NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 37(2021)

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 " <i>Act</i> "), as
5	amended, and regulations thereunder; and
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7	IN THE MATTER OF an application by
8	Newfoundland and Labrador Hydro for an Order
9	pursuant to sections 41 and 78 of the Act: (a) approving
10	capital expenditures for 2022 projects and multi-year
11	projects commencing in 2022; (b) approving its 2022
12	Capital Budget; and (c) fixing and determining its average
13	rate base for 2020.
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16	WHEREAS Newfoundland and Labrador Hydro ("Hydro") is a corporation continued and
17	existing under the Hydro Corporation Act, 2007, is a public utility within the meaning of the Act,
18	and is also subject to the provisions of the EPCA; and

IN THE MATTER OF the *Electrical Power*

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WHEREAS section 41 of the *Act* requires a public utility to submit an annual capital budget of proposed improvements or additions to its property for approval of the Board no later than December 15th in each year for the next calendar year, as well as an estimate of contributions toward the cost of improvements or additions to its property which the utility intends to demand from its customers; and

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WHEREAS subsection 41(3) of the *Act* prohibits a utility from proceeding with the construction, purchase or lease of improvements or additions to its property without the prior approval of the Board where (a) the cost of the construction or purchase is in excess of \$50,000, or (b) the cost of the lease is in excess of \$5,000 in a year of the lease; and

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WHEREAS section 78 of the *Act* gives the Board the authority to fix and determine the rate base for the service provided or supplied to the public by the utility and gives the Board the power to revise the rate base; and

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WHEREAS Hydro filed its 2022 Capital Budget Application (the "Application") on August 2, 2021 requesting the Board make an order:

approving its 2022 Capital Budget in the amount of \$84,714,000;

approving capital expenditures for 2022 projects and multi-year projects commencing in 2022; and

fixing and determining its average rate base for 2020 at \$2,310,559,000; and

WHEREAS notice of the Application, including an invitation to participate, was published in papers in the province on August 15, 2021 and August 18, 2021 and details of the Application and supporting documentation were posted on the Board's website; and

WHEREAS on August 13, 2021 a group of Island Industrial customers: Corner Brook Pulp and Paper Limited, NARL Refining LP and Vale Newfoundland and Labrador Limited (the "Industrial Customer Group") filed an intervenor submission; and

WHEREAS on August 18, 2021 Newfoundland Power Inc. ("Newfoundland Power") filed an intervenor submission; and

WHEREAS on August 25, 2021 the Consumer Advocate, Dennis Browne, Q.C. (the "Consumer Advocate") filed an intervenor submission; and

WHEREAS on September 10, 2021 Hydro provided an overview of the Application in a presentation to the Consumer Advocate, his counsel and consultants, counsel for the Industrial Customer Group, and counsel and staff from Newfoundland Power and the Board, with participants given an opportunity to ask questions and raise areas of concern; and

WHEREAS on September 14, 2021 a total of 114 Requests for Information ("RFIs") were issued to Hydro by the Board, the Consumer Advocate, Newfoundland Power and the Industrial Customer Group, which were responded to by Hydro on October 5, 2021; and

WHEREAS on October 18, 2021 Grant Thornton LLP ("Grant Thornton"), the Board's financial consultant, filed a report on its review of the calculations of Hydro's 2020 average rate base, which was circulated to the parties on October 19, 2021; and

WHEREAS on October 27, 2021 the Consumer Advocate filed eight additional RFIs, which were responded to by Hydro on November 5, 2021; and

WHEREAS on November 12, 2021 Newfoundland Power and the Industrial Customer Group filed submissions and on November 15, 2021 the Consumer Advocate filed a submission; and

- WHEREAS in its submission Newfoundland Power submitted that it is premature for the Board to approve the proposed two-year project to convert the existing 4.16 kV distribution system in
- 41 Mary's Harbour to 25 kV to address an under-voltage condition arising from a load addition (the
- 42 "Mary's Harbour Voltage Conversion Project") as it is predicated on the approval of Hydro's
- 43 Long-Term Supply for Southern Labrador Phase 1 supplemental application; and

WHEREAS in its reply submission filed on November 19, 2021 Hydro agreed that it is premature for the Board to approve the Mary's Harbour Voltage Conversion Project and requested that the Board defer its consideration of this project; and

WHEREAS the Board has reviewed the record of the Application and, based on its review and in consideration of the timing, is satisfied that it is appropriate that an Order respecting the Application be issued now with the Board to issue its Reasons for Decision separately; and

WHEREAS the Board is satisfied that the proposed capital expenditures, with the exception of those related to the Mary's Harbour Voltage Conversion Project, are reasonable and necessary to ensure the continued provision of a safe and reliable electricity supply to customers and should be approved.

