NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 17(2017)

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, RSNL
4	1990, Chapter P-47, as amended (the "Act"), and
5	regulations thereunder; and
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7	IN THE MATTER OF an application by
8	Newfoundland and Labrador Hydro for approval
9	of rules and rates for a Net Metering Program; and
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11	IN THE MATTER OF an application by
12	Newfoundland Power Inc. for approval of rules
13	and rates for a Net Metering Service Option.
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16	Background
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18	On July 28, 2015 the Government of Newfoundland and Labrador ("Government") released the
19	Provincial Net Metering Policy Framework (the "Framework"). At the same time Government
20	also issued the Net Metering Exemption Order pursuant to the EPCA to facilitate the development
21	of and implementation of net metering programs by Newfoundland and Labrador Hydro
22	("Hydro") and Newfoundland Power Inc. ("Newfoundland Power"). The Net Metering
23	Exemption Order exempts Newfoundland Power and net metering customers from the provision
24	of section 14.1 of the EPCA for customer generating facilities of 100 kW or less up to a system
25	total limit of 5 MW.
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27	Net metering allows utility customers with small-scale renewable generating facilities to generate
28	power for their own consumption, drawing power from the grid when their generation does not
29	fully meet their needs and feeding excess power back to the grid. The stated objective of the
30	Framework is:
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The Framework sets out the policy parameters for program eligibility, including eligible generation sources, applicable customer classes and size of generation, as well as requirements

guidelines, connection requirements, and application processes.¹

...to provide the utilities with the policy parameters to inform the development and implementation of their own net metering programs including the development of appropriate

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¹ Framework, page 2.

for program development, cost allocation, and rates. Under the Framework the utilities are responsible for developing and implementing net metering programs for their respective customers, consistent with the policy direction set out the Framework. The Board is responsible for reviewing the utilities' proposals and approving net metering programs to ensure the rules developed by the utilities are consistent with the *Act* and the *EPCA*.

Applications

On December 2, 2016 Hydro filed an application in respect of its proposed net metering program, requesting approval of revisions to its Schedule of Rates, Rules and Regulations to implement a Net Metering Program. On December 19, 2016 Newfoundland Power filed an application for approval of (i) rates, tolls and charges and (ii) rules and regulations to permit the implementation of a Net Metering Service Option. While separate applications were filed, both Hydro and Newfoundland Power stated that the proposed programs are based on the principles outlined in the Framework. These applications were considered concurrently by the Board.

On January 10, 2017 the Board issued public notice of the applications on its website and in newspapers throughout the province, inviting written comments by February 1, 2017.

On January 25, 2017 the Board wrote Hydro, Newfoundland Power, the Consumer Advocate, Dennis Browne, Q.C., and the Island Industrial customers requesting that they indicate by February 3, 2017 if they intended to participate in the Board's review of the applications. The Board also advised that Requests for Information (RFIs) on the applications must be filed by February 3, 2017 and that further processes would be determined following receipt of public comments.

Written comments were received by the published deadline from: i) Karen Oldford on behalf of Municipalities Newfoundland and Labrador; ii) Kieran Hanley, Executive Director of the Newfoundland and Labrador Environmental Industry Association; iii) Curtis Mercer of K&P Contracting Limited a building contractor qualified to construct net zero housing; and iv) Delia Warren, Director of Iron & Earth East, an energy trades organization. These comments supported approval of the net metering applications. On March 5, 2017 the Board received a written comment from Gerry Skinner, of Labrador Coastal Equipment Ltd. and other named companies, supporting the implementation of net metering but raising concern with the 5 MW cap on net metering program capacity.

The Consumer Advocate indicated that he would participate and filed 14 RFIs with respect to Hydro's application and 16 RFIs related to Newfoundland Power's application. The Board issued 16 RFIs to Hydro and 15 RFIs to Newfoundland Power.

On February 8, 2017 the Board established a further schedule for the applications. All RFIs were answered by February 15, 2017. Written submissions were to be filed by February 24, 2017 with reply submissions from Hydro and Newfoundland Power to be filed by March 6, 2017.

On February 24, 2017 the Consumer Advocate filed a letter requesting a joint public hearing in respect of the applications. The Board considered the request along with responses from Hydro and Newfoundland Power and, on March 15, 2017, advised that it was satisfied that a final

determination on the utilities' net metering applications could be made on the basis of the written record. The Board set a further deadline for submissions of March 23, 2017.

On March 17, 2017 the Consumer Advocate requested the Board reconsider its decision to not hold a public hearing on the applications. Hydro and Newfoundland Power filed submissions on the Consumer Advocate's request for re-consideration on March 21, 2017. On March 24, 2017 the Board denied the request for reconsideration and set a date of March 29, 2017 for further comments from the Consumer Advocate on the merits of the applications. No further submissions were received. Hydro filed a reply submission on April 7, 2017.

