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HAND DELIVERED

June 13, 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 a Capital Expenditure to Increase the Generating Capacity at Holyrood Thermal Generating Station to Improve Boiler Load Capacity in Units 1, 2 and 3 – Requests for Information

Please find enclosed the original and 10 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

c. Geoffrey Young
Newfoundland and Labrador Hydro

Dennis Browne, QC
Browne Fitzgerald Morgan & Avis

Paul Coxworthy
Stewart McKelvey Stirling Scales

Sheryl Nisenbaum
Praxair Inc.

Larry Bartlett
Teck Resources Ltd.

Newfoundland Power Inc.

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

PHONE (709) 737-5609 • FAX (709) 737-2974 • ghayes@newfoundlandpower.com

IN THE MATTER OF the Electrical Power Control Act, RSNL 1994, Chapter E-5.1 (the EPCA) 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 approval of capital expenditures to increase the generating capacity at the Holyrood Thermal Generating Station pursuant to Subsection 41(3) of the Act.

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

NP-NLH-001 to NP-NLH-009

June 13, 2018

Requests for Information

NP-NLH-001 **Reference: *Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Page 3, Lines 20-23.***

“Some fouling normally occurs as a by-product of combustion; however, the current levels of hard ash build up on the air heater hot end baskets and economizer tubes is restricting air flow and reducing heat transfer to unacceptable levels.”

Are the current levels of hard ash build up a result of abnormal fouling and, if so, what is Hydro’s understanding of why this is occurring?

NP-NLH-002 Does Hydro anticipate that completion of this project will result in a return to normal levels of fouling and hard ash build up?

NP-NLH-003 **Reference: *Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Page 7, Lines 3-6.***

“Restoration of capacity that is anticipated through execution of the project and cleaning of the economizer is required to fully avail of the benefits of recapture energy over the Labrador Island Link (LIL). Technical analysis has been completed that dictate how much capacity is required on the Avalon in order to provide for reliable service.”

Please provide a detailed description of this technical analysis or, if a written analysis is available, provide a copy.

NP-NLH-004 **Reference: *Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Page 7, Lines 6-8.***

“If Hydro is in the position to use recapture energy and shut down a Holyrood unit, the remaining units must have the ability to operate at higher loads for spinning reserve requirements.”

Will maximizing the capacity available for spinning reserve involve operating the thermal units at Holyrood at low loads during the upcoming winter season?

NP-NLH-005 **Reference: *Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Appendix A, B&W Engineering Study Report, Page A14.***

“The current fuel oil atomizing temperature (approx. 187 F) is lower than required for optimal combustion. It is recommended to increase firing temperature to 220-225 F to ensure proper combustion with the current range of oil viscosities.”

Has operating at these lower temperatures contributed to the abnormal ash deposits encountered in recent years and does Hydro intend to follow the recommendation to operate at the higher temperature?

NP-NLH-006

Reference: Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Appendix A, B&W Engineering Study Report, Page A14.

“The MgO additive system was taken out of service in 2014 and reductions in unit load capability for Units #1 and #2 started to occur in 2015-2016 and Unit #3 in late 2017. This system should be placed back into service and the oil dosed at a rate of 1 lb. MgO per lb. V20 in the fuel oil.”

Why was the MgO additive system taken out of service?

NP-NLH-007

Has operating without the MgO additive system contributed to the abnormal ash deposits encountered in recent years, and does Hydro intend to follow the recommendation to place the MgO additive system back in service?

NP-NLH-008

Reference: Improve Boiler Load Capacity – Units 1, 2 and 3, Holyrood, June 1, 2018, Appendix A, B&W Engineering Study Report, Page A15.

“Fouling in the Unit #1 and Unit #2 air heaters and economizers occurred between 2015-16 and 2018. The operating conditions during which this fouling occurred is unknown. It is most likely that the economizer fouling occurred start-up operation [sic] and the air heater during low load and/or start-up operation.”

In light of B&W Engineering’s suggestion that it is most likely that the air heater fouling occurred during low load operations, does Hydro have a plan to minimize low load operation of Holyrood?

NP-NLH-009

B & W Engineering has suggested that it is most likely that the air heater fouling occurred during low load operations. In recent years, Hydro has operated Unit #1 and Unit #2 at low load to provide spinning reserve to the Island Interconnected System. Please fully describe how Hydro proposes to balance these conflicting impacts.

RESPECTFULLY SUBMITTED at St. John's, Newfoundland and Labrador, this 13th day of June, 2018.



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