newfoundland labrador hydro
a nalcor energy company

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July 10, 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: Monthly Energy Supply Report for the Island Interconnected System for June 2019

Enclosed please find one original and eight copies of Newfoundland and Labrador Hydro's Monthly Energy Supply Report for the Island Interconnected System as directed by the Board of Commissioners of Public Utilities in correspondence dated February 8, 2016 and with schedule modifications on July 26, 2016 and July 29, 2016.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh
Senior Legal Counsel, Regulatory
SAW/las

Encl.

cc: Gerard Hayes, Newfoundland Power
Paul Coxworthy, Stewart McKelvey
Dennis Browne, Q.C., Browne Fitzgerald Morgan & Avis
Denis J. Fleming, Cox & Palmer
ecc: Sheryl Nisenbaum, Praxair Canada Inc.
Larry Bartlett, Teck Resources Limited
Dean A. Porter, Poole Althouse

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A report to the Board of Commissioners of Public Utilities

Contents

1.0 Introduction

On February 8, 2016, the Board of Commissioners of Public Utilities ("Board") requested Newfoundland and Labrador Hydro ("Hydro") file a biweekly report containing, but not limited to, the following:

1) System Hydrology Report as contained in Hydro's Quarterly Report;
2) the thermal plant operated in support of hydrology;
3) production by plant/unit; and
4) details of any current or anticipated long-term de-rating.

In July 2016, the Board indicated that a monthly report would thereafter be sufficient. This report covers data for June 2019.

2.0 System Hydrology

Table 1 summarizes the aggregate storage position of Hydro's reservoirs at the end of the reporting period.

Table 1: System Hydrology Storage Levels

Storage Level	2019 (GWh)	2018 (GWh)	20-Year Average (GWh)	2019 Minimum Storage Limit (GWh)	Maximum Operating Level (GWh)	Percent of Maximum Operating Level
30-June-2019	1,886	1,903	2,172	1,455	2,588	73%

Reservoir inflows in June 2019 were approximately 64% above average. To date, 2019 inflows have been 8% above average.

The aggregate reservoir storage level on June 30, 2019, was 1,886 GWh, 27% below the seasonal Maximum Operating Level and 30% above the minimum storage level. This storage level compares with the 20-year average storage level for the end of June of 2,172 GWh. At the end of June 2018, the aggregate storage level was 1,903 GWh.

On June 13, 2019, the Granite Canal Plant was derated from 40 MW to 36 MW while the water level was below the normal low supply level in preparation for its planned annual outage. The unit was taken offline for its planned annual outage on June 16, 2019.

Spilling began at the Cat Arm Plant ("Cat Arm") on June 22, 2019 and continues as of June 30, 2019. An update will be provided in the Monthly Energy Supply Report for the Island Interconnected System for July 2019. Hydro engaged Nalcor Energy Marketing to export energy on its behalf to aid in the mitigation of spillage at Cat Arm pursuant to the "Pilot Agreement for the Optimization of Hydraulic Resources", filed with the Board on August 23, 2018. Exporting in the overnight hours when system load is light has allowed for the sustained maximization of output from Cat Arm and the utilization of water (energy) that would otherwise have been spilled.

Figure 1 plots the 2018 and 2019 storage levels, Maximum Operating Level storage, and the 20-year average aggregate storage for comparison.

