currently specifically assigned to customers continue to be specifically assigned.
- 15. The Parties agree that the net export revenues shall be functionalized as generation, which is the same manner as the functionalization of the Muskrat Falls Project Costs.

Classification

- 16. The Parties agree that the cost of service methodology shall continue to be based on embedded costs.
- 17. The Parties agree that system load factor shall continue to be used for the classification of Hydro's existing hydraulic based generation and other power purchases on the island (excluding wind and capacity assistance purchases).
- 18. The Parties agree that capacity assistance purchases shall continue to be classified as 100% Demand.
- 19. The Parties agree that the classification between demand and energy for the power purchases costs resulting from the Muskrat Falls Power Purchase Agreement and the Transmission Funding Agreement shall be based on system load factor. For greater clarity, the Parties agree that this is inclusive of the costs related to the Muskrat Falls Generation, the Labrador Island Link and the Labrador Transmission Assets.
- 20. The Parties agree that the classification of Holyrood TGS generation costs, excluding fuel, be based on a test year forecast capacity factor.
- 21. The Parties agree that the Island Interconnected and Labrador Interconnected gas turbine and diesel assets and fuel costs shall continue to be classified as 100% Demand.
- 22. The Parties agree that Isolated Diesel Systems (excluding L'Anse Au Loup) Generation Assets shall continue to be classified using system load factor and associated fuel cost classified as 100% Energy.
- 23. The Parties agree that L'Anse Au Loup Generation Assets shall continue to be classified as 100% Demand with the associated Fuel Costs classified as 100% Energy.
- 24. The Parties agree that Power Purchase costs on diesel systems shall continue to be classified as 100% Energy.
- 25. The Parties agree that Power Purchase costs for wind on the Island Interconnected System shall be 22% demand and 78% energy.
- 26. The Parties agree that all functionalized transmission costs shall continue to be classified as 100% demand related.
- 27. The Parties agree that Conservation and Demand Management ("CDM") costs shall continue to be classified as energy. 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.

28. The Parties agree that net export revenues shall be classified using system load factor, which is the same manner as the classification of the Muskrat Falls Project costs.

Allocation

- 29. The Parties agree that the single coincident peak ("1 CP") approach shall continue to be used in the cost allocation of production/generation demand costs and transmission among customer classes. Hydro agrees to further review the contribution of different customer classes to the uncertainty parameters in its planning studies (e.g. PSO 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.
- 30. The Parties agree that energy costs shall continue to be allocated based on annual energy use by customer class.
- 31. The Parties agree that the revenue requirement method shall continue to be used for allocation of the Rural Deficit between Newfoundland Power and the Hydro Rural Customers on the Labrador Interconnected System.
- 32. The Parties agree that the indexed cost approach shall continue to be used in allocating operating and maintenance costs in the determination of specifically assigned charges pending the development of a reasonable alternative. Hydro agrees 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.
- 33. The Parties agree that Hydro should continue to provide a generation credit for Newfoundland Power for hydraulic and thermal generation consistent with past practice. Hydro agrees 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.
- 34. The Parties agree that 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.
- 35. The Parties agree that 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 a deferral account mechanism. Hydro agrees to propose the specific deferral account mechanism in its next General Rate Application.

36. The Parties agree that the existing Corner Brook Pulp and Paper 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 Corner Brook Pulp and Paper.

General

- 37. This Settlement Agreement removes the requirement for the experts retained by the Board, Consumer Advocate, Newfoundland Power, the Island Industrial Customer Group and the Labrador Interconnected Group to appear before the Board regarding this Cost of Service Methodology Application.
- 38. The Parties agree that this Settlement Agreement addresses all the issues raised in the Cost of Service Methodology Application.
- 39. Hydro agrees that if circumstances permit an extension to the date of filing of the next General Rate Application, currently scheduled for no later than September 2020, and an extension would be legally and fiscally permissible, it shall bring a request to the Board to delay the filing of the General Rate Application.