

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

AN ORDER OF THE BOARD

NO. P.U. 21(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 Newfoundland
8 and Labrador Hydro for approval of a capital expenditure
9 to repair and advance the overhaul of the Happy Valley
10 gas turbine pursuant to section 41 of the *Act*.
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12

13 **WHEREAS** Newfoundland and Labrador Hydro (“Hydro”) is a corporation continued and
14 existing under the *Hydro Corporation Act, 2007*, is a public utility within the meaning of the
15 *Act*, and is also subject to the provisions of the *EPCA*; and
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17 **WHEREAS** section 41 of the *Act* states that a public utility shall not proceed with the
18 construction, purchase or lease of improvements or additions to its property where:
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- 20 a) the cost of construction or purchase is in excess of \$50,000; or
21 b) the cost of the lease is in excess of \$5,000 in a year of the lease
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23 without prior approval of the Board; and
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25 **WHEREAS** in Order No. P.U. 45(2016) the Board approved Hydro's 2017 Capital Budget in
26 the amount of \$271,265,600; and
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28 **WHEREAS** the Board approved supplementary 2017 capital expenditures:
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- 30 (i) in Order No. P.U. 5(2017) in the amount of \$3,045,000 to construct a
31 distribution feeder at the Bottom Waters Terminal Station;
32 (ii) in Order No. P.U. 7(2017) in the amount of \$3,168,944 to lease, sublease and
33 purchase transmission lines and electrical equipment to serve Labrador West;
34 (iii) in Order No. P.U. 10(2017) in the amount of \$1,349,200 to replace the exciter
35 controls for Units 1 and 2 at the Holyrood Thermal Generating Station;
36 (iv) in Order No. P.U. 11(2017) in the amount of \$2,585,200 to replace equipment
37 and complete a level 2 condition assessment of the synchronous condensers at
38 Wabush Terminal Station;

- 1 (v) in Order No. P.U. 13(2017) in the amounts of \$9,063,700 and \$2,361,500
2 respectively to inspect and refurbish Bay d'Espoir Penstock 2 and to complete a
3 major overhaul on Bay d'Espoir Unit 3 Turbine;
- 4 (vi) in Order No. P.U. 15(2017) in the amount of \$500,000 to be added to the 2017
5 Allowance for Unforeseen Items; and
- 6 (vii) in Order No. P.U. 20(2017) in the amount of \$2,610,000 to refurbish and
7 replace critical systems and equipment at the Holyrood Thermal Generating
8 Station; and
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10 **WHEREAS** on April 19, 2017 Hydro filed an application with the Board requesting approval
11 of a capital expenditure in the amount of \$3,714,800 for the repair and advanced overhaul of
12 the Happy Valley gas turbine (the "Application"); and
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14 **WHEREAS** the Happy Valley gas turbine is required to provide emergency and peaking
15 power, as well as supply power during the performance of planned maintenance and to provide
16 synchronous condensing capability to provide voltage regulation and permit the transmission
17 of power to the Happy Valley area during the winter months; and
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19 **WHEREAS** the Application stated that in December, 2016 the Happy Valley gas turbine was
20 observed to be leaking oil after shut down following a test run, and an investigation determined
21 that there was an internal leak; and
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23 **WHEREAS** the Application also stated that repair of the Happy Valley gas turbine requires its
24 removal from site and shipment to the original equipment manufacturer repair facility; and
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26 **WHEREAS** as part of Hydro's asset management activities, the Happy Valley gas turbine is
27 scheduled for an overhaul in 2019; and
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29 **WHEREAS** the Application stated that Hydro is also proposing to advance the overhaul to
30 take advantage of the requirement to send the Happy Valley gas turbine to the original
31 equipment manufacturer repair facility; and
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33 **WHEREAS** the Application stated that the advancement of the overhaul is justified due to the
34 following:
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- 36 (i) the repair of the oil leak from the number three bearing seal requires the
37 complete disassembly of the HVGT;
- 38 (ii) the OEM has recommended replacement components due to obsolescence,
39 which work would have been completed in the planned overhaul in 2019;
- 40 (iii) an estimated cost saving of approximately \$600,000 is expected by overhauling
41 the gas turbine at this time as opposed to 2019 as planned, as removal, shipping,
42 reinstallation and commissioning would not have to be incurred in 2019; and
- 43 (iv) the need for another extended outage in 2019 to complete the HVGT overhaul
44 as currently planned will be eliminated; and
45

46 **WHEREAS** the Application was copied to: Newfoundland Power Inc.; the Consumer
47 Advocate, Dennis Browne, Q.C.; a group of Island Industrial customers: Corner Brook Pulp

1 and Paper Limited and NARL Refining Limited Partnership; Vale Newfoundland and Labrador
2 Limited; Praxair Canada Inc.; and Teck Resources Limited; and

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4 **WHEREAS** on May 11, 2017 the Consumer Advocate submitted that there appeared to be
5 justification for the capital expenditure; and

6
7 **WHEREAS** the Board issued requests for information which were answered by Hydro on May
8 15, 2017; and

9
10 **WHEREAS** on May 23, 2017 Hydro stated that the proposed capital works are necessary to
11 ensure that Hydro can continue to provide service which is safe and adequate and just and
12 reasonable and requested that the Board approve the Application; and

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14 **WHEREAS** the Board is satisfied that the proposed 2017 supplemental capital expenditure to
15 repair and advance the overhaul of the Happy Valley gas turbine is reasonable and necessary to
16 ensure the continued provision of a safe and reliable electricity supply to Hydro's customers.

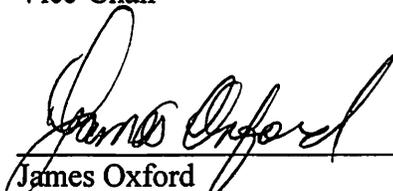
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18
19 **IT IS THEREFORE ORDERED THAT:**

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21 1. The proposed capital expenditure in the amount of \$3,714,800 for the repair and advanced
22 overhaul of the Happy Valley gas turbine is approved.
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24 2. Hydro shall pay all expenses of the Board arising from this Application.

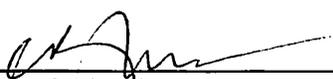
DATED at St. John's, Newfoundland and Labrador, this 30th day of May, 2017.



Darlene Whalen, P.Eng.
Vice-Chair



James Oxford
Commissioner



Cheryl Blundon
Board Secretary