

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

**AN ORDER OF THE BOARD**

**NO. P.U. 13(2017)**

1 **IN THE MATTER OF** the *Electrical Power*  
2 *Control Act, 1994*, SNL 1994, Chapter E-5.1 (the  
3 “*EPCA*”) and the *Public Utilities Act, RSNL 1990*,  
4 Chapter P-47 (the “*Act*”), as amended, and regulations  
5 thereunder; and  
6

7 **IN THE MATTER OF** an application by  
8 Newfoundland and Labrador Hydro for approval to  
9 inspect and refurbish Bay d’Espoir Penstock 2 and  
10 to complete a major overhaul on Bay d’Espoir Unit 3  
11 Turbine pursuant to section 41 of the *Act*.  
12  
13

14 **WHEREAS** 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  
16 *Act*, and is also subject to the provisions of the *EPCA*; and  
17

18 **WHEREAS** subsection 41(3) of the *Act* requires that a public utility not proceed with the  
19 construction, purchase or lease of improvements or additions to its property where:  
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- 21 a) the cost of construction or purchase is in excess of \$50,000; or
- 22 b) the cost of the lease is in excess of \$5,000 in a year of the lease,

23  
24 without prior approval of the Board; and  
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26 **WHEREAS** in Order No. P.U. 45(2016) the Board approved Hydro's 2017 Capital Budget in  
27 the amount of \$271,265,600; and  
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29 **WHEREAS** the Board approved supplementary 2017 capital expenditures:  
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- 31 (i) in Order No. P.U. 5(2017) in the amount of \$3,045,000 to construct a  
32 distribution feeder at the Bottom Waters Terminal Station;
- 33 (ii) in Order No. P.U. 7(2017) in the amount of \$3,168,944 to lease, sublease and  
34 purchase transmission lines and electrical equipment to serve Labrador West;
- 35 (iii) in Order No. P.U. 10(2017) in the amount of \$1,349,200 to replace the exciter  
36 controls for Units 1 and 2 at the Holyrood Thermal Generating Station; and
- 37 (iv) in Order No. P.U. 11(2017) in the amount of \$2,585,200 to replace equipment  
38 and complete a level 2 condition assessment of the synchronous condensers at  
39 Wabush Terminal Station; and

1 **WHEREAS** on March 3, 2017 Hydro applied to the Board for approval of a capital  
2 expenditure in the amount of \$9,063,700 to inspect and refurbish Bay d’Espoir Penstock 2 and  
3 \$2,361,500 to complete a major overhaul on Bay d’Espoir Unit 3 Turbine (the “Application”);  
4 and

5  
6 **WHEREAS** the Application stated Penstock 1 experienced weld failures in 2016 and, based on  
7 the condition of the welds in Penstock 1, Hydro anticipates and is concerned that the weld  
8 conditions in Penstock 2 could be in a similar deteriorated state and that Penstock 2 could be in  
9 need of refurbishment; and

10  
11 **WHEREAS** the Application stated that a weld failure in Penstock 2 would result in a loss of  
12 153 MW of generation capacity from the Bay d’Espoir plant which will result in an  
13 unacceptable impact to the generation capacity plan for the Island Interconnected System; and

14  
15 **WHEREAS** the Application also stated that Bay d’Espoir Unit 4 was overhauled in 2016 and  
16 that, as part of its 2017 Capital Budget Application Five Year Capital Plan, Hydro planned to  
17 complete a major overhaul on each remaining unit in the Bay d’Espoir plant starting in 2019;  
18 and

19  
20 **WHEREAS** to ensure reliable turbine operation, Hydro decided to advance the timing of each  
21 major overhaul by one year, starting in 2018; and

22  
23 **WHEREAS** Hydro now proposes to advance the Unit 3 turbine major overhaul to coincide  
24 with the refurbishment of Penstock 2 to avoid an additional extended outage to Unit 3; and

25  
26 **WHEREAS** the Application stated that the proposed capital expenditures are required to  
27 ensure that Hydro can continue to provide service which is safe and adequate and just and  
28 reasonable; and

29  
30 **WHEREAS** the Application was copied to: Newfoundland Power Inc.; the Consumer  
31 Advocate, Dennis Browne, Q.C.; Corner Brook Pulp and Paper Limited and NARL Refining  
32 Limited Partnership; Vale Newfoundland and Labrador Limited; Praxair Canada Inc.; and Teck  
33 Resources Limited; and

34  
35 **WHEREAS** Newfoundland Power filed requests for information which were answered by  
36 Hydro on March 23, 2017; and

