

IN THE MATTER OF the *Electrical Power Control Act*, 1994, SNL 1994, Chapter E-5.1 (“EPCA”) and the *Public Utilities Act*, RSN 1990, Chapter P-47 (“Act”);

AND IN THE MATTER OF the Non-Firm Rate Application, filed by Hydro.

SUBMISSIONS OF THE LABRADOR INTERCONNECTED GROUP

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Introduction

1. The Labrador Interconnected Group (the “LIG”) represents the communities of Sheshatshiu, Happy Valley-Goose Bay, Wabush, and Labrador City. These communities are all part of the Labrador Interconnected System. The LIG respectfully submits that the Board should include the conditions set out below in any approval of Hydro’s proposed non-firm rate.

Procedural history and background

2. As part of its process surrounding the review and approval of the *Network Additions Policy – Labrador Interconnected System*, Hydro determined that there is available transmission capacity in Labrador that could be used to provide non-firm service to a limited number of customers in Labrador. Hydro therefore committed to conducting a review of the feasibility of the addition of a non-firm rate option. While the non-firm rate option would be available to all types of customers, it widely understood that this non-firm rate would be of particular (and perhaps exclusive) interest to cryptocurrency miners either operating in or proposing to operate in Labrador.
3. On June 30, 2021, Hydro filed its report with the Board setting out Hydro’s conclusion that a non-firm rate was technically feasible for a limited number of customers on the Labrador Interconnected System. Following its review of non-firm rate structures in other jurisdictions,

Hydro submitted its application for a non-firm rate to the Board on September 15, 2022. In its application, Hydro proposed to base the non-firm rate on the incremental cost of supply, which will reflect the market value of energy exports, plus a demand charge.

ORDER IN COUNCIL 2022-266

4. On November 10, 2022, the Lieutenant Governor in Council promulgated Order in Council 2022-266 (“OiC 2022-266”). OiC 2022-266 exempts Hydro from supplying firm electrical power to applicants from the cryptocurrency industry.
5. This was a significant development. Hydro interprets the *Electrical Power Control Act* as requiring it to provide firm electrical power to any applicant for that power. If an applicant’s power needs cannot be met by existing generation and transmission capacity, Hydro must proceed to develop additional generation and transmission capacity to meet the new demand. The *Network Addition Policy* protects ratepayers to a certain extent from the costs of new transmission investments required to serve new customers, but there is no similar instrument to protect existing customers from the costs of new generation investments made necessary by new demand.
6. Before the OiC, applications were submitted for thousands of megawatts of firm power by cryptocurrency operators in Labrador – far in excess of existing generation and transmission capacity. Serving these applicants would require Hydro to build substantial generation and transmission assets, and to pass those costs (except for the transmission costs borne by the new demand in accordance with the *Network Addition Policy*) onto all ratepayers. The OiC prevents that outcome by ensuring that Hydro will not have to build additional transmission or generation capacity to provide firm service to cryptocurrency operators in Labrador.

The LIG's requests for information

7. The LIG submitted 11 requests for information in this application. RFIs 2 (LAB-NLH-002); 8 (LAB-NLH-008); and 11 (LAB-NLH-011), and Hydro's responses, are particularly relevant to these submissions.
8. In LAB-NLH-002, the LIG asked about, among other things, the apparently contradictory positions taken by Hydro with respect to whether or not it would require non-firm customers to pay a demand charge. On page 38-39 of the application, Hydro suggested that they should pay a demand charge, stating:

As the non-firm customers would use the transmission system, Hydro believes it would be appropriate for the customers to pay a transmission demand charge based on the average embedded cost of demand.

9. However, on page 22 of the same application, it stated that they would not.
10. In response to the RFI, Hydro confirmed that it had reversed its position, and concluded that non-firm customers should not pay a demand charge:

Newfoundland and Labrador Hydro ("Hydro") changed its position on whether it should apply a demand charge for non-firm service based on the review of the pricing approach of surplus/additional energy conducted by Christensen Associates Energy Consulting, LLC ("CA Energy Consulting") which is provided in Schedule 1, Attachment 2.1 The CA Energy Consulting review indicated that no demand charges are applied in the sale of surplus/additional energy by BC Hydro, Manitoba Hydro, NB Power and Hydro-Québec. Hydro also notes that the application of a demand charge is not consistent with an incremental cost approach to pricing for non-firm energy. There are no incremental common transmission or generation capacity costs as a result of the provision of the proposed non-firm service.

11. In LAB-NLH-008, the LIG asked about, among other things, Hydro's proposed load prioritization, which would limit the ability of mines to take available energy in excess of their contracted amounts. The proposal would require that available surplus energy be shared with non-firm customers.

