

Newfoundland and Labrador Hydro Hydro Place. 500 Columbus Drive P.O. Box 12400. St. John's. NL Canada A1B 4K7 t. 709.737.1400 | f. 709.737.1800 nlhydro.com

April 19, 2024

Board of Commissioners of Public Utilities Prince Charles Building 120 Torbay Road, P.O. Box 21040 St. John's, NL A1A 5B2

Attention: Jo-Anne Galarneau

Executive Director and Board Secretary

Re: Application for Exemption to Regulation 17 – Temporary Restriction for Load Additions in Labrador East and West – Various Customers in Labrador East

Please find attached Newfoundland and Labrador Hydro's ("Hydro") application for approval of exemptions to Regulation 17, which temporarily limits load additions in Labrador East and West pursuant to Section 71 of the *Public Utilities Act*.

Hydro has received requests for service from several General Service customers in Labrador East. Since the Muskrat Falls to Happy Valley Interconnection Project and subsequent commissioning of Transformer 5 in the Happy Valley Terminal Station was completed in November 2022, the transmission capacity of Labrador East has increased from 76 MW to 104 MW. The total estimated peak load of all five customers is approximately 22 MW; further detail is provided in the attached application and Schedules 1–5 to the application. Hydro believes that, with the increased transmission capacity in the region, it is reasonable to allow for some additional growth on the system.

Preliminary analysis indicates that with the inclusion of these customers, along with normal forecast load growth, additional capital investment will likely be needed to address transmission capacity. The additional investment could be as early as 2031, which would be an acceleration of the existing Transmission Expansion Plan. This will be considered in Hydro's calculation of the fees required for these customers pursuant to the *Network Additions Policy*.

As per the *Network Additions Policy*, approved and effective as of April 1, 2021, a customer that makes an application for service from the Labrador Interconnected System for a demand request of less than 1,500 kW is responsible for paying an Upstream Capacity Charge (i.e., a contribution required from an applicant who is requesting an increase in access to Capacity on Common Assets). Hydro is working with each of the customers to confirm more specifically the estimated peak demand associated with their applications, and to then calculate the charge necessary under the *Network Additions Policy*. Hydro will apply for any necessary approval of those contributions at a later date.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh

Senior Legal Counsel, Regulatory

SAW/rr

Encl.

Board of Commissioners of Public Utilities

Jacqui H. Glynn Board General

Island Industrial Customer Group

Paul L. Coxworthy, Stewart McKelvey Denis J. Fleming, Cox & Palmer Dean A. Porter, Poole Althouse **Labrador Interconnected Group**

Senwung F. Luk, Olthuis Kleer Townshend LLP Nicholas E. Kennedy, Olthuis Kleer Townshend LLP

Consumer Advocate

Dennis M. Browne, KC, Browne Fitzgerald Morgan & Avis Stephen F. Fitzgerald, KC, Browne Fitzgerald Morgan & Avis Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis Bernice Bailey, Browne Fitzgerald Morgan & Avis **Newfoundland Power Inc.**

Dominic J. Foley Lindsay S.A. Hollett Regulatory Email

Iron Ore Company of Canada

Gregory A.C. Moores, Stewart McKelvey

Exemption to Regulation 17

Various Customers in Labrador East

April 19, 2024

An application to the Board of Commissioners of Public Utilities



IN THE MATTER OF the Electrical Power Control Act, 1994, SNL 1994, Chapter E-5.1 ("EPCA") and the Public Utilities Act, RSNL 1990, Chapter P-47 ("Act"), and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro ("Hydro") for exemptions, pursuant to Section 71 of the *Act*, to Regulation 17 which limits new load additions in Labrador East and West.

To: The Board of Commissioners of Public Utilities ("Board")

THE APPLICATION OF HYDRO STATES THAT:

A. Background

- 1. Hydro, a corporation continued and existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the *Act*, and is subject to the provisions of the *EPCA*.
- 2. Hydro's 2018 Capital Budget Application,¹ identified forecast capacity shortfalls as well as reliability issues on the Labrador East system. To address these issues, Hydro proposed the Muskrat Falls to Happy Valley Interconnection Project ("Project"). In Board Order No. P.U. 43(2017), issued on December 22, 2017, the Board deferred the decision on the Project pending additional information.
- 3. On May 31, 2018, while the Project remained under consideration by the Board, Hydro filed an application for approval of a proposed new regulation permitting a restriction for load additions in Labrador East pursuant to Section 71 of the Act. This was intended to address the forecast capacity shortfalls and reliability issues for the Labrador East System pending completion of the Project.
- 4. In Board Order No. P.U. 32(2018), the Board accepted that a moratorium should be implemented for the 2018–2019 winter season and ordered Hydro to file for approval a revised regulation, effective until May 30, 2019, reflecting the findings of the Board. Hydro filed a

¹ "2018 Capital Budget Application," Newfoundland and Labrador Hydro, rev. October 3, 2017 (originally filed July 27, 2017).

