NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 18(2022)

1	IN THE M.	ATTER OF the Electrical Power		
2	Control Act	t, 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, ar	nd regulations thereunder; and		
6				
7	IN THE M.	AATTER OF an application by		
8	Newfoundla	ndland and Labrador Hydro for approval		
9	of rotor rim	rotor rim shrinking and stator recentering at		
10	the Upper Salmon Hydroelectric Generating			
11	Station pursuant to section 41 of the <i>Act</i> .			
12				
13				
14	WHEREAS	EREAS Newfoundland and Labrador Hydro ("Hydro") is a corporation continued and		
15	existing under the Hydro Corporation Act, 2007, is a public utility within the meaning of the Act,			
16	and is also s	subject to the provisions of the <i>EPCA</i> ; and		
17				
18	WHEREAS section 41 of the Act states that a public utility shall not proceed with the construction,			
19	purchase or lease of improvements or additions to its property without prior approval of the Board			
20	where a) the cost of construction or purchase is in excess of \$50,000, or b) the cost of the lease is			
21	in excess of	\$5,000 in a year of the lease; and		
22				
23	WHEREAS in Order No. P.U. 37(2021) the Board approved Hydro's 2022 Capital Budget in the			
24	amount of \$	84,163,400; and		
25				
26		S the Board approved supplementary 2022 capital expenditures in:		
27	(i)	Order No. P.U. 9(2022) to reset Hydro's 2022 Allowance for Unforeseen Items to		
28		\$1,000,000; an		
29	(ii)	Order No. P.U. 12(2022) in the amount of \$634,000 to replace the roof of the		
30		Makkovik Diesel Generating Station;		
31	(iii)	Order No. P.U. 14(2022) in the amount \$137,700 to purchase and install a 545 kW		
32		diesel engine at the Mary's Harbour Diesel Generating Station;		
33	(iv)	Order No. P.U. 17(2022) in the amount \$1,578,900 to purchase one set of last stage		
34		blades to serve as capital spares for Units 1 and 2 at the Holyrood Thermal Generating		
35		Station; and		

WHEREAS on April 26, 2022 Hydro filed an application for approval of a capital expenditure in the amount of \$3,999,800 for rotor rim shrinking and stator recentering at the Upper Salmon Hydroelectric Generating Station (the "Application"); and

WHEREAS the Application stated that the Upper Salmon is located upstream of the Bay d'Espoir Hydroelectric Generating Facility, has been online since 1983 and consists of a single vertical hydraulic turbine unit rated for 84 MW of generating capacity; and

WHEREAS the Application stated through the annual maintenance program for this facility, cracks on the rotor rim guidance keys had been identified and refurbished with a replacement project previously completed in 2018 as well as additional refurbishment in 2019 and 2020; and

WHEREAS the Application stated that, during the planned annual preventive maintenance checks and inspections in August 2021, a significant crack on a rim guidance block was discovered along with the shifting of two drive key assemblies upward within their slots indicating further deterioration that required more extensive intervention; and

 WHEREAS the Application stated that Hydro consulted with the original equipment manufacturer ("OEM"), Andritz Hydro Canada Inc., and completed further inspections of all the rotor rim guidance keys and blocks which indicated extensive cracking requiring Hydro to complete a short-term solution in 2021 to return the unit to service; and

WHEREAS the Application stated that, following the implementation of the short-term solution in 2021, Hydro followed the OEM recommendation to inspect the unit every 12 weeks or 2,000 hours of operation with the first inspection completed in February 2022; and

WHEREAS the Application stated that, following the February 2022 inspection, Hydro determined the increased deterioration supported a long-term solution of shrinking the rotor rim and recentering the stator; and

WHEREAS the Application stated that a delay in implementation of a long-term solution increases the risk of unplanned expenditures, outages, and associated bypassed generation; and

WHEREAS the Application stated that, due to the time necessary for procurement, outage requirements, and the availability of the necessary equipment, execution of the long-term solution is anticipated to take two years: and

WHEREAS the Application stated that Hydro will continue the 12 week or 2,000 hours inspections and, if significant cracking is found, all efforts will be made to complete the work in 2022; and

- WHEREAS the Application was copied to: Newfoundland Power Inc. ("Newfoundland Power");
 the Consumer Advocate, Dennis Browne, Q.C.; a group of Island Industrial customers: Corner
 Brook Pulp and Paper Limited, Braya Renewable Fuels (Newfoundland) GP Inc. (formerly known
- as NARL Refining Limited Partnership), and Vale Newfoundland and Labrador Limited; the

1	communities of Sheshatshiu, Happy Valley-Goose Bay, Wabush, and Labrador City; Tec
2	Resources Limited; and Praxair Canada Inc.; and
3	

5 11, 2022; and

WHEREAS on May 16, 2022 Newfoundland Power advised that it had no comment on the Application; and

WHEREAS the Board issued a request for information which was answered by Hydro on May

WHEREAS on May 17, 2022 Hydro requested that the Board approve the Application as submitted; and

WHEREAS the Board is satisfied that the proposed 2022 supplemental capital expenditure for rotor rim shrinking and stator recentering at the Upper Salmon Hydroelectric Generating Station is necessary to ensure that Hydro can continue to provide service that is safe and adequate and just and reasonable.

IT IS THEREFORE ORDERED THAT:

1. The proposed capital expenditure in the amount of \$3,999,800 for rotor rim shrinking and stator recentering at the Upper Salmon Hydroelectric Generating Station is approved.

2. Hydro shall pay all expenses of the Board arising from this Application.

DATED at St. John's, Newfoundland and Labrador, this 20th day of May, 2022.

Darlene Whalen, P. Eng., FEC Chair and Chief Executive Officer

John O'Brien, FCPA, FCA, CISA Commissioner

Christopher Pike, LL.B., FCIP

Commissioner

Sara Kean

Assistant Board Secretary