

**NEWFOUNDLAND AND LABRADOR  
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

**AN ORDER OF THE BOARD**

**NO. P.U. 32(2018)**

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 by  
8 Newfoundland and Labrador Hydro for  
9 approval of a regulation to restrict load  
10 additions in Labrador East.  
11  
12

13 **Background**  
14

15 On July 28, 2017 Newfoundland and Labrador Hydro (“Hydro”) filed its 2018 Capital Budget  
16 Application which included a project to address both forecast capacity shortfalls and reliability  
17 issues on the Labrador East system.<sup>1</sup> In Order No. P.U. 43(2017) the Board deferred consideration  
18 of this project on the basis that the evidence did not demonstrate that it was necessary and  
19 consistent with the least-cost provision of service. Following the filing of additional information  
20 by Hydro, the Board found in Order No. P.U. 9(2018) that further information was required before  
21 the proposed work in Labrador East would be approved. The Board acknowledged the reliability  
22 concerns in Labrador East for 2018-2019 and stated:  
23

24       Based on the record it appears that, despite the size of the forecast load increase relative to  
25       the existing loads on the system and the costs associated with addressing this increase,  
26       Hydro has not completed a comprehensive plan to address load growth and reliability on  
27       the Labrador Interconnected system. In particular Hydro did not demonstrate that it has  
28       explored options to manage load in the context of additional demand.<sup>2</sup>  
29

30       As part of the application for approval of such a significant project Hydro is required to  
31       demonstrate that it conducted appropriate planning for the system in a comprehensive  
32       manner which would include development of reasonable planning criteria, identification  
33       of needs on the system and assessment of reasonable alternatives. This planning must  
34       address both Labrador East and Labrador West as they are both part of the Labrador  
35       Interconnected system. In addition, Hydro would be expected to address its obligation to

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<sup>1</sup> The Muskrat Falls to Happy Valley Interconnection Project, 2018 Capital Budget Application, Volume I, page C-44

<sup>2</sup> Order No. P.U. 9(2018), page 8

1 provide least cost reliable service, considering the impact on existing customers of meeting  
2 new loads which may affect adequacy or reliability on the system.<sup>3</sup>

3  
4 The Board directed Hydro to file a proposed plan in relation to the provision of reliable service in  
5 Labrador East in 2018-2019 as well as a proposal in relation to the process and timelines for further  
6 consideration of the proposed Labrador East project.

7  
8 On April 16, 2018 and April 24, 2018 Hydro filed correspondence setting out its plan to ensure  
9 the provision of reliable service in Labrador East, which included a plan to develop an approach  
10 to limit the amount of load growth related to requests for service connections or upgrades during  
11 2018.

### 12 **Application**

13  
14  
15 On May 31, 2018 Hydro filed an application for approval of a proposed new regulation permitting  
16 a restriction for load additions in Labrador East pursuant to section 71 of the *Act* (the  
17 “Application”). The Application stated that Hydro believes that it is necessary to limit load growth  
18 on the Labrador East system to enable the provision of reliable service to customers for the 2018-  
19 2019 winter season. The Application requested approval of a regulation to limit the load  
20 requirement that Hydro will be required to provide to customers requesting service as follows:

#### 21 **17. TEMPORARY RESTRICTION FOR LOAD ADDITIONS TO LABRADOR EAST**

22  
23  
24 Effective {insert date}, Hydro will not provide service connections or service upgrades to  
25 an Applicant that will result in the addition of load requirements of greater than 100 kW  
26 on the Labrador East System. The load addition limit applies to Applicants for single  
27 service connection requests for load additions in excess of 100 kW and to Applicants  
28 requesting multiple service connections for which the total load addition of the multiple  
29 service requests exceeds 100 kW. The load addition limit to Applicants for multiple  
30 services will apply to both service requests made concurrently and service requests made  
31 at different times for the period while this regulation is in effect.

32  
33 All Applicants for new services and for name changes on existing services shall complete  
34 a written Electrical Service Contract. Hydro will review name change requests on existing  
35 serviced premises to ensure that the additional load required to serve the new applicant  
36 does not exceed 100 kW. The review of name change requests will also include the review  
37 of multiple name change requests and/or new service connection requests from the same  
38 Applicant to ensure that the total additional load provided to an individual Applicant will  
39 not exceed 100 kW.<sup>4</sup>

40  
41 The Application explained that the proposed limit of a forecast maximum demand of 100 kW for  
42 any new customer would effectively prevent the addition of any new customers to Hydro’s two  
43 large general service classes. According to the Application, over the last ten years Hydro  
44 connected, on average, approximately two customers per year with maximum annual demands  
45 greater than 100 kW.

