

1 **Q. Re: Application for Exemption to Regulation 17 — Wabush Airport**

2 **Citation (pp. 6-7 pdf):**

3 12. The impact of the additional load in Wabush, based on the existing transfer  
4 capability and current load requirements, would increase the potential for  
5 requests for curtailment of the power supplied to the existing industrial  
6 customers and customers with whom Hydro has contracts permitting  
7 curtailment. Hydro has communicated with those industrial customers prior to  
8 filing this application and they have not advised Hydro of any objections to the  
9 proposed exemption.

10 a. Please provide one or more tables indicating rural and industrial loads in Labrador West and  
11 Labrador East, in both MW and GWh, indicating annual curtailments, for historic years 2018  
12 through 2021, and forecasts for 2022 through 2026, including the proposed project.

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15 A. a. Newfoundland and Labrador Hydro (“Hydro”) did not make any requests for curtailment of  
16 rural loads in Labrador East<sup>1</sup> during the period of January 1, 2018–December 31, 2021.  
17 Hydro made one call to a Labrador West customer<sup>2</sup> on June 17, 2021, resulting in  
18 approximately 18 hours of curtailment of approximately 2,800 kW (50,500 kWh).

19 Under normal operating conditions and with all equipment in service, Hydro has not needed  
20 to curtail the industrial loads in Labrador West during the period of January 1, 2018–  
21 December 31, 2021.<sup>3</sup> This is due to the fact that Hydro uses an automated system that  
22 provides a maximum load set point to the industrial customers. The industrial customers  
23 monitor this value and adjust their electrical load accordingly so they do not exceed this set  
24 point. This method provides for efficient administration and allows the industrial customers  
25 to maximize electrical usage under normal operating conditions.

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<sup>1</sup> This includes the load curtailment agreement with Labrador Lynx in Labrador East.

<sup>2</sup> The temporary non-firm agreement with 77849 Newfoundland & Labrador Inc. in Labrador West.

<sup>3</sup> There are no industrial customer loads in Labrador East.

1 There have been occasions when the transmission system capacity was reduced for  
 2 extended periods of time, due to planned<sup>4</sup> or unplanned equipment outages. Table 1 below  
 3 provides descriptions of all significant events during the period of January 1, 2018–  
 4 December 31, 2021.

**Table 1: Significant Events Affecting Industrial Customers in Labrador West  
 January 1, 2018–December 31, 2021**

<b>Date</b>	<b>Duration</b>	<b>Description</b>
September– November 2018	Approximately an eight-week period	Planned breaker replacement when one of the two transmission lines supplying Labrador West was out of service.
September– October 2019	Approximately an eight-week period	Planned breaker replacement when one of the two transmission lines supplying Labrador West was out of service.
February 2020	Approximately a one-week period	Unplanned forced outage to a synchronous condenser machine at the Wabush Terminal Station.
June 2020	Approximately a one-week period	Planned maintenance outage to one of the two transmission lines supplying Labrador West.
June 2021	Approximately a one-week period	Planned maintenance outage to one of the two transmission lines supplying Labrador West.
August 2021	One-day period	Planned maintenance outage to Bus 3 at the Wabush Terminal Station.
September 2021	Approximately a one-week period	Planned maintenance outage to one of the two transmission lines supplying Labrador West.
October 2021	One-day period	Planned maintenance outage to Bus 3 at the Wabush Terminal Station.

5 Please refer to LAB-NLH-003, Attachment 1 for forecast data.

<sup>4</sup> Hydro works with the industrial customers during the planning of outages to minimize the effects of the outages to their operations (e.g. industrial customer may also take maintenance outages at the same time).

### Labrador West and East Load Forecasts

The forecast tables below are based upon the spring 2021 Operating Load Forecast with additional load added for the proposed project based upon the recent service requests.

#### Labrador Interconnected System Annual Peak Demand Forecast (MW)<sup>1</sup>

	<b>2022<sup>2</sup></b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Labrador West Utility <sup>3</sup>	74	69	69	70	70
Labrador West Industrial Customers <sup>4</sup>	313	313	313	313	313
<b>Labrador West - Customer Coincident Demand</b>	<b>387</b>	<b>382</b>	<b>382</b>	<b>382</b>	<b>383</b>
Labrador East Utility	78	79	80	80	81
<b>Labrador Interconnected System Customer Coincident Demand<sup>5</sup></b>	<b>453</b>	<b>448</b>	<b>449</b>	<b>450</b>	<b>451</b>

#### Labrador Interconnected System Customer Sales (GWh)<sup>1</sup>

	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Labrador West Utility	403	353	357	359	360
Labrador West Industrial Customers	2,116	2,116	2,116	2,116	2,116
<b>Labrador West - Total</b>	<b>2,518</b>	<b>2,468</b>	<b>2,473</b>	<b>2,475</b>	<b>2,476</b>
Labrador East Utility	345	350	353	354	356
<b>Labrador Interconnected System Customer Energy<sup>5</sup></b>	<b>2,864</b>	<b>2,818</b>	<b>2,825</b>	<b>2,829</b>	<b>2,832</b>

<sup>1</sup> The decline in utility requirements between 2022 and 2023 reflects the expiry of an existing contract with 77849 Newfoundland & Labrador Inc.

<sup>2</sup> The 2022 Labrador West utility demand includes 6.2 MW of non-firm demand.

<sup>3</sup> Labrador West utility demand is the coincident demand for Wabush and Labrador City at the time of the Labrador West peak.

<sup>4</sup> Labrador West industrial customer demand is the coincident demand of the industrial customers at the time of the Labrador West peak .

<sup>5</sup> Total Labrador requirements excludes transmission losses and station service.