# WHENEVER. WHEREVER. We'll be there.



#### HAND DELIVERED

June 19, 2018

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

Attention: G. Cheryl Blundon

**Director of Corporate Services** 

and Board Secretary

Ladies and Gentlemen:

Re: Newfoundland and Labrador Hydro – 2018 Capital Budget Supplemental Application – Approval of Capital Expenditures to Complete a Level 2 Condition Assessment on Penstocks 1 and 2, and a Report on Penstocks 1, 2, and 3 at the Bay d'Espoir Hydroelectric Generating Station – Request for Comments

### **Introductory**

On June 8, 2018, Newfoundland and Labrador Hydro ("Hydro") submitted an application (the "Application") to the Board requesting approval of certain capital expenditures proposed for Hydro's Bay d'Espoir Hydroelectric Generating Station ("Bay d'Espoir"). The Application seeks approval of a capital expenditure of an estimated \$1.1 million for a level 2 condition assessment of Penstocks 1 and 2, and a report on Penstocks 1, 2, and 3.

By letter dated June 13, 2018, the Board set today as the deadline for comments on the Application. These are Newfoundland Power's comments.

#### The Application

The Bay d'Espoir Hydroelectric Generating Station (Bay d'Espoir) relies on 4 penstocks to supply water to its 7 generating units. Following a rupture experienced in Penstock 1 in 2016, Hydro carried out work to refurbish the original penstock weld material. In the summer of 2017, an inspection revealed similar issues with Penstock 2 and refurbishment work was completed on that penstock. In November 2017, another failure occurred on Penstock 1, requiring additional capital expenditures to reinforce welded areas, and allowing for the penstock to return to service for the 2017/2018 winter season. In May 2018, an inspection undertaken revealed weld cracking in Penstock 3. A refurbishment project is currently ongoing using Hydro's approved Allowance for Unforeseen Items.

Hydro engaged engineering consultant Hatch to review the original design documents and operating history of Penstocks 1, 2, and 3 to make recommendations regarding the measures necessary to ensure long-term reliability. In light of the past failures on Penstock 1, and considering the similarity in the

Hydro has determined that Penstock 4 will not be part of a review at this time because of its younger age and differing design.

Board of Commissioners of Public Utilities June 19, 2018 Page 2 of 2

design and operating conditions of the 3 penstocks, the consultant has recommended a Level 2 condition assessment for Penstocks 1, 2, and 3.

Hydro believes that completing Level 2 condition assessments on the penstocks will allow Hydro to enhance long-term planning focused on reliability of Bay d'Espoir. Hydro indicates it will use the results to evaluate alternatives using a cost benefit analysis to determine the least cost alternative to ensure the penstocks operate reliably.

#### **Submission**

The condition of the penstocks is essential to the ongoing reliability of Bay d'Espoir. For this reason, Newfoundland Power supports the Application.

It is Newfoundland Power's submission that Hydro should proceed as soon as possible with the proposed condition assessments, and file the resulting report with the Board, together with cost benefit analysis of the alternatives available to establish the least cost solution for the ongoing reliable operation of Bay d'Espoir. Once appropriate alternatives have been identified, the Board should require Hydro to bring forward a plan for future investment in the penstocks.

## Concluding

While Newfoundland Power supports the need for a Level 2 condition assessment of Penstocks 1 and 2 to deepen the understanding of the recent failures, it is important that completion of this work be followed in a timely way by the development of a long-term plan for the Bay d'Espoir penstocks.

We trust this is in order. If you have any questions, please contact the undersigned.

Yours very truly,

Gerard M. Hayes Senior Counsel

c. Michael Ladha

Newfoundland and Labrador Hydro

Paul Coxworthy Stewart McKelvey

Sheryl Nisenbaum Praxair Canada Inc. Dennis Browne, QC

Browne Fitzgerald Morgan & Avis

Larry Bartlett
Teck Resources Ltd.