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HAND DELIVERED

May 30, 2016

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: An Application by Newfoundland and Labrador Hydro pursuant to Subsection 41 (3) of the Act for the approval of the Gas Generator Engine Refurbishments at the Hardwoods Gas Turbine Plant and the Stephenville Gas Turbine Plant.

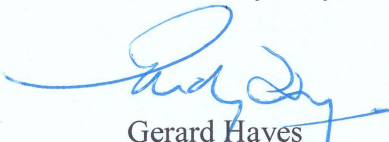
Please find enclosed the original and 12 copies of Newfoundland Power's Requests for Information NP-NLH-001 to NP-NLH-015 in relation to the above noted Application.

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,



Gerard Hayes
Senior Counsel

Enclosures

c. Geoffrey Young
Newfoundland and Labrador Hydro

Thomas Johnson, QC
O'Dea Earle Law Offices

Newfoundland Power Inc.

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

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Paul Coxworthy
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IN THE MATTER OF the *Electric 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;

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro (Hydro) pursuant to Subsection 41 (3) of the Act; for approval of the Gas Generator Engine Refurbishments at the Hardwoods Gas Turbine Plant and the Stephenville Gas Turbine Plant.

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

NP-NLH-001 to NP-NLH-015

May 30th, 2016

Requests for Information

NP-NLH-001

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 3, lines 15-20:

“The engine was removed from the plant and replaced, on an interim basis, with a leased spare unit provided by Alba Power Ltd. The leased unit is of smaller generation capacity (19MW vs 25MW) than the one being replaced, but fit the installation berth and was readily available for the quickest in-service date during the winter period. The cost of the leased unit is \$4,000 per week plus \$42 for each hour of operation.”

On September 3, 2015, Hydro filed an application for the approval of the Hardwoods Gas Turbine Engine Refurbishment. In its response to Request for Information NP-NLH-008 of that application, Hydro indicated that a replacement engine was being leased from Alba Power at a cost of \$16,000 per month. Is the leased spare unit currently in service at Hardwoods replacing engine serial number 202225 the same unit as referred to in Request for Information NP-NLH-008?

NP-NLH-002

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 3, lines 15-20:

“The engine was removed from the plant and replaced, on an interim basis, with a leased spare unit provided by Alba Power Ltd. The leased unit is of smaller generation capacity (19MW vs 25MW) than the one being replaced, but fit the installation berth and was readily available for the quickest in-service date during the winter period. The cost of the leased unit is \$4,000 per week plus \$42 for each hour of operation.”

If the response to NP-NLH-001 above is yes, has Hydro continued to lease the replacement engine from Alba Power from the time when engine serial number 202224 was returned to service in the fall of 2015 until February 8, 2016 when engine serial number 202225 failed?

NP-NLH-003

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 3, lines 15-20:

“The engine was removed from the plant and replaced, on an interim basis, with a leased spare unit provided by Alba Power Ltd. The leased unit is of smaller generation capacity (19MW vs 25MW) than the one being replaced, but fit the installation berth and was readily available for the quickest in-service date during the winter period. The cost of the leased unit is \$4,000 per week plus \$42 for each hour of operation.”

If the response to NP-NLH-001 above is yes, does Hydro plan to continue to lease the replacement engine from Alba Power indefinitely?

NP-NLH-004

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 4, lines 17-18:

“In addition, an analysis of each engine failure will be completed. It is anticipated that the findings of this analysis will be available by August 2016.”

Will the analysis be completed by Hydro? If not, who will complete the analysis for Hydro?

NP-NLH-005

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 4, lines 17-18:

“In addition, an analysis of each engine failure will be completed. It is anticipated that the findings of this analysis will be available by August 2016.”

Will the analysis include an investigation of the root cause of each engine failure?

NP-NLH-006

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 7, lines 5-6:

“Hardwoods End A engine, serial no. 202205, was overhauled in 2010 as a result of turbine blade damage.”

Is the cost associated with the 2010 engine overhaul included in the Plant Life Extension Program cost identified in Table 1?

NP-NLH-007

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 8, line 5 to Page 9, line 10.

Please provide a copy of any inspection reports completed by the Alba Power representative who was onsite at Hardwoods on February 18, 2016 and at Stephenville on March 30, 2016.

NP-NLH-008

Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 12, lines 10-11:

“A conservative estimate is that each engine will have at least 10 years of service life remaining after engine refurbishment.”

On September 3, 2015, Hydro filed application for the approval of the Hardwoods Gas Turbine Engine Refurbishment. In its response to Request for Information NP-NLH-012 of that application, Hydro indicated that “...Hydro typically has operated these engines for ten or more years after refurbishment, depending on usage.” Does Hydro have any explanation, in light of the recent failure history for the gas generators, as to why it has not achieved ten or more years of reliable service after refurbishment?

NP-NLH-009 Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 14, line 11 to Page 15, line 5.

Are the costs associated with the leased replacement engine included in the \$3,047,100 capital cost estimate for this project?

NP-NLH-010 Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 14, line 11 to Page 15, line 5.

The \$3,047,100 capital cost estimate for this project includes the cost to refurbish and reinstall both engines at Hardwoods and Stephenville. As the “Stephenville engine failed within the warranty period from the previous refurbishment in 2014”, please break out the \$3,047,100 capital cost estimate for this project into separate cost estimates for the Hardwoods and Stephenville engines.

NP-NLH-011 Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Page 14, line 11 to Page 15, line 5.

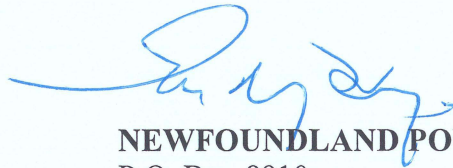
Further to Request for Information NP-NLH-010, to what extent does Hydro expect the cost associated with the Stephenville engine to be covered by the warranty?

NP-NLH-012 Reference: *Gas Generator Engine Refurbishments Hardwoods and Stephenville*, Appendix A.

Please provide a copy of the basic warranty and the extended warranty outlining all terms and conditions.

- NP-NLH-013 Reference: Newfoundland and Labrador Hydro's 2009 Capital Budget Application, Volume II, Tab 21, *Hardwoods Gas Turbine Plant Life Extension Upgrades*.
- In 2007, Hydro engaged Stantec Inc., an engineering consultant, to complete a condition assessment and life cycle cost analysis study of the Hardwoods and Stephenville gas turbine plants. Please provide a copy of the final report(s) prepared by Stantec Inc. for Hydro.
- NP-NLH-014 Reference: Newfoundland and Labrador Hydro's 2009 Capital Budget Application, Volume II, Tab 21, *Hardwoods Gas Turbine Plant Life Extension Upgrades*.
- Please provide, for both Hardwoods and Stephenville gas turbine plants, a table summarizing by year all capital cost incurred by Hydro at each site since 2007.
- NP-NLH-015 Reference: Newfoundland and Labrador Hydro's 2009 Capital Budget Application, Volume II, Tab 21, *Hardwoods Gas Turbine Plant Life Extension Upgrades*.
- At page 14 of the report *Hardwoods Gas Turbine Plant Life Extension Upgrades* found at Tab 21 of Hydro's 2009 Capital Budget Application, there is a cost estimate of approximately \$26 million for an alternative to repower the Hardwoods gas turbine facility with new gas turbine engines and power turbines. In light of the recent failure history for the Hardwoods and Stephenville gas generators, has Hydro revisited the decision for repowering the Hardwoods and Stephenville gas turbine facilities? If not, why not?

RESPECTFULLY SUBMITTED at St. John's, Newfoundland and Labrador, this 30th day of May, 2016.



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