- revised regulation on September 21, 2018, which was approved in Board Order No. P.U. 36(2018) ("Regulation 17").
- 5. On April 23, 2019, Hydro filed an application for an extension of the effective date of Regulation 17 pending further Order from the Board. That application was approved in Board Order No. P.U. 18(2019).
- 6. Board Order No. P.U. 34(2019), issued on October 29, 2019, approved Hydro's request to increase the load restriction threshold from 100 kW to 200 kW and to extend the application of Regulation 17 to Labrador West.
- 7. On March 17, 2021, in Board Order No. P.U. 17(2021), the Board approved the *Network Additions Policy Labrador Interconnected System* ("Network Additions Policy") effective April 1, 2021. The *Network Additions Policy* is intended to limit rate increases that can result from investment in new transmission assets to serve new load requests and to achieve a reasonable balance in the sharing of the benefits and the costs of new transmission investments between new and existing customers.
- 8. In response to the Board's query on March 23, 2021, regarding the status of Regulation 17 post approval of the *Network Additions Policy*, Hydro recommended that the existing restrictions remain in place while the system expansion needs for reliable service to customers in Labrador West and Labrador East were determined. This was due to the continued system capacity restrictions that exist in the region.² At the time of that correspondence, the Project had been completed but had not come online.

B. Current Customer Requests

- 9. The Project and subsequent commissioning of Transformer 5 in the Happy Valley Terminal Station was completed in November 2022. As a result, the transmission capacity of Labrador East has increased from 76 MW to 104 MW.
- 10. Since the approval of the *Network Additions Policy*, Hydro has been confirming and formalizing customer requests for incremental load, both from the customers whose applications were

² "Restriction on Load Additions on the Labrador Interconnected System – Update," Newfoundland and Labrador Hydro, April 7, 2021.

denied under Regulation 17 as well as any customer who had yet to formally apply. Initial customer service requests totalled approximately 6,185 MW for Labrador East; however, some customers have elected to withdraw their applications and others, identified as cryptocurrency customers, are no longer eligible for firm service.³

11. In the Board's initial approval of Regulation 17, the Board stated in part:

When Hydro has reason to believe there are special circumstances surrounding an application for service in Labrador East that will result in the addition of load requirements of greater than 100 kW, where it may be appropriate to approve service connections and upgrades, Hydro may apply to the Board for a variance or exemption to this Regulation.⁴

- 12. To assist with determining the special circumstances under which it would be appropriate to support an application for variance or exemption to the regulation, Hydro identified several examples of the types of businesses that may qualify, including industrial development and services, which meet a defined need in the community. Hydro has applied to the Board and received approval of several exemptions utilizing these criteria.
- 13. At present, Hydro has active requests for service from five customers for the Labrador East System with estimated peak loads exceeding the 200 kW restriction. The total estimated peak load of all five customers is approximately 22 MW. While the criteria previously identified as supporting an application for exemption may not apply to all of these customers, with the increased transmission capacity in Labrador East, it is reasonable to allow for some additional growth in the region to serve these requests for service.⁵
- 14. Although it is important to continue to ensure the system is not overwhelmed to the point that delivery of reliable service is impacted, Hydro must also balance this with the necessity for reasonable community infrastructure and business growth in Labrador. Therefore, Hydro is requesting that an exemption be made to serve the customers detailed in this application. Hydro is not requesting that the load restriction be lifted entirely, as with the regulation in

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³ On November 10, 2022, the Government of Newfoundland and Labrador issued Order in Council OC2022-266 exempting Hydro from the legislative obligation to supply firm electrical service in Newfoundland and Labrador to applicants from cryptocurrency industries. To ensure rates for customers on the Labrador Interconnected System remain stable, Hydro is denying all applications for new firm service for cryptocurrency operations.

⁴ Public Utilities Act, RSNL 1990, c P-47, Board Order No. P.U. 36(2018), Board of Commissioners of Public Utilities, October 5, 2018, sch. A.

⁵ *Supra*, f.n. 2.

place, Hydro can better monitor and manage the load growth in the region and ensure continued reliable service to customers.