Net Metering Proposals

The net metering proposals set out in the applications filed by both Hydro and Newfoundland Power are substantively similar. The key provisions are:

- Eligibility is limited to small-scale renewable energy sources including wind, solar, photovoltaic, geothermal, biomass, tidal, or wave energy.
- Individual renewable generation systems will be limited up to a maximum of 100 kW and cannot be sized beyond a customer's load.
- Meter aggregation is not permitted (only one metering point per account and property).
- A customer's net consumption will be billed using retail rates that are consistent with those that apply to a non-net metering customer of the same size, type and location.
- A customer's net excess generation will be credited at the end of the billing period (e.g. monthly) as a kilowatt hour (kWh) credit.
- Annually, net excess generation will be settled based on a value that reflects system marginal costs.
- Following implementation the utilities will track and monitor participation in its program.

In addition the proposed programs recognize the provincial cap of 5 MW set out in the *Net Metering Exemption Order*.

Both Hydro and Newfoundland Power proposed to deviate from the Framework with respect to the settlement rate for net excess generation.² While the Framework set out that the value for a customer's banked energy credit at the annual review date should reflect the customer's retail rates, both Newfoundland Power and Hydro proposed that the settlement rate be based on marginal costs.³ The utilities advised that, in advance of filing the applications, Government was notified of their intention to propose settlement rates based on marginal costs rather than retail rates.⁴ The Board did not receive any input from Government during the review of the applications in relation to this deviation from the Framework, either by way of a direction pursuant to the *EPCA*, or by way of comments filed in the process of the review of the applications.

Hydro proposed that customers' unused energy credits on the annual review date be credited back to customers as a bill credit based on a value that reflects system marginal costs. According to

² Both Newfoundland Power and Hydro confirmed that the annual settlement rate is the only deviation from the Framework proposed in the applications (PUB-NLH-001 and PUB-NP-002).

³ Framework, section 3.4(ii).

⁴ PUB-NLH-004 and PUB-NP-001, page 3.

Hydro this deviation from the Framework with respect to the value of unused energy credit will "limit the risk of shifting costs to be recovered from non-participating customers, and therefore the subsidization of the net metering program by non-participants." Hydro also suggested that "if retail rates are materially higher than the marginal cost of generation, the potential financial payment may incent net metering customers to overbuild their generation capacity in an attempt to sell excess generation to Hydro and further increase the cross-subsidization provided to net metering customers." The settlement rates proposed by Hydro are:

• On the Island Interconnected system the proposed settlement rate is the wholesale excess energy rate that applies to Newfoundland Power.⁷ This wholesale excess energy rate is the 2nd block energy charge in Hydro's Utility Rate to Newfoundland Power, which is set to reflect the marginal cost of No. 6 fuel consumed at the Holyrood Thermal Generating Station. The 2nd block energy charge is currently set at 9.509¢ per kWh.⁸

 • On the Labrador Interconnected system the rate for all customer classes is proposed to be the Imbalance Energy Rate that applies to excess energy use by Labrador Industrial customers. This rate is updated monthly to reflect the value of energy in the export market and was 4.608¢ per kWh in January 2017. The current Domestic energy charge on the Labrador Interconnected system is 3.28¢ per kWh.

• On Isolated Diesel systems the proposed settlement rate is the excess energy rate in the approved Rates, Rules and Regulations. Hydro considers this rate a reasonable proxy for the marginal cost of No. 2 diesel fuel. Government departments on diesel systems that are charged full embedded cost rates will be credited based on the excess energy rate for the comparable non-Government rate.

 Newfoundland Power proposed that the annual settlement of banked energy credits be in the form of either a cash payment or bill credit and, consistent with Hydro's proposal for the Island Interconnected system, be based upon the then current 2nd block energy charge for Hydro's Utility Rate applicable to service provided to Newfoundland Power.⁹ Newfoundland Power stated that the proposed approach to the annual settlement rate is consistent with the provincial power policy set out in the *EPCA* and that it is broadly consistent with the Framework.¹⁰ In Newfoundland Power's view its proposal to use the 2nd Block Energy Charge is a balanced approach which is consistent with the least cost principle, reasonable and non-discriminatory rates, and accepted regulatory principles.

 Both utilities proposed that the rates to be used in all cases for the settlement of excess generation credits are the approved rates that are in force at the time of determining the credit for any net excess generation during the settlement processes.¹¹ In addition both Hydro and Newfoundland Power proposed that the maximum monthly charge for General Service rates be eliminated for those customers availing of net metering services to reduce the risk of cost subsidization arising

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⁵ Hydro Application Evidence, page 10.

