



January 11, 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: Newfoundland and Labrador Hydro – March 4, 2015 Voltage Collapse
Final Written Submission**

This letter contains the Consumer Advocate's final written submissions.

On the morning of March 4, 2015, Hydro experienced system outages as a result of a voltage collapse. The system outage affected over 80,000 customers at the height of the event.

As detailed in Liberty's report of October 22, 2015, interruptions resulted from the triggering of automatic protection schemes and manual load shedding. Liberty's report states that it was retained to review the utility reports and present any material findings to the Board. The scope of Liberty's review "included determining if any linkages existed to the underlying causes and contributing factors of the January 2014 outage events."

Liberty's Summary stated (p. 2):

Liberty's examination shows that Hydro and Newfoundland Power took many positive and effective actions to deal with a situation with the potential for becoming far worse. Events unfolded quickly, which does not offer a blanket excuse, but does acknowledge that operators faced challenging circumstances. Counterbalancing these positive actions, Hydro has continued to plan for and react to contingencies less aggressively than do many other utilities. Liberty observed such an approach in our work associated with the January 2014 outages. Hydro's operating culture continues to comprise a matter of concern. With the operating culture issue identified in the aftermath of the January 2014 incidents, it

nevertheless appears that Hydro has not accepted changing that culture as a priority. Liberty found that Hydro's reliability culture contributed to the causation and to the management of the March 4 event.

Looking forward, Hydro will face more severe system operating challenges when the Labrador-Island Link (LIL) enters service. Liberty considers it essential for Hydro to implement a more robust operating philosophy before that time.

Liberty's Analysis and Conclusions section of its report stated that one "overriding root cause" of the March 4th events was the "current operating culture at Hydro." Liberty stated (p. 5).

There are many lessons to be learned from the March 4th events, but Liberty has determined one overriding root cause. The current operating culture at Hydro, which does not appear to have changed since our review of the January 2014 events continues to adversely influence Hydro's decision making and contributes to operational incidents."

According to Liberty, the culture has three elements of consequence, namely:

- *A greater tolerance for outages than Liberty has seen elsewhere*
- *An uncommon approach to reliability engineering and analysis*
- *A less rigorous approach to emergency management and preparedness.*

Liberty set out 5 Recommendations in its report as follows:

1. *Hydro should assign a team to implement a program to establish a more robust operational philosophy regarding reliability.*
2. *Hydro should enhance the skills and capabilities it brings to reliability engineering and analysis.*
3. *Hydro should take steps to assure set situational awareness among operators and others who need the information to respond promptly and ability to adverse system conditions.*
4. *Hydro should implement a more robust approach to the Corporate Emergency Response Plan (CERP).*
5. *Advance Notification Protocols should appropriately identify potential impact in terms of the loss of power to customers.*

During Hydro's General Rate Application, Mr. Robert Henderson, former Vice President, Hydro, stated that there was a "strong focus on reliability" [October 30, 2015, p. 123 – line 15] and



continued, *“But that’s not to say that there isn’t room for improvement, and as I said to Mr. O’Brien, there is room for improvement and we accept that there is room for improvement and are committed to improve on the manner in which we address and focus reliability issues. . . I would agree that there are gaps there that we have to improve upon.”*

The Consumer Advocate asked Mr. Henderson whether the “gaps” that Hydro needed to improve upon necessitated a *“cultural shift or cultural modification.”* Mr. Henderson replied:

Well, I think we’re talking about a philosophy on what culture is and that sort of thing, but culture is the manner in which people in the company behave and accept as their way of going about their business and that type of change, cultural change generally in an organization does not happen on a dime. It takes time and it’s a concerted effort to continue to focus and bringing that attention to each and every employee that has a role in the company of the importance of reliability and as I said, there is a very strong culture of reliability, but there’s room to improve that culture of reliability and it’s on a spectrum and where we were versus where we need to be and what we’re hearing and people are asking, we’re absolutely going to be making improvements with respect to the way that we address reliability issues.

In Hydro’s November 17, 2015 letter to the Board, Hydro indicated that it was taking the Liberty Report “under advisement” and it intended to *“continue to move forward with its work to improve reliability for customers.”*

On December 22, 2015 Hydro filed its Final Submission into the review of the March 4, 2015 Voltage Event. In its Final Submission, Hydro reiterated that Hydro was committed to improvement as outlined by Mr. Henderson at the hearing. Hydro’s Final Submission also summarized the actions that have been taken by Hydro in response to the lessons learned from the March 4, 2015 event together with Hydro’s comments in reply to Liberty’s Report Recommendations.

The Consumer Advocate submits that it is important that Hydro fully implement the recommendations of Liberty, as these recommendations are well grounded and should, if fully implemented, improve on the reliability of service provided to customers.

The Consumer Advocate particularly wishes to highlight the need for Hydro to better align to Liberty’s first 2 recommendations:

In reply to Liberty’s first recommendation – that Hydro assign a team to establish a more robust operational philosophy regarding reliability – Hydro does not specifically commit to carry out this recommendation. Hydro states that it will *“consider Liberty’s advice and recommendations in future planning as it continues to build on the work completed in 2015.”* This does not indicate whether Hydro will in fact assign a team to establish a more robust philosophy regarding reliability.



The Consumer Advocate submits that Hydro should report to the Board on the establishment of this team and the work of the team to ensure that the recommendation is carried out.

In reply to Liberty's second recommendation – that Hydro should enhance the skills and capabilities it brings to reliability engineering and analysis – Hydro points to actions taken to deepen the skills and capabilities with respect to reliability engineering and analysis. Hydro states that it remains committed to the development of professionalism and will continue *"to look for opportunities for courses and training in the field of reliability."* Hydro states that it will consider Liberty's advice and recommendations in future planning. The Consumer Advocate believes that Hydro should actually commit to bring forward a plan as to how it will go about enhancing the skills and capabilities it brings to reliability engineering and analysis. Without a plan it will be difficult to know how Hydro intends to meet the goal of enhancing these skills and capabilities or how it is progressing on its goals and its plan.

The Consumer Advocate appreciates the opportunity to provide the foregoing which hopefully is of help to the Board.

Yours very truly,

O'DEA, EARLE

A handwritten signature in blue ink, appearing to read 'T. Johnson', written over the typed name 'THOMAS JOHNSON, Q.C.'.

THOMAS JOHNSON, Q.C.

TJ/cel

Encl.

cc: Newfoundland and Labrador Hydro
Attention: Mr. Geoffrey Young

Newfoundland Power
Attention: Gerard Hayes

Island Industrial Customers
Attention: Paul Coxworthy

Grand Riverkeeper Labrador Inc.
Attention: Ms. Roberta Frampton Benefiel

Mr. Danny Dumaresque