15. The applications for service Hydro proposes to accept are:

- Department of National Defence, 5 Wing Goose Bay ("DND") to produce steam at the central heating plant for heating of major buildings and hangars. DND's application for service, attached to this application as Schedule 1, has an estimated peak demand of 20 MW.
- ii. College of the North Atlantic, North West River Campus's application for service for its new campus, attached to this application as Schedule 2, lists an estimated peak demand of 700 kVA. Hydro estimates that the peak demand in kW will be very close to that amount.
- iii. College of the North Atlantic, Happy Valley-Goose Bay Campus's application for service, attached to this application as Schedule 3, has an estimated peak demand of 771 kW for electrification of their heating system. Their existing peak demand is approximately 340 kW; providing this service will result in an increase of approximately 431 kW to the current estimated peak demand.
- iv. Spruce Meadow Farm's application for service, attached to this application asSchedule 4, has an estimated peak demand of 190 kW for a four-season greenhouse to serve the local region.
- v. Innu Nation is requesting service for a Cultural Centre and Museum intended to be located in Sheshatshui. Their application for service, attached to this application as Schedule 5, indicates a total connected load of 516 kW. Hydro is currently working with the Innu Nation to determine the estimated peak load.

C. Newfoundland and Labrador Hydro's Request

16. This application requests approval of an exemption to Regulation 17, allowing Hydro to provide service to the above noted customers.

D. Communications

17. Communications with respect to this application should be forwarded to Shirley A. Walsh, Senior Legal Counsel, Regulatory for Hydro.

DATED at St. John's in the province of Newfoundland and Labrador on this 19th day of April 2024.

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh

Counsel for the Applicant Newfoundland and Labrador Hydro, 500 Columbus Drive, P.O. Box 12400

St. John's, NL A1B 4K7

Telephone: (709) 685-4973

Request for Service

Department of National Defence, 5 Wing Goose Bay





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name	Department of National Defence, 5 Wing Goose Bay	
Current Address	Bldg 271, Alkali Drive, Goose Bay, NL, A0P1C0	
Service Address	Bldg 371, Alkali Drive, Goose Bay, NL	
Phone Number	709-896-6900 x7727, garrett.sykes@forces.gc.ca	
	343-548-6095, amanda.drew@forces.gc.ca	

GENE	RAL SERVICE ONLY		
1.	Nature of business: Department of Nationsteam at the central heating plant for heati	•	Ving Goose Bay. Electricity requested is to produce ildings and hangars at 5 Wing.
2.	Location of Premises:	Yes	No
	Public Road Within Community Municipal or Other Plan Permanent Service		
3.	Single Phase Service Three Phase Service		
4.	Service Voltage: 25kV		
5.	Service Size in Amps: Service Cond Lugs Required: Single, Double Serv	uctor Size (mcm): ice already exists	
6.	Please provide breakdown of connected lo	oad (attach separa	ate sheet if more room required).
	Lighting (kW)	1 Phase	<u>3 Phase</u>
	Heating (kW)		20,000
	Miscellaneous (kW)		
	Motors (kW) Total (kW)		20,000
7.	Estimated Peak Demand: 20,000 kW		20,000
	(Total kW of load <i>expected</i> to be on at the	same time)	
8.	Estimated annual load factor: 35%		
	Or estimated annual consumption (kWh)		recast is attached)
9.	If applicable, the expected service life: Permanent		
10.	A copy of the customer's electrical drawings. Available upon request, service already exists		
11.	A copy of the customer's site plan. Available upon request		
12.	Date service required (ready for connection	· · · · · · · · · · · · · · · · · · ·	(best current estimate)
13.	Primary metering requested (extra charge	, , , , , ,	
	(subject to the customer supplying and maintaining	ng all distribution	
14.	facilities beyond the point of supply) Yes Temporary / Construction power requeste	od (ovtra charges :	may apply). Not required
14.	remporary / Construction power requeste	u (extra thanges i	nay appryj. Not required

Customer/Electrician signature verifies that his information is accurate and understands information is subject to a
2 year review:

Prepared by: _Amanda Drew, P.Eng______ Date: _31 Mar 2023_____

Request for Service

College of the North Atlantic – North West River Campus





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name

Curre	ent Address	164 to	tage R	d.		
Servi	ce Address	164 PE	rtage	Rd.		
Phon	ie Number	896-	6318			
		1 200				
GEN	ERAL SERVICE ONLY	1				
1.	Nature of business:	(11 -	(1 /	0 11	Atlantic	
				z Hert	MILLENTIC	ę.
2.	Location of Premises	:	Yes	No		
	Public Road			П		
	Within Community					
	Municipal or Other P	lan				
	Permanent Service					
			*			
3.	Single Phase Service					
	Three Phase Service		Y			
4.	Service Voltage:	600/3	YIV		TO THE STATE OF TH	
5.	Service Size in Amps:		ductor Size (mcm)	: Conductor	Type: ⚠ Cu, ☐ Al.	F
	Lugs Required: ☐ Sin	gle, 🗆 Double	1200 A		Seamon x	bealphas
6.	Please provide break	down of connec	ted load (attach se	narate sheet if i	more room required).	, M
0.	Trease provide break	down or connect	ica load (attach sc	parate sheet in	more room required).	
			1 Phase	3 Phase		
	Lighting (kW)		10kw			
	Heating (kW)			-		
	Miscellaneous (kW)		Soku	Loso	Boilers	
	Motors (kW)		2	to kw		
<u></u>	Total (kW)		<u>69</u>	7090	The second secon	
7.	Estimated Peak Dema			7001	LVA	
8.	(Total kW of load <i>exp</i> Estimated annual loa		it the same time)	1001	- A A/	
0.			.//b)			
9.	Or estimated annual consumption (kWh) If applicable, the expected service life:					
10.	A copy of the customer's electrical drawings.					
11.	A copy of the custom					
12.	Date service required (ready for connection).					
13.	Primary metering rec					

Customer/Electrician signature verifies that his information is accurate and understands information is subject to a 2 year review:

Prepared by: Sandy Connars Date: Aug 3/2020

(subject to the customer supplying and maintaining all distribution

Temporary / Construction power requested (extra charges may apply)

facilities beyond the point of supply)

14.

Request for Service

College of the North Atlantic – Happy Valley-Goose Bay Campus





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name	College of the North Atlantic	
Current Address	219 Hamilton River Road, Happy Valley-Goose Bay, NL A0P 1E0	
Service Address	219 Hamilton River Road, Happy Valley-Goose Bay, NL A0P 1E0	
Phone Number	1-888-982-2268 (Or contact Maderra Engineering @ (709) 739-5002)	

GENERAL SERVICE ONLY

<u> </u>	TO THE OTHER				
1.	Nature of business: Utility Service Upgrade / Heating Upgrades				
2.	Location of Premises:	Yes	No		
	Public Road Within Community Municipal or Other Plan Permanent Service				
3.	Single Phase Service Three Phase Service				
4.	Service Voltage: 347/600V 3-Phase				
5.	Service Size in Amps: 2000A Conductor S Lugs Required: Single, Double	Size (mcm): 6 Para	llel runs of 4Cx750 Conductor Type: Cu, Al.		
6.	Please provide breakdown of connected	load (attach separ	ate sheet if more room required).		
		<u>1 Phase</u>	<u>3 Phase</u>		
	Lighting (kW)		F40 (N)		
	Heating (kW)		540 (New)		
	Miscellaneous (kW) Motors (kW)		339 (peak demand from Feb 2021-Feb 2022)		
	Total (kW)				
7.	Estimated Peak Demand: 771 kW				
/.	(Total kW of load <i>expected</i> to be on at the same time)				
8.	Estimated annual load factor:	ie same time,			
	Or estimated annual consumption (kWh)				
9.	If applicable, the expected service life:				
10.	A copy of the customer's electrical drawings. Not yet completed. Informal sketches				
11.	A copy of the customer's site plan. Not yet completed / updated with new pad location. Informal				
	sketches/assessment can be provided.				
12.	Date service required (ready for connection). TBD				
13.	Primary metering requested (extra charges may apply). Existing meter to be upgraded (meter # C23401) (subject to the customer supplying and maintaining all distribution facilities beyond the point of supply)				
14.	Temporary / Construction power request	ted (extra charges	may apply).		

Customer/Electric	cian signature verifies that his in	formation is accurate and	understands information is subject to	a
2-year review:				
Prepared by:	Raymond Hann	Date:	28-Mar-2022	

Request for Service

Spruce Meadow Farm





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name	Spruce Meadow Farm
Current Address	#540, NL-520, Happy Valley-Goose Bay, NL A0P 1E0
Service Address #540, NL-520, Happy Valley-Goose Bay, NL A0P 1E0	
Phone Number 709-897-5398	