IT IS THEREFORE ORDERED:

1. Hydro's proposed construction and purchase of improvements or additions to its property in excess of \$50,000 to be completed in 2022, as set out in Schedule A to this Order, are approved.

2. Hydro's proposed multi-year proposed construction and purchase of improvements or additions to its property in excess of \$50,000, as set out in Schedule B to this Order, are approved.

3. Hydro's 2022 Capital Budget for improvements or additions to its property in an amount of \$84,163,400, as set out in Schedule C to this order, is approved.

4. Hydro's average rate base for the year ending December 31, 2020 is hereby fixed and determined at \$2,310,559,000.

5. Unless otherwise directed by the Board Hydro shall file, with its 2023 Capital Budget Application, an updated overview in relation to the proposed capital expenditures for the Holyrood Thermal Generating Station.

6. Unless otherwise directed by the Board, Hydro shall file an annual report to the Board on its 2022 capital expenditures by March 1, 2023.

7. Unless otherwise directed by the Board Hydro shall provide, in conjunction with its 2023 capital budget application, a status report on the 2022 capital budget expenditures showing for each project:

- i) the approved budget for 2022;
- ii) the expenditures prior to 2022;
- iii) the 2022 expenditures to the date of application;
- 45 iv) the remaining projected expenditures for 2022;

v) vi	and
_	dro shall pay all costs and expenses of the Board incurred in connection with plication.
DATED	at St. John's, Newfoundland and Labrador, this 20 th day of December, 2021.
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	Darlene Whalen, P. Eng., FEC Chair and Chief Executive Officer
	Dwanda Newman, LL.B. Vice-Chair
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	John O'Brien, FCPA, FCA, CISA

Christopher Pike, LL.B., FCIP Commissioner

Cheryl Blundon Board Secretary

Schedule A Order No. P.U. 37(2021) Single-Year Projects over \$50,000 Issued: December 20, 2021

NEWFOUNDLAND AND LABRADOR HYDRO 2022 CAPITAL BUDGET SINGLE YEAR PROJECTS OVER \$50,000 (\$000)

GENERATION		
HYDRAULIC PLANT		
Hydraulic Generation In-Service Failures (2022)	1,000.0	
TOTAL HYDRAULIC PLANT		1,000.0
THERMAL PLANT		
Thermal In-Service Failures (2022)	2,000.0	
Boiler Condition Assessment and Miscellaneous Upgrades - Holyrood	3,014.2	
Air Receivers Condition Assessment and Upgrades - Holyrood	336.5	
Turbine Valve Overhaul Unit 3 - Holyrood	3,623.5	
Major Pumps Overhaul - Holyrood	491.3	
Upgrade Wastewater Treatment Plant 600 V Variable Frequency Drives - Holyrood	70.1	
TOTAL THERMAL PLANT		9,535.6
TOOLS AND EQUIPMENT		
Purchase Tools and Equipment less than \$50,000 (2022) - Hydraulic Plants	187.3	
TOTAL TOOLS AND EQUIPMENT		187.3
TOTAL GENERATION		10,722.9
GENERAL PROPERTIES		
<u>ADMINISTRATION</u>		
Purchase Office Equipment Less Than \$50,000 (2022)	67.1	
Remove Safety Hazards (2022) - Various	199.6	
TOTAL ADMINISTRATION		266.7
INFORMATION SYSTEMS		
Replacement of Short-Term Load Forecasting Software	439.5	
Upgrade Energy Management System (2022) - Hydro Place	292.6	
Purchase Personal Computers (2022) - Hydro Place	477.1	
Replace Peripheral Infrastructure (2022) - Hydro Place	193.2	
Upgrade Core IT/OT Infrastructure (2022) - Hydro Place	308.2	
Perform Software Upgrades and Minor Enhancements (2022) - Hydro Place	621.7	
Refresh Cyber Security Infrastructure (2022) - Hydro Place	221.7	
Hydro Command Centre Upgrade (2022) - Hydro Place	76.4	
TOTAL TRANSMISSION		2,630.4
TELECONTROL		
Replace Radomes (2022) - Various	179.9	
	193.0	
Replace Network Communications Equipment (2022)		
Upgrade Remote Terminal Units (2022) - Various	171.1	
Upgrade Remote Terminal Units (2022) - Various Replace Battery Banks and Chargers (2022) - Various	171.1 226.6	
Upgrade Remote Terminal Units (2022) - Various		770.6 3,667.7