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<sup>3</sup> Order No. P.U. 9(2018), pages 8-9

<sup>4</sup> Application, Schedule 1, page 1 of 1

1 According to the Application, approval of the regulation would contribute to providing reliable  
2 service to customers in Labrador East for the 2018-2019 winter season and would provide  
3 guidelines for Hydro in dealing with new customers during the period while the capacity shortfall  
4 is in effect. The Application submitted that the proposed limitation provides a balanced approach  
5 in dealing with new customers' service requests while ensuring adequate capacity is available to  
6 serve existing customers in Labrador East.

7  
8 The Application was copied to: Newfoundland Power Inc.; the Consumer Advocate, Dennis  
9 Browne, Q.C.; Hydro's Island Industrial customers: Corner Brook Pulp and Paper Limited, NARL  
10 Refining Limited Partnership, Vale Newfoundland and Labrador Limited; the communities of  
11 Sheshatshui, Happy Valley-Goose Bay, Wabush, and Labrador City (the "Labrador Interconnected  
12 Group"); Iron Ore Company of Canada ("IOC"); Teck Resources Limited; and Praxair Canada  
13 Inc.

14  
15 Requests for information ("RFIs") were filed in relation to the Application by the Labrador  
16 Interconnected Group, IOC and the Board. On June 26, 2018 Hydro responded to the RFIs. On  
17 July 24, 2018 the Labrador Interconnected Group filed an expert report, *Moratoria Applied to*  
18 *Cryptocurrency Loads in Low-Cost Jurisdictions*.

19  
20 On July 24, 2018 IOC filed submissions in relation to the Application. On August 16, 2018 the  
21 Labrador Interconnected Group filed submissions.

22  
23 On August 21, 2018 Hydro filed a reply submission. No other submissions were filed in relation  
24 to the Application.

## 25 26 **Submissions**

27  
28 IOC expressed support for the temporary service restriction proposed by Hydro. According to IOC  
29 Labrador faces a unique challenge as it is endowed with large renewable energy resources but  
30 access remains constrained by its transmission system. IOC stated that it favours economic  
31 development that is fair and sustainable to all customers. IOC explained that the system is not  
32 unique in facing a sudden influx of new customers from a high risk industry, the blockchain  
33 industry. In this context, IOC noted the approach taken in the province of Quebec to maintain  
34 affordable rates for incumbent and new customers and protect the utility and ratepayers from  
35 crippling future stranded costs.

36  
37 A key component of IOC's support is the design of a "clear airtight" regulation. According to IOC  
38 the proposed temporary restriction will only benefit ratepayers if it does not allow applicants to  
39 circumvent its prescriptions. IOC proposed the following alternate language:

40  
41       Effective {insert date}, Hydro will not provide service connections or service connections  
42       or service upgrades to an Applicant that will result in the addition of load requirements or  
43       greater than 100 kW on the Labrador East System. The limit applies to loads in excess of  
44       100 kW.<sup>5</sup>

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<sup>5</sup> Iron Ore Company of Canada Submission, page 4

1 IOC agreed with Hydro's approach whereby exceptions would be addressed through an application  
2 for a variance or exemption.

3  
4 The Labrador Interconnected Group stated that it was prepared to support the imposition of load  
5 restrictions in Labrador East but only with a time limit of 90 days. Further the Labrador  
6 Interconnected Group submitted that Hydro should be required to propose a comprehensive  
7 approach to data center customers for the whole Labrador Interconnected system which prioritizes  
8 industrial job growth in Labrador. The Labrador Interconnected Group stated:

9  
10 The LIG observes that the proposed moratorium comes with neither a limit to its duration,  
11 nor is targeted toward a particular end use. No other community in the Province is subject  
12 to an indefinite moratorium on all large loads, which is essentially imposes an indefinite  
13 pause on the construction of community infrastructure, facilities, and certain types of  
14 business. The LIG urges the Board to recognize the seriousness of what is being proposed  
15 for Labrador East.<sup>6</sup>

16  
17 The Labrador Interconnected Group expressed concern that the design of the moratorium may  
18 make it vulnerable to cryptocurrency miners who wish to avoid its application. According to the  
19 Labrador Interconnected Group the proposed approach is subject to the use of existing customer  
20 connections by cryptocurrency miners, and fractionation as the transaction costs for a customer to  
21 set up separate businesses may not be sufficient. The Labrador Interconnected Group also argued  
22 that the proposed approach is too narrowly targeted at Labrador East while the cryptocurrency  
23 issue affects the entire Labrador Interconnected system.