GENERAL SERVICE ONLY

1.	Nature of business: Four season greenho	ouse vegetabl	e and fruit produ	uction for local market		
2.	Location of Premises:	Yes	No			
	Public Road Within Community Municipal or Other Plan Permanent Service					
3.	Single Phase Service Three Phase Service	x				
4.	Service Voltage: 600Vac					
5.	Service Size in Amps: 200A Service Co Lugs Required: Single, Double	onductor Size	(mcm):4/0 Co	nductor Type: X Cu, Al.		
6.	Please provide breakdown of connected required).	load (attach s	eparate sheet if	more room		
		1 Phase	3 Phase			
	Lighting (kW)	_	100			
	Heating (kW)		75			
	(Miscellaneous (kW)		5_			
	Motors (kW)	_	10			
	Total (kW)		190kW			
7.	Estimated Peak Demand: (Total kW of load expected to be on at the	e same time)	190 kW(va	ariable speed motors)		
8.	Estimated annual load factor: Or estimated annual consumption (kWh) 1,250,000 kWh/year					
9.	If applicable, the expected service life: 25+ years					
10.	A copy of the customer's electrical drawings. See attached					
11.	A copy of the customer's site plan. See attached					

Exemption to Regulation 17 - Various Customers in Labrador East Schedule 4, Page 2 of 2

12.	Date service required (ready for connection). May 30, 2023	
13.	Primary metering requested (extra charges may apply). N/A (subject to the customer supplying and maintaining all distribution facilities beyond the point of supply)	
14.	Temporary / Construction power requested (extra charges may apply). Not Required	

Customer/Electrician signature verifies that this information is accurate and understands information is subject to a 2 year review:

Prepared by: Jon Angies Date: May 5, 2023

Request for Service

Innu Nation





REQUEST FOR SERVICE GENERAL INFORMATION

CUSTOMER INFORMATION

Name	Innu Nation
Current Address	2 Utshimau road Sheshatshiu NL AOP 1TO
Service Address	2 Old Sawmill Road, Sheshatshiu NL A0P1T0
Phone Number	819-244-2319

GENERAL SERVICE ONLY

<u> </u>	KAL SERVICE UNLY			
1.	Nature of business: Cultural center, museum			
2.	Location of Premises: Yes		No	
	Public Road Within Community Municipal or Other Plan Permanent Service			
3.	Single Phase Service Three Phase Service			
4.	Service Voltage: 347/600V			
5.	Service Size in Amps: 800A Service Conductor Size (mcm): 500 Conductor Type: Cu, Al. Lugs Required: Single, Double (or we can put a 800 switch with 800 fuses and 100% rated 600A breaker)			
6.	Please provide breakdown of connected load (attach separa	te sheet if more room required).	
	Lighting (kW) Heating (kW) Miscellaneous (kW) Motors (kW) Total (kW)	<u>aase</u> 	3 Phase 5 241 180.6 90 516	
7.	Estimated Peak Demand: unknow at this mon (Total kW of load <i>expected</i> to be on at the sam			
8.	Estimated annual load factor: unknow at this r Or estimated annual consumption (kWh)	Estimated annual load factor: unknow at this moment Or estimated annual consumption (kWh)		
9.	If applicable, the expected service life: 50			
10.	A copy of the customer's electrical drawings. Will follow later			
11.	A copy of the customer's site plan. Will follow later			
12.	Date service required (ready for connection). V	Vill follow late	er	
13.	Primary metering requested (extra charges ma (subject to the customer supplying and maintaining all facilities beyond the point of supply)	distribution		
14.	Temporary / Construction power requested (ex	xtra charges n	nay apply).	

Customer/Electrician signature	verifies that his information is acc	curate and und	derstands infor	mation is subject to a
2 year review:				
Prepared by:	Innu Nation	Date:	_May 4 2023	

Affidavit



IN THE MATTER OF the Electrical Power Control Act, 1994, SNL 1994, Chapter E-5.1 ("EPCA") and the Public Utilities Act, RSNL 1990, Chapter P-47 ("Act"), and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro ("Hydro") for exemptions, pursuant to Section 71 of the *Act*, to Regulation 17 which limits new load additions in Labrador East and West.

AFFIDAVIT

- I, Dana Pope, of St. John's in the province of Newfoundland and Labrador, make oath and say as follows:
 - 1) I am Vice President, Regulatory and Stakeholder Relations for Newfoundland and Labrador Hydro, the applicant named in the attached application.
 - 2) I have read and understand the foregoing application.
 - 3) To the best of my knowledge, information, and belief, all of the matters, facts, and things set out in this application are true.

SWORN at St. John's in the province of Newfoundland and Labrador this 19th day of April, 2024 before me:

Commissioner for Oaths, Newfoundland and Labrador

KIMBERLEY DUGGAN

A Commissioner for Oaths in and for the Province of Newfoundland and Labrador.

My commission expires on December 31, 2021.