PROJECT DESCRIPTION 2022

TRANSMISSION AND RURAL OPERATIONS		
TRANSMISSION		
Wood Pole Line Management Program (2022)	1,603.5	
TOTAL TRANSMISSION		1,603.5
DISTRIBUTION		
Provide Service Extensions (2022) - Various	3,627.2	
Distribution System In-Service Failures, Miscellaneous Upgrades, and Street Lights (2022) - Various	3,826.7	
TOTAL METERING		7,453.9
TOOLS AND EQUIPMENT		
Purchase Tools and Equipment Less than \$50,000 (2022) - Central Region	193.9	
Purchase Tools and Equipment Less than \$50,000 (2022) - Northern Region	134.6	
Purchase Tools and Equipment Less than \$50,000 (2022) - Labrador Region	121.8	
Replace Light-Duty Mobile Equipment (2022) - Various	695.0	
TOTAL TOOLS AND EQUIPMENT		1,145.3
TERMINAL STATIONS		
Terminal Station In-Service Failures (2022)	900.0	
TOTAL TERMINAL STATIONS		900.0
GENERATION		
Overhaul Diesel Units (2022) - Various	1,360.5	
Upgrade Fuel Storage Tanks (2022) - Mary's Harbour	499.1	
TOTAL GENERATION		1,859.6
TOTAL TRANSMISSION and RURAL OPERATIONS		12,962.3
TOTAL SINGLE YEAR PROJECTS OVER \$50,000		27,352.9

Schedule B Order No. P.U. 37(2021) Multi-Year Projects over \$50,000 Issued: December 20, 2021

NEWFOUNDLAND AND LABRADOR HYDRO 2022 CAPITAL BUDGET PROJECTS OVER \$50,000 MULTI-YEAR PROJECTS (\$000)

Multi-year Projects Commencing in 2022

PROJECT DESCRIPTION	2022	2023	2024	Total
Hydraulic Generation Refurbishment and Modernization (2022-2023)	2,970.6	3,788.9	-	6,759.5
Install Infrared Scanning Ports - Happy Valley Gas Turbine	39.6	25.6	-	65.2
Unit 3 Generator Components Condition Assessment and Miscellaneous Upgrades	153.0	338.8	-	491.8
Replace Underground Fire Water Distribution System - Holyrood	128.3	1,578.0	-	1,706.3
Control System Replacement - Holyrood Gas Turbine	146.0	41.0	-	187.0
Replace Light- and Heavy-Duty Vehicles (2022-2024)	569.0	593.2	2,319.6	3,481.8
Purchase 85' Material Handler Aerial Device on Track Unit	20.4	1,265.7	67.8	1,353.9
Terminal Station Refurbishment and Modernization (2022-2023)	3,111.9	6,109.7	-	9,221.6
Purchase 46' Material Handler Aerial Device on Track Unit	20.4	698.8	38.8	758.0
Replace Metering System	515.6	3,865.6	994.6	5,375.8
Additions for Load (2022) - Mary's Harbour Service Conductor	307.8	51.3	-	359.1
Install Fire Protection in Diesel Plants (2022-2023) - Ramea	90.7	1,838.1	-	1,928.8
Upgrade Circuit Breakers (2022-2023) - Various	2,121.9	7,361.8	-	9,483.7
Upgrade of Worst-Performing Distribution Feeders (2022-2023)	850.0	1,922.9	-	2,772.9
Labrador City L22 Voltage Conversion (2022-2023)	486.8	1,004.4	-	1,491.2
Diesel Genset Replacement Unit 2039 - St. Lewis	397.0	1,583.8	134.9	2,115.7
Diesel Genset Replacement Unit 2012 - L'Anse-Au-Loup	339.9	2,513.2	210.2	3,063.3
Install Recloser Remote Control (2022-2023) - Various	174.6	149.1	-	323.7
Total Multi-Year Projects over \$50,000 commencing in 2022 ¹	12,443.5	34,729.9	3,765.9	50,939.3

