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August 12, 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 July 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/sk

Encl.

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

Monthly Energy Supply Report for the Island Interconnected System for July 2019

August 12, 2019

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 derating.

In July 2016, the Board indicated that a monthly report would thereafter be sufficient. This report covers data for July 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
31 Jul 2019	1,683	1,828	2,040	1,410	2,521	67%

Reservoir inflows in July 2019 were approximately 95% of average. To date, 2019 inflows have been 7% above average.

The aggregate reservoir storage level on July 31, 2019 was 1,683 GWh, 33% below the seasonal maximum operating level and 19% above the minimum storage level. This storage level compares with the 20-year average storage level for the end of July of 2,040 GWh. At the end of July 2018, aggregate storage level was 1,828 GWh.

Spilling began at the Cat Arm Hydroelectric Generating Station ("Cat Arm") on June 22, 2019 and ended on July 13, 2019. During this time Hydro engaged Nalcor Energy Marketing ("NEM") to export energy on its behalf to aid in the mitigation of spill at Cat Arm pursuant to the Pilot Agreement for the

Optimization of Hydraulic Resources. Exporting in the overnight hours when system load was light allowed for sustained maximization of Cat Arm and the utilization of water (energy) that would otherwise have been spilled. In total, 58 GWh was spilled from the Cat Arm reservoir between June 22, 2019 and July 13, 2019.

Figure 1 plots the 2018 and 2019 storage levels, maximum operating level storage, and the 20-year average aggregate storage for comparison.

