



NEWFOUNDLAND AND LABRADOR  
**BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**  
120 Torbay Road, P.O. Box 21040, St. John's, Newfoundland and Labrador, Canada, A1A 5B2

2015-04-01

**ELECTRONIC DISTRIBUTION**

**Newfoundland and Labrador Hydro**

Mr. Geoff Young  
P.O. Box 12400  
Hydro Place, Columbus Drive  
St. John's, NL A1B 4K7  
E-mail: [gyoung@nlh.nl.ca](mailto:gyoung@nlh.nl.ca)

**Newfoundland Power Inc.**

Mr. Gerard Hayes  
P.O. Box 8910  
55 Kenmount Road  
St. John's, NL A1B 3P6  
E-mail: [ghayes@newfoundlandpower.com](mailto:ghayes@newfoundlandpower.com)

**Consumer Advocate**

Mr. Thomas Johnson  
O'Dea, Earle Law Offices  
323 Duckworth Street  
P.O. Box 5955  
St. John's, NL A1C 5X4  
E-mail: [tjohnson@odeaearle.ca](mailto:tjohnson@odeaearle.ca)

**Island Industrial Customer Group**

Mr. Paul Coxworthy  
Stewart McKelvey Stirling Scales  
Cabot Place, 100 New Gower Street  
P.O. Box 5038  
St. John's, NL A1C 5V3  
E-mail: [pcoxworthy@stewartmckelvey.com](mailto:pcoxworthy@stewartmckelvey.com)

**Grand Riverkeeper Labrador Inc.**

Ms. Roberta Frampton Benefiel  
Box 569, Station B  
Happy Valley-Goose Bay, NL AOP 1E0  
E-mail: [rebfnl@gmail.com](mailto:rebfnl@gmail.com)

**Mr. Danny Dumaresque**

213 Portugal Cove Road  
St. John's, NL A1B 2N5  
E-mail: [danny.liberal@gmail.com](mailto:danny.liberal@gmail.com)

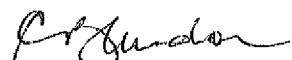
Dear Sirs/Madams:

**Re: The Board's Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System – Phase One – Comments by The Liberty Consulting Group**

Please find attached correspondence received today from The Liberty Consulting Group providing comments on Hydro's responses to recommendations in Liberty's December 2014 Report.

If you have any questions, please do not hesitate to contact the Board's Legal Counsel, Ms. Jacqui Glynn, by email, [jglynn@pub.nl.ca](mailto:jglynn@pub.nl.ca) or by telephone, 709-726-6781.

Yours truly,

  
Cheryl Blundon  
Board Secretary

/bds

Encl.

ecc. **Newfoundland Power Inc.**  
Mr. Ian Kelly, QC, E-mail: ikelly@curtislaw.com  
**Consumer Advocate**  
Mr. Raman Balakrishnan, E-mail: rbalakrishnan@odeaearl.ca  
Ms. Colleen Lacey, E-mail: clacey@odeaearl.ca  
**Island Industrial Customer Group**  
Mr. Dean Porter, E-mail: dporter@pa-law.ca

**Mr. Danny Dumaresque**  
Mr. William S. Kennedy, E-mail: wkennedy@kennedylawoffice.ca  
**Grand Riverkeeper Labrador Inc.**  
Mr. Charles O'Brien, E-mail: bluegreentaw@gmail.com  
Mr. Philip Raphals, Helios Centre, E-mail: Philip@centrehelios.org

**THE  
LIBERTY  
CONSULTING GROUP**

279 North Zinns Mill Road, Suite H Lebanon PA 17042-9576  
(717) 270-4500 (717) 270-0555 fax

April 1, 2015

Ms. Cheryl Blundon, Board Secretary  
Board of Commissioners of Public Utilities  
120 Torbay Road  
P.O. Box 21040  
St. John's, NL A1A 5B2

Dear Ms. Blundon:

In response to the Board's request, Liberty has examined the reports issued by Hydro since the filing of Liberty's December 2014 report. Liberty provides its comments on Hydro's responses in the enclosed document, with references to the relevant recommendations in Liberty's December 2014 report.

Sincerely,



John Antonuk  
President

Enclosure

## **Introduction**

Following Liberty's Interim Report in April 2014, the Board's interim May 2014 report directed Newfoundland and Labrador Hydro to undertake additional work analysis and reports. Hydro filed a number of reports, as directed. Most of these reports Liberty addressed in its December 2014 report, however, Hydro submitted a of them after the December filing of Liberty's report. Liberty provides its comments on Hydro's responses to these recommendations below. References to recommendations refer to those in Liberty's December 2014 report.