12. Hydro indicated, among other things, that mines and cryptocurrency operators would have equal priority to energy in excess of industrial customers' contracted amounts of interruptible power and non-firm customers' allocations. In effect, this would put non-firm customer allocations ahead of industrial customers' use above their contractual amounts, and place industrial customers on an equal footing with cryptocurrency operators for load in excess of those customers' allocations:

Hydro proposes the non-firm service be implemented via the following:

Any demand usage by Labrador mines in excess of their contracted interruptible load availability would be based on equal sharing of available excess capacity with other non-firm rate customers after the non-firm rate customers have had the opportunity to fully use their allotments.

Load would be served in the following priority:

1. Firm Town Loads.
2. Firm Industrial Customer Loads up to the contracted Power on Order.
3. Interruptible Industrial Customer Loads up to contracted amounts.
4. Non-Firm Rate Customer Loads up to their allocations.
5. Equal sharing of any additional excess capacity between Industrial customers and non-firm rate customers.

13. In LAB-NLH-011, the LIG asked, among other things, whether Hydro's conclusion that "even if the available transmission capacity were fully utilized at a 100% capacity factor, surplus recapture energy would not be exhausted" takes into account potential non-firm sales that are located near Churchill Falls or near the Muskrat Falls Terminal Station, in order to avoid transmission constraints.

14. Hydro confirmed that it does not:

The statement does not take into account non-firm service for locations near Churchill Falls or near the Muskrat Falls Terminal Station. The study was completed using existing transmission infrastructure serving Labrador West (Labrador City–Wabush area) and Labrador East (Happy Valley-Goose Bay area) only.

15. The LIG’s RFIs and Hydro’s responses are relevant to the LIG’s submissions below.

The LIG’s position

16. The LIG makes four submissions regarding Hydro’s application.

1. Hydro’s allocation of non-firm revenues

17. The LIG’s first submission concerns how non-firm revenues generated in Labrador should be applied.

18. Hydro proposes in PUB-NLH-004 that “non-firm revenues from Labrador customers should contribute to the rate mitigation required to keep electricity rates affordable on the Island Interconnected System.” In effect, Hydro proposes to use revenues from electricity consumed in Labrador to subsidize rates on the Island.

19. This arrangement may be reasonable while existing energy demand in Labrador can be satisfied with Recapture Energy. However, when the available supply of Recapture Energy is exhausted, Hydro will be required to supply Labrador with energy from other sources. This may cause rates in Labrador to increase.

20. At that time, it is respectfully submitted that non-firm revenues generated in Labrador should go towards offsetting rates in Labrador. Therefore, the LIG respectfully submits that the Board, as a condition of approving Hydro’s proposed non-firm rate should:

- a. require Hydro to advise the Board when there is no longer sufficient Recapture Energy available to meet energy requirements in Labrador; and
- b. from that time on, require Hydro to direct non-firm revenues generated in Labrador towards offsetting rates paid by Labrador ratepayers.

2. The non-firm rate's potential to contribute to exhaustion of Recall Energy

21. The LIG's second submission concerns the potential for non-firm sales to exhaust surplus Recapture Energy.
22. Hydro confirmed in response to PUB-NLH-011 that its conclusion that using available transmission capacity at 100% will not exhaust surplus Recapture Energy does not account for non-firm sales located near Muskrat Falls or Churchill Falls. In other words, it is possible that non-firm sales could exhaust surplus Recapture Energy, even in light of existing transmission constraints, if non-firm customers locate themselves near to Muskrat Falls or Churchill Falls.
23. Furthermore, it is entirely possible that new transmission will be built in Labrador in the coming years in response to growing demand from industrial or rural customers. It is possible, and indeed likely, that any new transmission assets will have surplus capacity, in order to allow for subsequent load growth.
24. In such an event, the additional transmission capacity would allow for additional potential energy deliveries to Non-Firm Customers, above and beyond the amounts identified in Table 1 of LAB-NLH-011. It is thus entirely possible that energy deliveries to Non-Firm Customers will accelerate the exhaustion of Recapture Energy.
25. OiC 2022-266 exempts Hydro from the obligation to provide firm service to cryptocurrency customers and allows for non-firm service only on the condition that said service would not require "new generation infrastructure." However, this wording does not prevent Hydro from using power from other existing infrastructure, above and beyond Recapture Energy, to serve firm and non-firm customers in Labrador. Thus, for example, the OiC would not prevent Hydro from using power from the Muskrat Falls Generating Station ("MFGS") to serve non-firm customers, once Recapture Energy is exhausted. As energy from MFGS will necessary

be significantly more expensive than Recapture Energy, this would result in upward pressure on rates in the Labrador Interconnected System.

26. The LIG there respectfully requests that:

- a. the Board specify that Non-Firm Customers can only be served using Recapture Energy; and
- b. service to Non-Firm Customers necessarily be curtailed whenever such service would require Hydro to supply the LIS with energy from any source other than Recapture Energy.