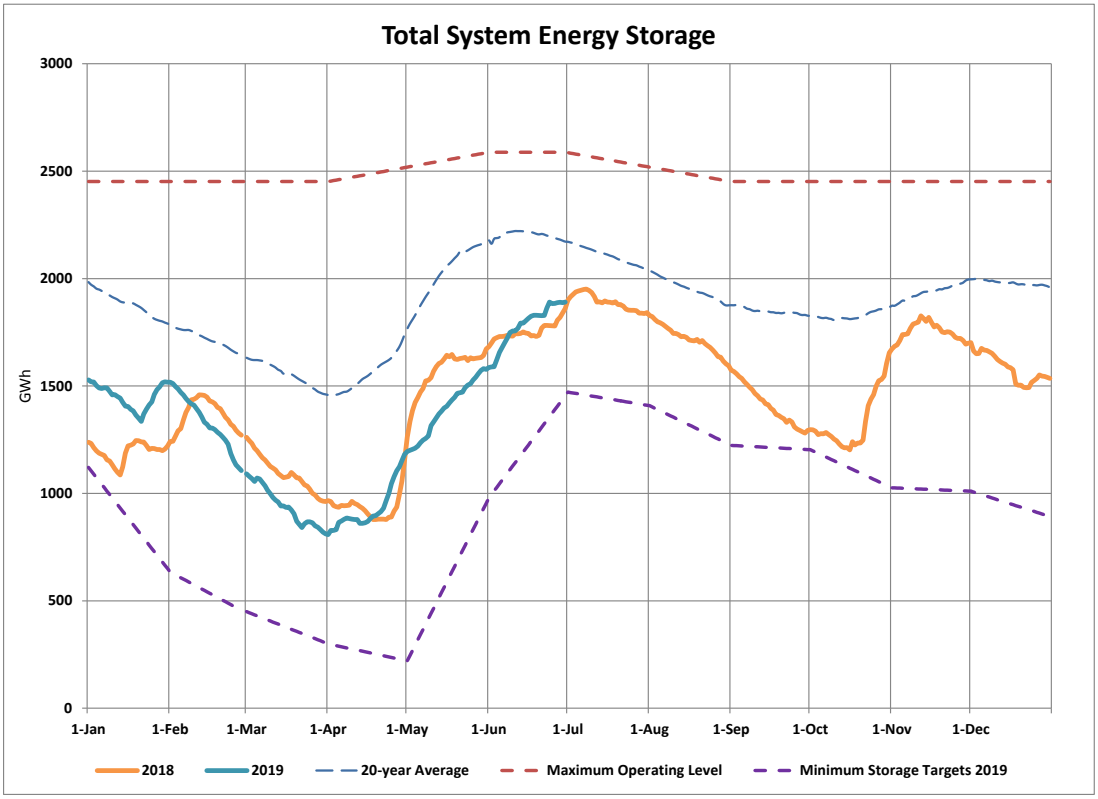

Figure 1: Total System Energy Storage for June 30, 2019

3.0 Production by Plant

Production during June 2019 by plant and unit, both hydraulic and thermal, is provided in Table 2.

Quantities imported are also provided in Table 2.

Table 2: Generation Production from June 1 to 30, 2019[1]

		Generation (GWh)	Year to Date (GWh)
Newfoundland and Labrador Hydro - Hydro Generation			
Bay d'Espoir Plant	Unit 1	38.3	245.0
	Unit 2	38.0	245.4
	Unit 3	12.7	156.4
	Unit 4	26.3	120.1
	Unit 5	21.7	105.0
	Unit 6	27.0	132.5
	Unit 7	0.0	430.0
	Bay d'Espoir Plant Total	**163.9**	**1434.3**
Upper Salmon Plant		49.0	312.2
Granite Canal Plant		13.7	133.7
Hinds Lake Plant		39.1	200.4
Cat Arm Plant	Unit 1	37.8	228.4
	Unit 2	39.1	234.3
	Cat Arm Plant Total	**77.0**	**462.8**
Paradise River		2.3	17.2
Star Lake Plant		12.4	74.8
Rattle Brook Plant		2.5	8.1
Nalcor Exploits Plants		43.7	320.3
Mini Hydro		0.3	1.8
	Total Hydro Generation	**403.9**	**2965.5**
Newfoundland and Labrador Hydro Thermal Generation			
Holyrood	Unit 1	21.0	316.7
	Unit 2	0.0	246.5
	Unit 3	0.0	171.6
	Holyrood Units Total	**21.0**	**734.8**
Holyrood Gas Turbine and Diesels		0.3	6.2
Hardwoods Gas Turbine		0.0	0.4
Stephenville Gas Turbine		0.0	1.1
Other Thermal		0.1	0.4
	Total Thermal Generation	**21.4**	**742.8**
Purchases			
Requested Newfoundland Power and Vale		0.0	0.1
Corner Brook Pulp and Paper Secondary		2.0	20.6
Corner Brook Pulp and Paper Co-Generation		5.5	30.9
Wind Purchases		9.8	96.1
Maritime Link Imports[2]		1.2	102.5
New World Dairy		0.3	1.6
Labrador-Island Link Imports[3]		0.8	214.6
	Total Purchases	**19.6**	**466.3**
	Total[4]	**444.9**	**4174.7**

[1] Gross generation.
[2] Includes energy flows as a result of purchases and inadvertent energy.
[3] Includes purchases as a result of testing activity.
[4] Actuals reflect rounded values to the nearest tenth of a GWh. Differences between total and addition of individual components is due to rounding.

4.0 Thermal Production and Imports

Holyrood Unit 1 was operated for 285 hours; Holyrood Unit 2 was not operated in June 2019. Holyrood Unit 3 was operated in synchronous condense mode for 224 hours during the month of June 2019 for system requirements. Total Holyrood generation was 21.0 GWh.

Standby units were operated for a total of 15.3 hours during the month. Total standby generation was 0.3 GWh. No standby generation was required specifically for water management.

Imports on the Maritime Link through June 2019 were for ponding. Total imported energy over the Maritime Link was 1.2 GWh.

A total of 0.8 GWh was delivered to the system via the Labrador-Island Link in June 2019 as a result of commissioning activities.

5.0 Unit Deratings

Holyrood Unit 1 was capable of producing at full load through the month of June 2019. On June 7, 2019, Unit 1 was taken offline and placed in hot standby. The unit was returned to service on June 10, 2019, at the request of the Newfoundland and Labrador System Operator. On June 15, 2019, the unit was again removed from service and placed in hot standby. It was subsequently moved to cold standby on June 25, 2019. The unit remained off line for the remainder of June 2019.

Holyrood Unit 2 remained in hot standby with full load capability until June 4, 2019 when hot standby operation was no longer required and was then moved to cold standby. The planned annual outage for Unit 2 began on June 17, 2019.

Holyrood Unit 3 remained on its planned annual generation outage throughout June 2019. Synchronous condenser capability was restored and the unit was placed on line in synchronous condenser mode on June 21, 2019.

The Stephenville Gas Turbine was returned to service from its planned annual outage on June 14, 2019, and derated to 25 MW. Engine Serial No. 202223 has been removed from End B and shipped to the

repair shop to be overhauled. It is expected that this unit will be returned to full capacity at the end of September 2019.

The Hardwoods Gas Turbine remains available at full capacity (50 MW).