

HAND DELIVERED

June 2, 2014

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 - Application for Approval of a Capital Project to Supply and Install 100 MW (Nominal) of Combustion Turbine Generation – Requests for Information

Please find enclosed the original and 12 copies of Newfoundland Power's Requests for Information GT-NP-NLH-1 to GT-NP-NLH-23 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.

We trust this is in order.

Yours very truly,



Gerard M. Hayes
Senior Counsel

c. Geoffrey Young
Newfoundland and Labrador Hydro

Paul Coxworthy
Stewart McKelvey

Dean A. Porter
Poole Althouse

Danny Dumaresque

Thomas Johnson
O'Dea Earle Law Offices

Thomas O'Reilly, QC
Vale Newfoundland and Labrador Limited

Fred Windsor
Sierra Club Atlantic



IN THE MATTER OF the *Electrical Power Control Act*_ R.S.N.L. 1994, Chapter E-5.1 (the *EPCA*) and the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the *Act*), and regulations thereunder;

AND IN THE MATTER OF an Application by Newfoundland and Labrador Hydro (Hydro) pursuant to Subsection 41(3) of the *Act*, for approval of the procurement and installation of a combustion turbine at Holyrood.

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

GT-NP-NLH-001 to GT-NP-NLH-023

June 2, 2014

Requests for Information

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| GT-NP-NLH-001 | Please provide the functional specifications of the 100 MW (Nominal) combustion turbine that has been procured by Hydro. |
| GT-NP-NLH-002 | Please describe the amount of fuel storage that will be available for the 100 MW combustion turbine. |
| GT-NP-NLH-003 | How long would the fuel storage planned for the 100 MW combustion turbine allow it to operate at nameplate rating without being replenished? |
| GT-NP-NLH-004 | How will fuel for the 100 MW combustion turbine be transported to site? |
| GT-NP-NLH-005 | How much fuel does Hydro anticipate the 100 MW combustion turbine will consume in each of 2014, 2015, 2016, and 2017? |
| GT-NP-NLH-006 | What is the estimated cost of energy in cents/kwh from the combustion turbine while operating at its nameplate rating? In the response, please provide the calculation. |
| GT-NP-NLH-007 | In the event of a sudden and unexpected loss of generation or transmission assets on the Island Interconnected System, how long does Hydro expect it would take to start the 100 MW combustion turbine and supply 100 MW of load? |
| GT-NP-NLH-008 | In the event of an anticipated winter peak condition or forecast supply shortfall, please describe the startup process and lead time required to start the 100 MW combustion turbine and provide 100 MW of generation capacity. |
| GT-NP-NLH-009 | <p>On page 9 of the <i>Supply and Install 100 MW (Nominal) of Combustion Turbine Generation</i> report, Hydro states:</p> <p><i>“Hydro estimates the combustion turbine may cause an approximate 2.3 per cent increase above existing rates.”</i></p> <p>Please provide the calculation that shows the approximate 2.3 per cent increase in existing rates that Hydro has estimated.</p> |
| GT-NP-NLH-010 | <p>On page 9 of the <i>Supply and Install 100 MW (Nominal) of Combustion Turbine Generation</i> report, Hydro states:</p> <p><i>“Hydro estimates the combustion turbine may cause an approximate 2.3 per cent increase above existing rates.”</i></p> <p>Paragraph 99 of the opinion rendered by the Supreme Court of Newfoundland Court of Appeal in the matter of a case stated by the Board of Commissioners of Public Utilities (the “Stated Case”) states:</p> |

“A reserve fund could be ordered by the Board to be used in the future to improve service, or to keep rates low or for some other purpose that is consistent with the objectives and policies of the legislation.”

In light of the electricity supply issues encountered on the Island Interconnected System in January 2014, and in light of the cited passage from the Stated Case, has Hydro considered whether it would be of benefit to customers to ask the Provincial Government to consider directing the disposition of the Newfoundland Power RSP surplus to some other purpose consistent with the objectives and policies of the legislation, including improving service? If not, please explain why not.

GT-NP-NLH-011 On page 9 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“Hydro estimates the combustion turbine may cause an approximate 2.3 per cent increase above existing rates.”

Has Hydro had any conversations with the Provincial Government concerning how the Newfoundland Power RSP surplus might be used to mitigate Hydro’s increase in capital spending required in future years to finance either (i) Hydro’s proposed 230kV transmission line from Bay D’Espoir to Western Avalon; (ii) Hydro’s proposed 100 MW combustion turbine to be installed at Holyrood; or (iii) any other material expenditure required to ensure security of supply until Muskrat Falls is fully operational? If not, why not?