¹ Reduced by \$550,600 in 2022 and \$524,600 in 2023 to reflect the removal of the Additions for Load (2022) - Distribution System - Mary's Harbour Voltage Conversion project.

NEWFOUNDLAND AND LABRADOR HYDRO 2022 CAPITAL BUDGET PROJECTS OVER \$50,000 MULTI-YEAR PROJECTS (\$000)

Multi-year Projects Commencing in 2021

	Expended to				
PROJECT DESCRIPTION	2021	2022	2023	2024	Total
Hydraulic Generation Refurbishment and Modernization (2021-2022)	6,569.6	5,005.6	-	-	11,575.2
Replace Voltage Regulator - Happy Valley Gas Turbine	131.3	211.0	-	-	342.3
Upgrade Compressed Air System - Happy Valley Gas Turbine	76.6	69.2	-	-	145.8
Refurbish Ebbegunbaeg Control Structure	3,236.8	3,238.3	3,470.1	3,674.7	13,619.9
Upgrade Waste Water Equalization System - Holyrood	1,813.4	547.7	-	-	2,361.1
Upgrade Distributed Control System Hardware - Holyrood	360.4	368.2	-	-	728.6
Replace Fuel Oil, Lube Oil, and Glycol Pumps - Happy Valley Gas Turbine	234.7	170.5	-	-	405.2
Replace Transfer Switches and Associated Hardware - Hydro Place	197.3	938.5	-	-	1,135.8
Replace Light- and Heavy-Duty Vehicles (2021-2022)	1,320.9	1,335.1	-	-	2,656.0
Diesel Genset Replacements (2021-2022)	2,560.6	286.2	-	-	2,846.8
Terminal Station Refurbishment and Modernization (2021-2022)	6,171.6	6,957.3	-	-	13,128.9
Upgrades for Future Retirement of Stephenville Gas Turbine	1,530.3	5,344.5	-	-	6,874.8
Wabush Terminal Station Upgrades	2,301.7	4,935.5	4,335.7	-	11,572.9
Additions for Load - Wabush Substation Upgrades	1,186.7	6,253.0	3,053.7	-	10,493.4
Upgrade Circuit Breakers (2021-2022) - Various	5,418.8	4,293.6	820.3	-	10,532.7
Upgrade of Worst-Performing Distribution Feeders (2021-2022)	318.9	805.6	-	-	1,124.5
Total Multi-Year Projects over \$50,000 commencing in 2021	33,429.6	40,759.8	11,679.8	3,674.7	89,543.9

mun-vear	I I UICCIS	Commencing in	1 4040

	Expended to				
PROJECT DESCRIPTION	2021	2022	2023	2024	Total
Perform Combustor Inspection - Holyrood Gas Turbine	3,046.1	2,427.4	-	-	5,473.5
Total Multi-Year Projects over \$50,000 commencing in 2020	3,046.1	2,427.4	-	-	5,473.5

Schedule C Order No. P.U. 37(2021) 2021 Capital Budget Issued: December 20, 2021

NEWFOUNDLAND AND LABRADOR HYDRO 2022 CAPITAL BUDGET

Projects Over \$50,000 to be completed in 2022	\$ 27,352,900
Multi-Year Projects over \$50,000 commencing in 2022	12,443,500
Multi-Year Project over \$50,000 commencing prior to 2022 (previously approved)	43,187,200
Projects under \$50,000 ¹	179,800
Allowance for Unforeseen Items	 1,000,000
Approved 2022 Capital Budget	\$ 84,163,400

¹ Approval of projects under \$50,000 is not required but these expenditures are part of the total 2022 Capital Budget