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38 **WHEREAS** on March 29, 2017 Newfoundland Power filed a written submission; and

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40 **WHEREAS** Newfoundland Power agreed that it is reasonable that Hydro perform a detailed  
41 inspection and assessment of the condition of Penstock 2 welds but submits that the request for  
42 Board approval of the proposed expenditure to refurbish the Penstock 2 welds is premature and  
43 that the evidence submitted in support of the Application does not meet the requirements of the  
44 Capital Budget Application Guidelines (the “Guidelines”); and

45  
46 **WHEREAS** Newfoundland Power submitted that the Board should establish a process to  
47 permit expedited approval of any refurbishment welds upon submission by Hydro of  
48 appropriate supporting evidence; and

1 **WHEREAS** Newfoundland Power stated it takes no issue with the proposed overhaul of Bay  
2 d’Espoir Unit 3; and

3  
4 **WHEREAS** Hydro filed a reply submission on April 3, 2017; and

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6 **WHEREAS** Hydro disagreed that approval to refurbish Penstock 2 is premature or that the  
7 evidence submitted does not meet the requirements of the Guidelines; and

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9 **WHEREAS** Hydro stated that it expects to know that condition of Penstock 2 within 3 days of  
10 the start of the inspection, that it will communicate the results of the inspection and whether or  
11 not the work must proceed to the Board and the parties, and that, if refurbishment is required, it  
12 must be able to immediately proceed with the work to ensure the reliability of the Island  
13 Interconnected System; and

14  
15 **WHEREAS** Hydro acknowledged that asking for approval to proceed with a significant capital  
16 expenditure prior to the submission of the inspection and assessment report is not the normal  
17 approach but submits that the Guidelines permit for the justification of a project without such  
18 information if an explanation is provided for its absence; and

19  
20 **WHEREAS** Hydro stated that it is only proposing this approach to ensure the expedient return  
21 to service of the penstock, and also that the timeline for the scope of work is already very  
22 aggressive and that to provide for an expedited process for approval after the inspection has  
23 been completed is not appropriate and could delay the project; and

24  
25 **WHEREAS** Hydro submitted that the capital works are necessary to provide service which is  
26 safe and adequate and just and reasonable; and

27  
28 **WHEREAS** the Board is satisfied that Hydro’s commitment to provide, on the day following  
29 the third day of inspection, an analysis by a qualified engineer or other appropriate expert,  
30 containing field findings on the weld condition and indicating whether or not the work must  
31 proceed, is sufficient in the circumstances to support proceeding with the refurbishment of  
32 Penstock 2 and that no additional process needs to be put in place at this time; and

33  
34 **WHEREAS** the Board is satisfied that the proposed capital expenditures to inspect, and  
35 refurbish if required, Bay d’Espoir Penstock 2 and to complete Bay d’Espoir Unit 3 Turbine  
36 Major Overhaul are necessary to allow Hydro to provide service and facilities which are  
37 reasonably safe and adequate and just and reasonable.

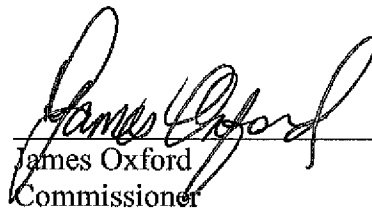
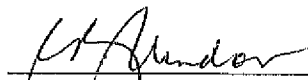
1 **IT IS THEREFORE ORDERED THAT:**  
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- 3 1. The proposed capital expenditure in the amount of \$9,063,700 to inspect and refurbish  
4 Bay d'Espoir Penstock 2 is approved subject to the following conditions:  
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6 (i) Hydro shall file, on the day following the third day of inspection, an analysis by a  
7 qualified engineer or other appropriate expert, containing field findings on the weld  
8 condition and indicating whether or not the work must proceed, to support the  
9 refurbishment of the penstock.  
10  
11 (ii) Hydro shall file copies of any subsequent inspection and assessment reports in  
12 connection with the refurbishment of the penstock.  
13  
14 2. The proposed capital expenditure in the amount \$2,361,500 to complete a major overhaul  
15 on Bay d'Espoir Unit 3 Turbine is approved.  
16  
17 3. Hydro shall pay all expenses of the Board arising from this Application.

**DATED** at St. John's, Newfoundland and Labrador, this 21<sup>st</sup> day of April, 2017.



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Darlene Whalen, P.Eng.  
Vice-Chair

  
\_\_\_\_\_  
James Oxford  
Commissioner  
\_\_\_\_\_  
Cheryl Blundon  
Board Secretary