GT-NP-NLH-012 On page 9 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“As well, for added security in the event of higher demands, decreased reliability or for schedule slippage of the proposed combustion turbine proposed in service date, Hydro is proposing to negotiate interruptible contracts with major industrial customers at least for 2014-2015.”

Is Hydro seeking approval from the Board to begin negotiations as a part of this Application?

GT-NP-NLH-013 On page 9 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“As well, for added security in the event of higher demands, decreased reliability or for schedule slippage of the proposed combustion turbine proposed in service date, Hydro is proposing to negotiate interruptible contracts with major industrial customers at least for 2014-2015.”

Has Hydro begun negotiations with major industrial customers for interruptible contracts? If so, please indicate if Hydro currently expects these negotiations to be concluded in advance of December 2014.

GT-NP-NLH-014 On page 22 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“The parameters used in Strategist software, the program used to perform this analysis, for Thermal Generation (Holyrood) are Derated Adjusted Forced Outage Rate (DAFOR) and, as a sensitivity, the rate was increased by 2 per cent above the Base Case assumption of 9.6 per cent to 11.64 per cent. The parameter used for combustion turbines is the Utilization Forced Outage Rate (UFOP) and this was increased by 10 per cent above base case of 10.62 per cent to 20.6 per cent.”

What were the actual DAFOR and UFOP values experienced for Hydro’s thermal generation and combustion turbines in 2013 and 2014 YTD?

GT-NP-NLH-015 On page 30 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“In the near term, a combustion turbine located at Holyrood provides...[t]he ability to return the leased black start diesels at Holyrood.”

Has Hydro received assurances from the supplier that the 100 MW combustion turbine will be able to black start the Holyrood Thermal Generating Station? If so, please provide a copy of those assurances.

GT-NP-NLH-016 On page 30 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“In the near term, a combustion turbine located at Holyrood provides...[t]he ability to return the leased black start diesels at Holyrood.”

How long would it take the 100 MW combustion turbine to begin to provide the necessary power to black start the Holyrood Thermal Generating Station?

GT-NP-NLH-017 On page 30 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“In the near term, a combustion turbine located at Holyrood provides...[t]he ability to return the leased black start diesels at Holyrood.”

When does Hydro expect to be able to return the leased black start diesels at Holyrood?

GT-NP-NLH-018 On page 30 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“In the near term, a combustion turbine located at Holyrood provides...[t]he ability to return the leased black start diesels at Holyrood.”

Please describe and quantify how returning the leased black start diesels earlier than originally planned might impact Hydro’s costs for each of 2014, 2015, and 2016?

GT-NP-NLH-019 On page 36 of *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“While synchronous condenser capability is a desirable feature, if its provision would mean delays in the initial in service date of the combustion turbine, it would not be considered critical. This capability will not be required until 2017 and it can be pursued later.”

Does the combustion turbine that Hydro has procured have synchronous condenser capability?

GT-NP-NLH-020 On page 36 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“While synchronous condenser capability is a desirable feature, if its provision would mean delays in the initial in service date of the combustion turbine, it would not be considered critical. This capability will not be required until 2017 and it can be pursued later.”

Please provide Hydro’s best estimate of the future costs that would be incurred to provision synchronous condenser capability on the combustion turbine if it does not currently have synchronous condenser functionality.

GT-NP-NLH-021 On page 38 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

“In order to provide greatest value for its customers, Hydro will accept only tenders from suppliers which include generating units with proven reliable records, in reliable operating order, and with a minimum of a one year warranty.”

Please provide the reliability and operating records for the combustion turbine that Hydro has procured.

GT-NP-NLH-022 On page 38 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

"In order to provide greatest value for its customers, Hydro will accept only tenders from suppliers which include generating units with proven reliable records, in reliable operating order, and with a minimum of a one year warranty."

Please provide details on the warranty of the combustion turbine that Hydro has procured including but not limited to the term of the warranty and the extent of the service and support that will be provided by the vendor.

GT-NP-NLH-023 On page 38-39 of the *Supply and Install 100 MW (Nominal) of Combustion Turbine Generation* report, Hydro states:

"The project is subject to review under the Province's Environmental Assessment (EA) process and construction cannot proceed until this is complete and the Project has been released from further environmental assessment."

Please provide an update on Hydro's progress in receiving environmental approval for the installation of the combustion turbine.

RESPECTFULLY SUBMITTED at St. John's, Newfoundland and Labrador, this 2nd day of June, 2014.



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