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HAND DELIVERED

March 14, 2017

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 - 2017 Capital Budget Supplemental
Application - Refurbishment of Bay d'Espoir Penstock 2 and Bay d'Espoir Unit 3
Turbine Major Overhaul**

Please find enclosed the original and 9 copies of Newfoundland Power's Requests for Information NP-NLH-001 to NP-NLH-009 in relation to the above noted Application.

For convenience, the Requests for Information are provided on three-hole punched paper.

A copy of this letter, together with enclosures, has been forwarded directly to the parties listed below.

If you have any questions regarding the enclosed, please contact the undersigned at your convenience.

Yours very truly,

A handwritten signature in blue ink, appearing to read "Gerard Hayes".

Gerard Hayes
Senior Counsel

Enclosures

Newfoundland Power Inc.

55 Kenmount Road • P.O. Box 8910 • St. John's, NL A1B 3P6

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c. Tracey Pennell
Newfoundland and Labrador Hydro

Paul Coxworthy
Stewart McKelvey Stirling Scales

Thomas J. O'Reilly, QC
Cox & Palmer

Dennis Browne, QC
Browne Fitzgerald Morgan & Avis

Sheryl Nisenbaum
Praxair Inc.

Larry Bartlett
Teck Resources Ltd.

IN THE MATTER OF the Electrical Power
Control Act, RSNL 1994, Chapter E-5.1 (the
SPCA) and the Public Utilities Act, RSNL 1990,
Chapter P-47 (the Act), and regulations thereunder;

AND IN THE MATTER OF an Application
by Newfoundland and Labrador Hydro
for the approval of the Refurbishment of Bay d'Espoir
Penstock 2 and Bay d'Espoir Unit 3 Turbine
Major Overhaul pursuant to Subsection 41(3) of the Act.

**Requests for Information by
Newfoundland Power Inc.**

NP-NLH-001 to NP-NLH-009

March 14th, 2017

Requests for Information

NP-NLH-001 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Page 2, Line 3.*

“Anticipated refurbishment of 900 m of penstock weld based upon Penstock 1 scope”

What is the total length of all welds completed as part of the original construction of Penstock 1 and what percentage of the total length of Penstock 1 is the 900 m of weld refurbishment completed in 2016?

NP-NLH-002 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Page 2, Lines 15-16.*

“Based on the condition of the welds in Penstock 1, it is anticipated that the welds in Penstock 2 are in a similar deteriorated state and in need of refurbishment.”

Please confirm that the justification for this application is based upon the condition of Penstock 1 and not on a condition based assessment of Penstock 2.

NP-NLH-003 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Page 3, Lines 14-16.*

“As a follow-up to the work on Penstock 1, a root cause analysis was performed by a third party consultant. The root cause analysis report is expected to be submitted to Hydro by mid-March and will be forwarded to the Board at that time.”

Please provide a copy of this report when it becomes available.

NP-NLH-004 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Page 10, Lines 6-7.*

“The only viable option considered is to complete a detailed weld inspection and refurbish the deteriorated welds using the same method as for Penstock 1.”

Please explain whether Hydro proposes to complete the full inspection and assessment of Penstock 2 in advance of undertaking any refurbishment activities.

NP-NLH-005 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Page 10, Lines 6-7.*

“The only viable option considered is to complete a detailed weld inspection and refurbish the deteriorated welds using the same method as for Penstock 1.”

What amount of the project cost estimate of \$9 million is attributable to (i) the detailed weld inspection, and (ii) the refurbishment of the deteriorated welds?

NP-NLH-006 Reference: *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Appendix A – Penstock 1 Refurbishment Report, Page 14, Lines 13-16.*

“Penstocks 2 and 3 at Bay d'Espoir will have detailed inspections completed in 2017. All remaining penstocks will have engineering inspections completed between 2018 and 2020. Hydro is coordinating the timing of the inspections with other work requiring the penstocks to be dewatered.”

Why is Hydro seeking Board approval to proceed with the refurbishment of Penstock 2 before the results of the inspection and assessment are available for consideration by the Board?

NP-NLH-007 *Refurbish Penstock 2, Bay d'Espoir Generating Station, March 3, 2017, Appendix B – Penstock 2 Inspection Report, Page 19.*

“Kleinschmidt’s inspection in June 2016 was a visual inspection only of the welds and there were no overt indications of cracking occurring in the penstock. With the microscopic cracking occurring in Penstock No. 1, Kleinschmidt’s inspection does not preclude the same happening in Penstock No. 2. For that reason, we recommend that NL Hydro complete a detailed weld investigation within Penstock No. 2 in 2017.”

Following the Kleinschmidt inspection in June 2016, has Hydro conducted any further inspections or analysis of Penstock 2 to assess its condition and determine whether refurbishment is necessary?

NP-NLH-008

Reference: *Unit 3 Turbine Major Overhaul Bay d'Espoir Generating Station, March 3, 2017, Page 4, Lines 6-8.*

Hydro's asset management strategy for hydraulic turbines consists of three distinct points of intervention:

...

2. *A unit overhaul, on a six year frequency, which consists of a partial dismantle of the unit (generator rotor is removed) to perform a more intrusive condition based inspection and, if required, rehabilitation; ..."*

Please provide details regarding the last time Unit 3 was overhauled. The details should include (i) when the last overhaul occurred, (ii) what, if anything, the intrusive condition based inspection revealed, and (iii) what, if any, rehabilitation work was completed.

NP-NLH-009

Reference: *Unit 3 Turbine Major Overhaul Bay d'Espoir Generating Station, March 3, 2017, Page 12, Table 2.*

Why are readings not available for 2013 and 2015?

RESPECTFULLY SUBMITTED at St. John's, Newfoundland and Labrador, this 14th day of March, 2017.



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