

January 15, 2019

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

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

Dear Ms. Blundon:

Re: The Board's Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnection System – Winter Readiness Planning Report – Update

On December 10, 2018, Newfoundland and Labrador Hydro ("Hydro") filed the 2018-2019 Winter Readiness Planning Final Report (the "Report"). While the majority of the winter readiness work was completed, an annual work plan item for a terminal station and several Capital Project work scopes were incomplete by the submission date. Hydro committed to filing an update regarding these items with the Board of Commissioners of Public Utilities (the "Board") by January 15, 2019. This letter provides Hydro's update to the December 10, 2018 2018-2019 Winter Readiness Planning Final Report.

Annual Work Plan – Terminal Stations

As noted in the Report in Section 2.4, the annual work plan preventive maintenance activity for Bay d'Espoir circuit breaker B1B10 remains incomplete, with a low identified risk of failure.¹ This item cannot be completed due to system load and will be carried into the spring of 2019.

Capital Projects – Outstanding Winter Readiness Scope Now Complete

- Replacement of circuit breaker at the Wabush Terminal Station: The winter readiness scope of this project involved the replacement of a circuit breaker at the Wabush Terminal Station, which was completed on December 20, 2018.
- Battery bank at the Upper Salmon Generation Station: The remaining winter readiness scope of this project was to replace the battery bank. The battery bank was installed, charged, commissioned, and placed in service on December 12, 2018.
- Capital Spares: The receipt of the Hinds Lake Circuit Breaker, planned for prior to the Winter Readiness date of December 1, 2018, occurred on December 11, 2018.

Capital Projects – Outstanding Winter Readiness Scope Carried to 2019

- Replacement of the Berry Hill 138 kV switch insulators: The remaining winter readiness scope of this project was to replace the insulators on a 138 kV switch at the Berry Hill Terminal

¹ Transmission and Rural Operations (East and West) Terminal Stations.

Station. Due to non-standard insulators, the options for replacement included ordering a shorter insulator and return to service a non-standard switch, or replacing the entire switch with a standard switch. A visual inspection of the existing switch showed no immediate concerns related to its operation and it was considered to be a low risk of failure for the coming winter. Therefore, Hydro selected the option to replace the entire switch in 2019. A replacement switch is available in the event of in-service failure.

- Capital Spares: Two Hydraulic Generation Capital Spares purchases (i.e., Cat Arm Excitation Transformer and Hinds Lake Station Service Transformer) and two Thermal Generation Capital Spares purchases (i.e., 1500 kVA Auxiliary Board Transformer and 1400 kVA Excitation Transformer) were carried to 2019, as documented in the December 10, 2018 2018-2019 Winter Readiness Planning report. No immediate risks were identified due to the unavailability of these spares.

Generation Capacity

- As of December 1, 2018, Holyrood Unit 1 was derated to 160 MW due to exhaust opacity, indicating insufficient combustion air at the burners and the subsequent requirement of boiler tuning. On December 9, 2018, Unit 1 tripped due to a failed potential transformer. Holyrood Unit 1 was returned to service on December 14, 2018 after repairs were completed. Boiler tuning commenced on December 17, 2018, and, as of December 19, 2018, the unit capacity was increased to 162 MW, improving the overall boiler control stability; however, restoration to full capacity was not possible. The boiler contractor for Hydro is further studying this limitation with an update expected by mid-January 2019. Updates regarding the boiler tuning of Holyrood Unit 1 will be provided in Hydro's Monthly Energy Supply Report for the Island Interconnected System.
- The Hardwoods Exhaust Stack was returned to service on December 9, 2019 following completion of a capital project. Final commissioning and return to service of the engines was completed on December 12, 2019.

Generation Capacity Breakdown

For further clarification, the details included in Table 5 of Section 7 Forecasted Loads, Capacity and Reserves, in the November 13, 2018 and December 10, 2018 Winter Readiness Planning Reports² are shown in Table 1. Newfoundland Power Hydraulic Generation was reduced by 4.9 MW to better reflect the actual capacity available from the units at peak, based on historical data. Newfoundland Power Thermal Generation was reduced by 2.5 MW to reflect revised thermal generation numbers. Deer Lake Power was increased by 4.9 MW as a result of the conversion of Unit 8 from 50 Hz to 60 Hz. Corner Brook Pulp and Paper ("CBPP") Co-Gen has been adjusted to add it to the Island Generation, and excluded from the 105 MW of CBPP capacity assistance approved in Board Order P.U. 40(2018). Wind power has now been included with a 22% capacity factor, equating to 6 MW for each of the Fermuse and St. Lawrence wind farms. Island generation totalling 7.6 MW from Vale diesels has been included, in addition to the 6 MW of capacity assistance with Vale.

² The figures presented in the December 10, 2018 Winter Readiness Update report are consistent with Hydro's "Reliability and Resource Adequacy Study" filed with the Board on November 16, 2018.

Table 1: Island Generation Capacity and Capacity Assistance

Unit	Firm Capacity Winter 2019	Firm Capacity Winter 2019
	November 13, 2018	December 10, 2018
Island Generation Capacity	MW	MW
Bay D'Espoir - Unit 1	76.5	76.5
Bay D'Espoir - Unit 2	76.5	76.5
Bay D'Espoir - Unit 3	76.5	76.5
Bay D'Espoir - Unit 4	76.5	76.5
Bay D'Espoir - Unit 5	76.5	76.5
Bay D'Espoir - Unit 6	76.5	76.5
Bay D'Espoir - Unit 7	154.4	154.4
Cat Arm - Unit 1	67	67
Cat Arm - Unit 2	67	67
Granite Canal	40	40
Hinds Lake	75	75
Paradise River	8	8
Upper Salmon	84	84
Holyrood Thermal - Unit 1	170	170
Holyrood Thermal - Unit 2	170	170
Holyrood Thermal - Unit 3	150	150
Newfoundland Power - Hydro	76.4	71.5
Newfoundland Power - Thermal	41.5	39
Hardwoods CT	50	50
Hawkes Bay Diesels	5	5
Holyrood CT	123.5	123.5
Holyrood Diesels	10	10
St. Anthony Diesels	9.7	9.7
Stephenville CT	50	50
Deer Lake Power	99	104
Bishop's Falls - Unit 1-6	63.0	63.0
Corner Brook CoGen	0	8
Fermuse Wind	0	6
Rattle Brook	0	0
St. Lawrence Wind	0	6
Star Lake	18	18
Vale Diesels	0	7.6
Total Island Generation Capacity	1990.5	2015.7
Labrador Island Link	110	110
Total Island Capacity at Peak (B)	2101	2126
Capacity Assistance		
CBPP Capacity Assistance	90	97
Vale	-	6
NP Capacity Assistance	9.9	9.9
Total Capacity Assistance	99.9	112.9
Total, including Capacity Assistance (C)	2201	2239

Ms. C. Blundon
Public Utilities Board

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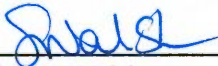
Summary

As indicated, much of the outstanding work has been completed. Where work remains outstanding, the risks have been assessed and are considered low. Unless otherwise noted, any work that remains incomplete will become part of the 2019 integrated annual work plan, for execution in 2019. Hydro continues to assess the condition of its assets with overall reliability and customer service in mind. Hydro remains confident in its ability to reliably serve customers in the 2018-2019 winter season.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



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SAW/sk

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey
ecc: Denis Fleming – Cox & Palmer
Larry Bartlett – Teck Resources Ltd.

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