

HAND DELIVERED

July 17, 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 the Upgrade of the Transmission Line Corridor from Bay d'Espoir to Western Avalon – Requests for Information**

Please find enclosed the original and 12 copies of Newfoundland Power's Requests for Information NP-NLH-001 to NP-NLH-012 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

Sheryl Nisenbaum  
Praxair Canada Inc.

Thomas Johnson  
O'Dea Earle Law Offices

Thomas O'Reilly, QC  
Vale Newfoundland and Labrador Limited

Danny Dumaresque



**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 upgrade of the Transmission Line Corridor from Bay d’Espoir to Western Avalon.

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

**NP-NLH-001 to NP-NLH-012**

**July 17, 2014**

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### Requests for Information

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| NP-NLH-001 | Please describe the role, if any, that system events which occurred during the 2013/2014 winter (December 2013 through March 2014) have played in Hydro's assessment of alternatives in relation to this project.   |
| NP-NLH-002 | Please indicate the forecast generating capacity that will be located on the Avalon Peninsula following the decommissioning of the Holyrood Thermal Generating Station.   |
| NP-NLH-003 | Please indicate the forecast peak load (by month) on the Avalon Peninsula following the decommissioning of the Holyrood Thermal Generating Station.   |
| NP-NLH-004 | <p>Re: <b>Upgrade Transmission Line Corridor Bay d'Espoir to Western Avalon</b>, Page 12. Hydro indicates "The criteria applied here permits controlled loss of load to maintain stability for loss of the HVdc bipole...".</p> <p>Please provide a complete description of the extent to which load is assumed to be reduced to maintain stability for the loss of the HVdc link in this aspect of Hydro's analysis.</p> |
| NP-NLH-005 | <p>Re: <b>Upgrade Transmission Line Corridor Bay d'Espoir to Western Avalon</b>, Pages 27-28 and 52-53.</p> <p>Please provide the estimated cost of a 175 MW synchronous condenser unit described in the alternatives considered in the analysis justifying this project.</p>   |
| NP-NLH-006 | <p>Re: <b>Upgrade Transmission Line Corridor Bay d'Espoir to Western Avalon</b>, Pages 27-28 and 52-53.</p> <p>Please provide an estimate of the additional cost to install a generator to provide the 175 MW synchronous condenser capabilities described in the alternatives considered in the analysis justifying this project.</p>  |
| NP-NLH-007 | <p>Re: <b>Upgrade Transmission Line Corridor Bay d'Espoir to Western Avalon</b>, Pages 27-28 and 52-53.</p> <p>Please provide Hydro's assessment of the relative costs and technical benefits, including reliability, of installing generators to provide synchronous condenser capabilities instead of installing simple synchronous condensers.</p>   |

NP-NLH-008      Re: **Upgrade Transmission Line Corridor** *Bay d’Espoir to Western Avalon*, Pages 27-28 and 52-53.

If generators were installed to provide synchronous condenser capabilities as opposed to simple synchronous condensers, would the proposed 230 kV transmission line still be required to ensure system stability? In the response, please indicate the technical and/or cost considerations justifying the conclusion.

NP-NLH-009      Re: **Upgrade Transmission Line Corridor** *Bay d’Espoir to Western Avalon*, Page 35.

Please provide a comparison of transient stability before (i.e., in the current system configuration) and after the addition of the Labrador-Island HVdc Link (i.e., prior to the proposed 230 kV transmission line). In your response, please indicate the sources of potential instability which Hydro assesses as significant.

NP-NLH-010      Re: **Upgrade Transmission Line Corridor** *Bay d’Espoir to Western Avalon*, Page 53. Hydro indicates “Without this new transmission line, imports from Nova Scotia during LIL outage will be limited.”

Please provide a description of how much imports from Nova Scotia will be increased by addition of the proposed 230 kV transmission line.

NP-NLH-011      Re: **Upgrade Transmission Line Corridor** *Bay d’Espoir to Western Avalon*, Page 56. Hydro indicates the “...proposed line addition will greatly enhance energy transport to the east...”.

In the event of a permanent bipole fault on the Labrador-Island HVdc Link, how much load will Hydro be able to deliver to the Avalon Peninsula with, and without, the proposed 230 kV transmission line?

NP-NLH-012      Does Hydro intend to request/conduct a technical conference into this Application?

**RESPECTFULLY SUBMITTED** at St. John’s, Newfoundland and Labrador, this 17<sup>th</sup> day of July, 2014.

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