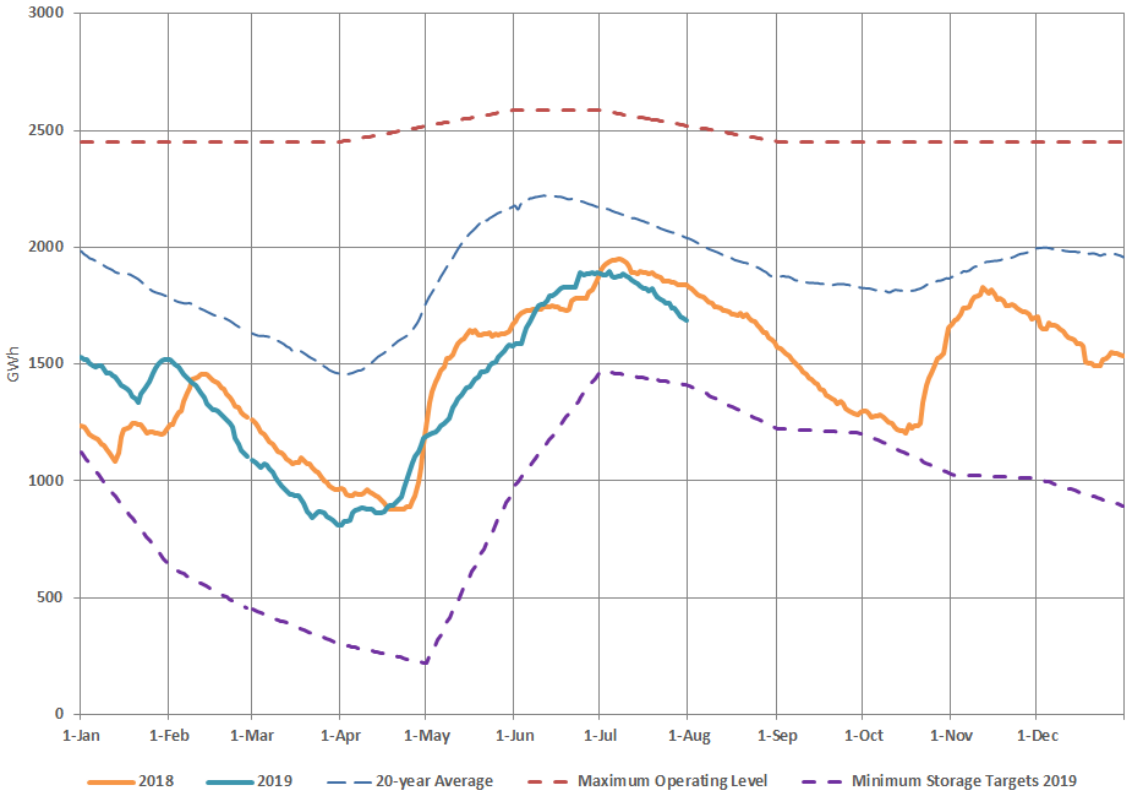

Figure 1: Total System Energy Storage for July 31, 2019

3.0 Production by Plant

Production during July 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 July 1, 2019 to July 31, 2019[1]

	Generation (GWh)	Year to Date (GWh)
Hydro Generation (Hydro)		
Bay d'Espoir Plant		
Unit 1	39.2	284.2
Unit 2	38.5	283.9
Unit 3	9.0	165.4
Unit 4	28.7	148.8
Unit 5	25.7	130.7
Unit 6	20.3	152.8
Unit 7	0.0	430.0
Subtotal Bay d'Espoir Plant	**161.5**	**1595.8**
Upper Salmon Plant	37.6	349.7
Granite Canal Plant	13.3	147.0
Hinds Lake Plant	49.4	249.8
Cat Arm Plant		
Unit 1	39.8	268.2
Unit 2	45.3	279.6
Subtotal Cat Arm Plant	**85.1**	**547.9**
Paradise River	1.1	18.3
Star Lake Plant	5.2	80.0
Rattle Brook Plant	0.9	9.0
Nalcor Exploits Plants	49.1	369.4
Mini Hydro	0.4	2.1
Total Hydro Generation	**403.4**	**3369.0**
Thermal Generation (Hydro)		
Holyrood		
Unit 1	0.0	316.7
Unit 2	0.0	246.5
Unit 3	0.0	171.6
Subtotal Holyrood Units	**0.0**	**734.8**
Holyrood Gas Turbine and Diesels	0.8	7.0
Hardwoods Gas Turbine	0.1	0.5
Stephenville Gas Turbine	0.0	1.1
Other Thermal	0.0	0.4
Total Thermal Generation	**0.9**	**743.7**
Purchases		
Requested Newfoundland Power and Vale	0.0	0.1
Corner Brook Pulp and Paper Secondary	2.9	23.4
Corner Brook Pulp and Paper Co-Generation	5.5	36.5
Wind Purchases	8.0	104.1
Maritime Link Imports[2]	0.2	102.7
New World Dairy	0.3	1.9
Labrador-Island Link Imports[3]	0.0	214.6
Total Purchases	**16.8**	**483.2**
Total[4]	**421.2**	**4595.8**

[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 due to rounding.

4.0 Thermal Production and Imports

Holyrood Unit 3 was operated in synchronous condenser mode for 744 hours during July 2019 for system requirements. Holyrood Unit 1 and Unit 2 were not operated during this time frame. Total Holyrood thermal generation was 0 GWh.

Standby units were operated for a total of 18.0 hours during the month. Total standby generation was 0.9 GWh. No standby generation was specifically required to support reservoir storage.

Imports on the Maritime Link through July 2019 were for ponding. Total imported energy over the Maritime Link was 0.2 GWh. There was no energy imported over the Labrador-Island Link in July 2019.

5.0 Unit Deratings

Holyrood Unit 1 remained on cold standby until it was placed on planned annual outage on July 29, 2019. Holyrood Unit 2 remained on planned annual outage for the month of July 2019. Holyrood Unit 3 remained online in synchronous condenser mode for the month of July 2019. As of July 29, 2019, there is a total plant outage underway at the Holyrood Thermal Generating Station until August 23, 2019.

The Stephenville Gas Turbine remained derated to 25 MW during the month of July 2019. It is expected that this unit will be returned to full capacity at the end of September 2019.

The Hardwoods Gas Turbine remained available at full capacity (50 MW) for the month of July 2019.