⁶ Ibid., page 11.

⁷ CA-NLH-008.

⁸ The compliance filing dated January 27, 2017 arising from Hydro's Amended General Rate Application proposed an increase in the wholesale excess block rate from 9.509¢ per kWh to 10.422¢ per kWh. A follow-up compliance filing from Hydro is pending as a result of Order No. P.U. 14(2017).

⁹ Newfoundland Power Application Evidence, pages 13-14.

¹⁰ PUB-NP-001, page 6.

¹¹ CA-NLH-014.

from shifting demand cost recovery between these customers. The maximum monthly charge limits the demand costs that low load factor customers with peak demands of 10 kW or greater are required to pay. As explained by Newfoundland Power:

Some customers with generating facilities interconnected to Newfoundland Power's electrical system may have monthly bills with low net energy usage but still have used the Company's system to meet its full peak demand requirement in the month. For such customers, it is fair that they pay the costs of the capacity used in the month and not an amount limited by application of the maximum monthly charge.¹²

Board Decision

As set out in the Framework the Board's responsibility is to review the utilities' proposals and ensure the rules developed by the utilities are consistent with the *EPCA* and the *Act*. Sections 3 and 4 of the *EPCA* require that the Board be satisfied that the proposed net metering programs:

• are consistent with sound public utility practice;

 permit the management of all sources and facilities for the production, transmission and distribution of power in the province consistent with the least cost delivery of service to customers; and

 • are reasonable and not unjustly discriminatory.

Adherence to these legislative requirements requires that the Board establish that the proposed net metering programs are fair to both participating and non-participating customers and are consistent with the least cost delivery of service in the province.

The net metering proposals set out in the applications are consistent with the provincial net metering policy set out in the Framework except with respect to the proposed annual settlement rate to be paid for net excess generation. Both Hydro and Newfoundland Power have proposed settlement rates that represent, or at least can be considered as a proxy for, the avoided cost on each system.

The Board is satisfied based on the information provided that the proposed settlement rates reasonably reflect the avoided costs on each system and would provide for a transparent and consistent approach for the annual settlement of net excess generation. Further, a settlement rate for net excess generation that is reflective of the avoided or marginal cost can reduce the risk of cross subsidization with non-net metered customers, since incremental costs above this rate would have to be paid by all customers. The Board accepts that variations in annual energy usage due to generation, weather, occupancy or other factors are to be expected which may, in some years, result in net excess generation credits. The Board believes that this excess energy has value to the system which should be recognized. The Board finds that a settlement rate based on avoided cost is a reasonable approach in the circumstances to assign fair value to the energy credits to the benefit of the net metering customer while, at the same time, being consistent with the least cost provision of service to all customers. The Board will approve the implementation of the net metering programs proposed by both Hydro and Newfoundland Power.

¹² Newfoundland Power Application Evidence, page 16.

The Board notes that Hydro's general rate application is ongoing and it is expected that final rates for both Hydro and Newfoundland Power will be approved effective July 1, 2017. The net metering applications were filed in advance of the approval of final rates, rules and regulations resulting from Hydro's general rate application process. To ensure the coordinated implementation of the revisions to the rates, rules and regulations associated with the net metering applications and Hydro's general rate application, Hydro and Newfoundland Power will be required to file revised rates, rules and regulations, effective July 1, 2017, for the approval of the Board.

In terms of ongoing monitoring the Board notes that the Framework provides that the utilities are responsible for monitoring their own net metering programs. As part of its general oversight role the Board will require each utility to provide an annual report on application and take-up rates, total customer generation installed, associated costs, and any additional relevant information.

IT IS THEREFORE ORDERED THAT:

1. Hydro's proposal to revise its Schedule of Rates, Rules and Regulations to permit the implementation of the net metering program is approved, to be effective as of July 1, 2017.

2. Hydro shall file a revised Schedule of Rates, Rules and Regulations for the approval of the Board.

3. Newfoundland Power's proposal to revise its i) rates, tolls and charges and ii) rules and regulations to permit the implementation of the net metering program is approved, to be effective as of July 1, 2017.

4. Newfoundland Power shall file revised i) rates, tolls and charges and ii) rules and regulations for the approval of the Board.

5. Hydro and Newfoundland Power shall provide an annual report, beginning on April 1, 2018, on their respective net metering programs.

34 6. Hydro and Newfoundland Power shall pay the costs and expenses of the Board associated35 with these applications, to be shared equally.

DATED at St. John's, Newfoundland and Labrador, this 18th day of May, 2017.

Darlene Whalen, P. Eng.

Vice-Chair

Dwanda Newman, LL.B.

Commissioner

Board Secretary