24  
25 According to the Labrador Interconnected Group:

26  
27 A broad-based moratorium, with no limit to end use and no time limit, is a drastic measure  
28 that has the potential to severely affect economic development and quality of life in the  
29 region where it is imposed.<sup>7</sup>

30  
31 The Labrador Interconnected Group cited potential negative impacts in relation to a Wellness  
32 Centre planned for the Town of Happy Valley-Goose Bay and the recent approval of commercial  
33 land in the community of Sheshatshiu. Further the Labrador Interconnected Group expressed  
34 concerns in relation to placing the burden on potential customers to apply for an exemption and  
35 suggested that the onus should be placed on Hydro to apply for an exemption.

36  
37 In its reply submission, Hydro requested that the Application be approved as submitted. In relation  
38 to the alternate language suggested by IOC, Hydro referenced IOC-NLH-007 to the effect that the  
39 change is unnecessary. In relation to the concerns expressed by the Labrador Interconnected Group  
40 that the moratorium is vulnerable to fractionation, Hydro referenced LAB-NLH-004 to the effect  
41 that it believes that the cost of circumventing the restriction may be adequate to dissuade such an  
42 approach. In relation to the concern that the regulation is vulnerable to the use of existing  
43 customers Hydro referenced IOC-NLH-005 and IOC-NLH-006 which set out that the regulation  
44 would apply in the case of transfers and service upgrades. In relation to the concern that the  
45 regulation will prevent development and construction of community infrastructure, Hydro stated:

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<sup>6</sup> Labrador Interconnected Group Submission, pages 6-7

<sup>7</sup> Ibid., page 9

1 As stated in the Application, Hydro normally connects less than two customers per year  
2 with demand requirements in excess of 100 kW. In addition, Hydro has the ability to apply  
3 to the Board for approval to further vary Regulation 17 or for a customers to be exempt  
4 from it should it be determined in the circumstances that it is appropriate.<sup>8</sup>  
5

6 In relation to the suggestion of a 90-day timeframe for the moratorium, Hydro submitted that the  
7 timeframe is both unrealistic and premature given the current regulatory calendar. Hydro explained  
8 that a comprehensive plan for dealing with cryptocurrency customers in Labrador will be informed  
9 by the Labrador West Transmission Planning Study and the Network Addition Policy to be filed  
10 this fall. Further, in Hydro's view, a comprehensive plan will likely require some form of  
11 government policy direction, and while discussion with government is ongoing, Hydro does not  
12 have clarity on the timing of this direction.  
13

### 14 **Board Findings**

15

16 The Application requests approval of a new regulation permitting Hydro to not provide service  
17 connections and upgrades that would result in the addition of load requirements of greater than  
18 100 kW on the Labrador East system. The Board acknowledges the ongoing capacity constraints  
19 in Labrador East and agrees that approval of a restriction on load additions for the 2018-2019  
20 winter season may limit load growth and assist in relation to reliability concerns in Labrador East.  
21 At the same time the Board acknowledges the significance of the proposed moratorium, both for  
22 potential customers and for the communities in Labrador East. As noted by the Labrador  
23 Interconnected Group no other community in the province has such a restriction. While Hydro  
24 argued that it normally connects less than two customers per year with demand requirements in  
25 excess of 100 kW, the potential impact of the proposed moratorium for an applicant or the  
26 communities in Labrador East is significant.  
27

28 Both the Labrador Interconnected Group and IOC agreed that the implementation of a load  
29 restriction is appropriate in the circumstances, but each set out concerns in relation to the proposed  
30 regulation. In particular, according to the Labrador Interconnected Group, the proposed regulation  
31 may be circumvented as it is vulnerable to fractionation, and to piggybacking of loads on existing  
32 customers. At the same time the Labrador Interconnected Group suggested that the provision  
33 applies too broadly, potentially making it difficult for socially useful community infrastructure to  
34 get service. The Labrador Interconnected Group noted that the moratorium is not time-limited and  
35 suggested that it be implemented for period of 90 days. IOC suggested different language for the  
36 regulation submitting that the provision must be clear and airtight as it will only benefit ratepayers  
37 if it cannot be circumvented.  
38