3. Demand charge for non-firm rate customers

27. The LIG's third submission concerns the need for non-firm customers to pay a demand charge.

28. Hydro's evidence presents two contradictory positions in this regard. On page 11 of Schedule 1, Attachment 1¹ (p. 38 of the pdf), Hydro wrote:

As the non-firm customers would use the transmission system, Hydro believes it would be appropriate for the customers to pay a transmission demand charge based on the average embedded cost of demand.

29. However, on page 9 of Schedule 1, it indicated the opposite, stating "the non-firm customers will not pay explicitly for the use of the common transmission facilities system through customer rates."

30. The contradiction is explained in PUB-NLH-006, where Hydro acknowledges that it changed its position on this issue following its review of the CA Energy Consulting report. Its current position is thus that non-firm customers should not be required to pay a demand charge for

¹ "Feasibility of the Addition of a Non-Firm Rate Option to the Network Additions Policy for the Labrador Interconnected System."

their use of transmission assets, which it justifies on the basis that other utilities do not charge non-firm customers a demand charge.

31. Implicitly, Hydro is referring to Table 1 of Schedule 1, Attachment 2 (page 9 of 19 of the CA Energy Consulting report), which summarizes the non-firm incremental energy designs at four other Canadian utilities. None of these utilities includes a demand charge in its Incremental or Surplus Energy rate.
32. Respectfully, Hydro's proposal is unfair and unreasonable. In the present context, not requiring non-firm customers to pay a demand charge permits them to free-ride on the transmission system, the capital and operating expenses of which are funded by other customers through demand charges. Put simply: if Hydro's proposal were accepted, non-firm customers would not be required to make any contribution to the capital and operating costs of a system which they use. This is unfair and unreasonable to the customers that pay the costs of that system.
33. Hydro's reliance on the examples cited by Christensen in other Canadian jurisdictions is misplaced. Each of these rates is for the sale of surplus or incremental energy to existing customers. In other words, these are customers with existing contracts to buy power, under firm power rates that do include demand charges. These customers already pay a demand charge as part of their existing contracts, and therefore already contribute to the upkeep of the transmission system. Since there are no additional transmission costs caused by their purchase of surplus or incremental power, no additional demand charges are levied as part of the surplus or incremental rate.
34. The proposed non-firm rate structure is materially different. Non-firm rate customers are not existing customers. They do not and, under Hydro's proposal, never will pay a demand charge

that contributes to the capital and operating costs of the transmission system. Hydro's rationale for not charging a demand charge is therefore based on an inapt comparator.

35. The LIG therefore respectfully requests that the Board require Hydro to impose a demand charge, as per Schedule 1, Attachment 1 or in an amount the Board determines to be reasonable, in any non-firm rate structure that the Board approves.

4. Hydro's proposed priority for allocating load

36. The LIG's fourth submission concerns the priority in which Hydro proposes to allocate excess capacity.

37. We understand from LAB-NLH-008 that Hydro will allocate load as follows: (a) Firm Town Loads; (b) Firm Industrial Customer loads up to the contracted Power on Order; (c) Interruptible Industrial Customer Loads up to contracted amounts; (d) Non-Firm Rate Customer Loads up to their allocations; and (e) equal sharing of any additional excess capacity between Industrial customers and non-firm rate customers.

38. Respectfully, NLH's proposed priority for allocating load is unreasonable. Industrial customers should have priority over non-firm loads for any additional energy they require, including amounts that exceed their contracted amounts. This is because energy is a scarce and valuable resource, and the allocation of load should correspond to the economic benefits these various customer types bring to Labrador. Industrial customers constitute an important part of the Labrador economy and provide significant employment and economic spinoffs, to a far greater extent that can be expected from cryptocurrency operators or other non-firm loads. Insofar as surplus energy is exists, it should thus be made available to Labrador's industrial customers, without limitation, in priority over non-firm loads.

39. The LIG therefore respectfully submits that the Board should include in any approval it grants for the non-firm rate the following order of priority for load in Labrador:

- a. Firm Town Loads;
- b. Firm Industrial Customer loads up to the contracted Power on Order;
- c. Interruptible Industrial Customer Loads, without limitation; and
- d. Non-Firm Rate Customer Loads.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

DATED at Toronto, Ontario, this 18th day of August, 2023.

OLTHUIS KLEER TOWNSHEND LLP



Nick Kennedy

TO: The Board of Commissioners of Public Utilities
Suite E210, Prince Charles Building
120 Torbay Road
PO Box 21040
St. John's, NL A1A 5B2
Attn: Board Secretary
Jacqui H. Glynn
PUB Official Email

TO: Newfoundland & Labrador Hydro
PO Box 12400
500 Columbus Drive
St John's, NL A1B 4K7
Attn: Shirley A. Walsh
Senior Legal Counsel