### **Nostradamus – Recommendation 2.1**

Liberty recommended that Hydro provide monthly updates on the status of Nostradamus upgrades until the production model is fully in service. The Board's January 19, 2015 letter to Hydro required this continuing reporting on the performance of Nostradamus, as Liberty had recommended. Liberty's review of Hydro's December and January reports found them well aligned with the requirements ordered by the Board. Overall, the prognosis for Nostradamus remains uncertain. Hydro's monthly reports show some days with deviations over 100 MW. For this system's size, 100MW is a significant amount, but recent results show much improvement, when compared with deviations. Hydro has offered no views on the acceptability of these deviations. Also, Hydro provided no information on the "status of Nostradamus upgrades until the production model is fully in-service and shaken down." Thus, we recommend reporting should continue, and address what improvements remain to be implemented and whether they will prove adequate.

### **Transmission Losses – Recommendation 2.3**

An unusual feature of the 2014 emergency was the appearance of added load in the form of higher than expected transmission losses. Abnormal dispatch in early January 2014 resulted in high imports from off the Avalon Peninsula. Liberty recommended analysis of and inclusion in future forecasts of this phenomenon. Hydro has completed rather extensive studies, and filed on February 20, 2014 a report completed in January 2015 and outlining this work. Liberty has reviewed this report, and concludes that the Hydro work was responsive and effective.

Hydro's report does not make clear, however, what it intends to do with the results. System operators and load forecasters will consider this data and apply it in their work, but the Hydro report offers no guidance on how or when that will happen. Liberty recommends that Hydro be requested to provide this information.

### **Peak Exceedances and Reconstruction of the Peak – Recommendation 2.5 and 2.6**

Liberty recommended and the Board directed that Hydro provide further information on its analysis of peak loads in the winter 2013-214. Hydro responded in a March 2, 2015 report, which provided the requested weather data and a reconstructed peak. Liberty believes that the report addresses this recommendation, and that no further follow up is required.

### **Emergency Contingency Plan – Recommendation 2.13**

Liberty's December 2014 Report recommended reporting requirements to the Board for any operating deviations, and steps to expedite the new CT. Regarding emergency reporting issues, Hydro reported that it uses its Standard Operating Instruction T-001 "Generation Reserves"

(December 23, 2014 letter to the PUB) and that T-001 fills the reporting need adequately. Liberty's review of T-001 concluded that it does meet the intent of the recommendation. The operating procedure and the discussion included in Hydro's December 23, 2014 response on this recommendation covers the issues. Acceleration of the new CT has become moot as the unit is now in service.

### **Critical Spares – Recommendation 2.15**

Liberty recommended that Hydro file a report on the status of its critical spares program, and the Board directed that this report be filed. Hydro issued its report on February 16, 2015, but that report still does not close the issue. Key unanswered questions remain as follows:

- Specification of the criteria for determining whether acquisition of a part is cost-effective? Previously, a detailed ranking system was used, but there is no explanation in the report of how it was related to cost and how any cutoff level was established.
- How was the limited life of Holyrood, and the poor condition of the CTs, factored into the decision-making process? Most Holyrood plant parts will not be obtained for this winter, leaving perhaps 2-3 winters of use before interconnection with Muskrat Falls and 5 winters before the Holyrood plant retirement. Also, it is not clear that the causes of recent CT failures are likely to be remedied by more spare parts.
- Overall cost of the spares program.
- Assessment of the "value added" by the program in terms of increased reliability and reduced risk.

Liberty recommends that the Board requires Hydro to provide information on these questions in order to determine whether: (1) reliability goals are being furthered, (2) the nature of the before and after risk profile, (3) how Hydro has balanced costs and risks, and (4) the degree to which the overall program is appropriately managed.

On the positive side, Hydro has completed a great deal of engineering analysis has occurred, and has produced some significant results including:

- The recommended list of critical spares for Holyrood, the CTs, and the hydro units
- The status of in or out of stock for each
- A plan for acquisition of out-of-stock items and a forecast date or a conclusion to not procure them
- Costing of Holyrood items: CT and hydro items are shown as under or over \$50,000, with very few items in the latter category.

### **PET "Home Basing" – Recommendation 10.3**

Liberty recommended improving the transparency of the process for locating resources that support Hydro by a report comparing the organizational home of PET resources with their actual utilization, based on time based reporting. Liberty has reviewed the report that Hydro provided on March 2, 2015. It contains data that meets this recommendation. Liberty recommends that this reporting should occur annually, and include a summary of the key drivers of the variances between assignment to Hydro as a home base and for whom work has been performed.