39 The Board accepts that, considering the potential impact of large load additions in the context of  
40 the transmission constraints and reliability concerns in Labrador East for the 2018-2019 winter  
41 season, approval of a moratorium is appropriate in the circumstances. A moratorium would serve  
42 to reduce load additions in the short term until the necessary studies and analysis can be completed  
43 and a comprehensive plan for the Labrador Interconnected system developed. The Board notes  
44 that, while the proposed regulation does not set out a time frame, Hydro advised that it would apply

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<sup>8</sup> Hydro Submission, page 3

1 to eliminate the restriction when there is no longer any transmission constraint in Labrador East.<sup>9</sup>  
2 The Board is concerned about such an undefined and discretionary approach. While the Board  
3 accepts that the approval of a moratorium for the 2018-2019 winter season is appropriate, it is not  
4 clear at this stage that it is necessary beyond this time frame. In the Board's view the time frame  
5 of 90 days suggested by the Labrador Interconnected Group is insufficient to address the concerns  
6 for the 2018-2019 winter season, especially given that the Labrador Interconnected System  
7 Expansion Study and a Network Additions Policy are not scheduled to be filed until later this fall.  
8 In the circumstances the Board believes that the moratorium should be in place for the full 2018-  
9 2019 winter season.

10  
11 While the Board accepts that a moratorium should be implemented for the 2018-2019 winter  
12 season, the Board has concerns in relation to the language of the proposed regulation which creates  
13 a complete moratorium on service connections or upgrades greater than 100 kW in Labrador East  
14 without any apparent exceptions. The approval of such a moratorium for a community in this  
15 province would be extraordinary and may have long term impacts on potential customers and the  
16 communities in Labrador East. The proposed regulation does not provide for special circumstances  
17 where it may be appropriate to approve service connections and upgrades; for example in the case  
18 of an applicant that would bring material benefits to the community and which would not  
19 significantly add to the load during the 2018-2019 winter season. While Hydro advised that it can  
20 apply to the Board for approval should it determine that a variation or exemption is appropriate,  
21 the regulation does not set out the circumstances in which Hydro would seek such a determination.  
22 Given the significant impact on applicants applying for service and considering the potential  
23 impact on communities in Labrador East, the circumstances surrounding the application of the  
24 moratorium should be clear and any decision to refuse service should be made in a fair and open  
25 manner considering all of the circumstances. As such the Board believes that the regulation should  
26 set out that Hydro may apply to the Board for a variance or an exemption and that Hydro should  
27 advise the Board when an application for service is refused pursuant to the moratorium.

28  
29 While the Board agrees with the intervenors that there may be an opportunity for some customers  
30 to circumvent the proposed language of the regulation, the Board does not believe that the alternate  
31 language suggested by IOC would offer any substantial improvement in this regard. The Board  
32 accepts the language of the regulation proposed by Hydro, except that it should be revised to  
33 provide that the moratorium would remain in place until the end of the 2018-2019 winter season  
34 and to transparently provide for exemptions and variances. The Board will require Hydro to file,  
35 for approval a revised regulation which implements a moratorium in Labrador East for service  
36 connections or upgrades resulting in load additions greater than 100 kW, to be effective until May  
37 30, 2019. The regulation should set out that Hydro may apply for a variance or exemption and,  
38 that upon the refusal of an application for service, Hydro will at the same time notify the Board,  
39 setting out a description of the applicant and the service requested.

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<sup>9</sup> PUB-NLH-004

1 **IT IS THEREFORE ORDERED THAT:**

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- 1. The proposed regulation is not approved.
- 2. Hydro shall file for the approval of the Board a revised regulation, effective from the date of this Order until May 30, 2019, prohibiting service connections or upgrades that would result in a load addition greater than 100 kW in Labrador East, consistent with the findings of the Board in this Order.
- 3. Hydro shall pay all expenses of the Board arising from this Application.

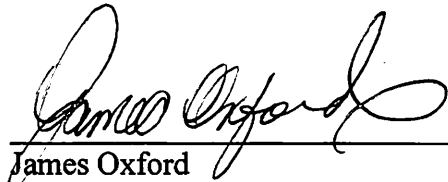
**DATED** at St. John's, Newfoundland and Labrador, this 11<sup>th</sup> day of September, 2018.



Darlene Whalen, P. Eng., FEC  
Chair & CEO



Dwanda Newman, LL.B.  
Vice-Chair



James Oxford  
Commissioner



Cheryl Blundon  
Board Secretary