

July 2, 2015

The Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, Newfoundland & Labrador
A1A 5B2

Attention: Ms. Cheryl Blundon
Director Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro - the Board's Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System - Worst Performing Feeder Capital Program Analysis and Report

Hydro has analyzed and reviewed the benefits of a capital program dedicated to addressing the previous year's 10 to 15 percent worst performing feeders. This is in response to recommendation 4.2 in the report "Review of Supply Issues and Power Outages Island Interconnected System".

Recommendation 4.2: Analyze and report on the benefits of a dedicated capital program component dedicated to addressing the previous year's 10 to 15 percent worst performing feeders.

Hydro analyzed how utilizing worst performing feeder reliability data and condition assessment information would ensure the worst performing feeders are indeed receiving capital investment to improve reliability.

Hydro currently has 154 distribution feeders that supply power to interconnected and isolated customers throughout Newfoundland and Labrador. For the purpose of the analysis, the top 10 percent, or 15, worst performing feeders were selected for review based on the 5 year average SAIFI excluding loss of supply, planned outages, and customer related equipment issues. Significant events related to weather causing long duration outages were included in the calculations and this is why only SAIFI was used to rank the feeders. In general, it was observed that a high SAIFI corresponded with a high SAIDI. The 5 year average SAIFI was used to better gauge the true performance of the feeder.

Detailed reports for the 15 worst performing feeders were reviewed. Each report contained the 5 year (2010-2014) average SAIFI & SAIDI, the 5 year trends, explanations for poor performance, cause and component details, past capital work (2010-2014), and future capital work already identified and currently in the 2015-2020 planning cycle. The existing five year planning cycle for Hydro's distribution feeder upgrade work is primarily based on analysis of condition assessment data, equipment failure trends and load growth requirements. Hydro notes that of the 15 worst performing feeders, 2 were not yet identified in the 5 year planning cycle (see table below).

System	5 year Average SAIFI excluding Loss of supply, planned outage, and CR	Future Capital Project
Farewell Head	5.498	Yes
Farewell Head	4.978	Yes
Bottom Waters	4.683	Yes
Wabush	4.387	Yes
Farewell Head	4.369	Yes
L'Anse-Au-Loup	4.369	Yes
L'Anse-Au-Loup	3.867	Yes
Wabush	3.786	Yes
Bottom Waters	3.729	Yes
Quartzite	3.606	
Happy Valley	3.344	Yes
Wabush	3.100	Yes
Happy Valley	3.083	Yes
English Harbour	3.049	Yes
Quartzite	3.020	

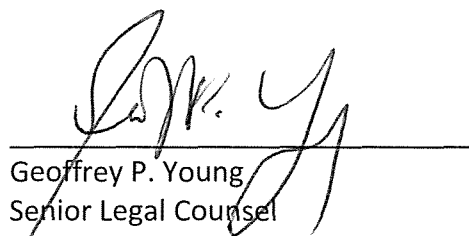
Hydro has determined that a stand alone worst performing feeder program is not necessary at this time since it has been determined that most worst performing feeders are already slated for upgrades in the 5 year planning cycle. However, Hydro will use worst performing feeder data, including number of customers interrupted and customer minutes, to prioritize existing projects and identify additional projects for inclusion in the planning cycle. Projects will be added in the 5 year planning cycle based on the gaps identified through the analysis

of worst performing feeder data. Utilizing the existing capital planning process, and adding a review of worst performing feeder data to this process, ensures the worst performing feeders will indeed receive capital upgrades.

We trust the foregoing is satisfactory. If you have any questions or comments, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Geoffrey P. Young
Senior Legal Counsel

GPY/bs

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey Stirling Scales
Sheryl Nisenbaum – Praxair Canada Inc.
ecc: Roberta Frampton Benefiel – Grand Riverkeeper Labrador

Thomas Johnson – Consumer Advocate
Thomas O' Reilly – Cox & Palmer
Danny Dumaresque