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May 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 April 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
ecc: Sheryl Nisenbaum, Praxair Canada Inc.
Dean A. Porter, Poole Althouse
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 April 2019

May 10, 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 (the "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 April 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-Apr-2019	1,194	1,276	1,740	220	2,443	49%

Reservoir inflows in April 2019 were approximately 33% above average. To date, 2019 inflows have been 4% above average.

The third snow survey of 2019 was completed in late April 2019. Snow pack data was not collected at Lower Salmon, Upper Salmon, Grey River, or Granite Lake regions due to poor weather conditions experienced in the area during the survey time frame. Based on the available snowpack data, the snow pack was approximately 141 mm at Hinds Lake Hydroelectric Generating Station, and approximately 275 mm at the Cat Arm Hydroelectric Generating Station. As much of the Bay d'Espoir region was not included in the April snow survey, there was insufficient data to make an observation about the snowpack at the Bay d'Espoir Hydroelectric Generating Facility.

The rate of decline of the reservoir level at the Cat Arm Hydroelectric Generating Station increased during April 2019 due to lack of inflows. From April 14, 2019 to April 25, 2019, the reservoir level was below the level at which the rated flow for two units could be maintained. This resulted in the deration of the Cat Arm Hydroelectric Generating Station to a total generation of 100 MW. On April 25, 2019, reservoir levels supported the return of the plant to full capability.

The aggregate reservoir storage level on April 30, 2019 was 1,194 GWh, 51% below the seasonal Maximum Operating Level and 443% above the minimum storage level. This storage level compares with the 20-year average storage level for the end of April of 1,740 GWh. At the end of April 2018, aggregate storage level was 1,276 GWh.

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

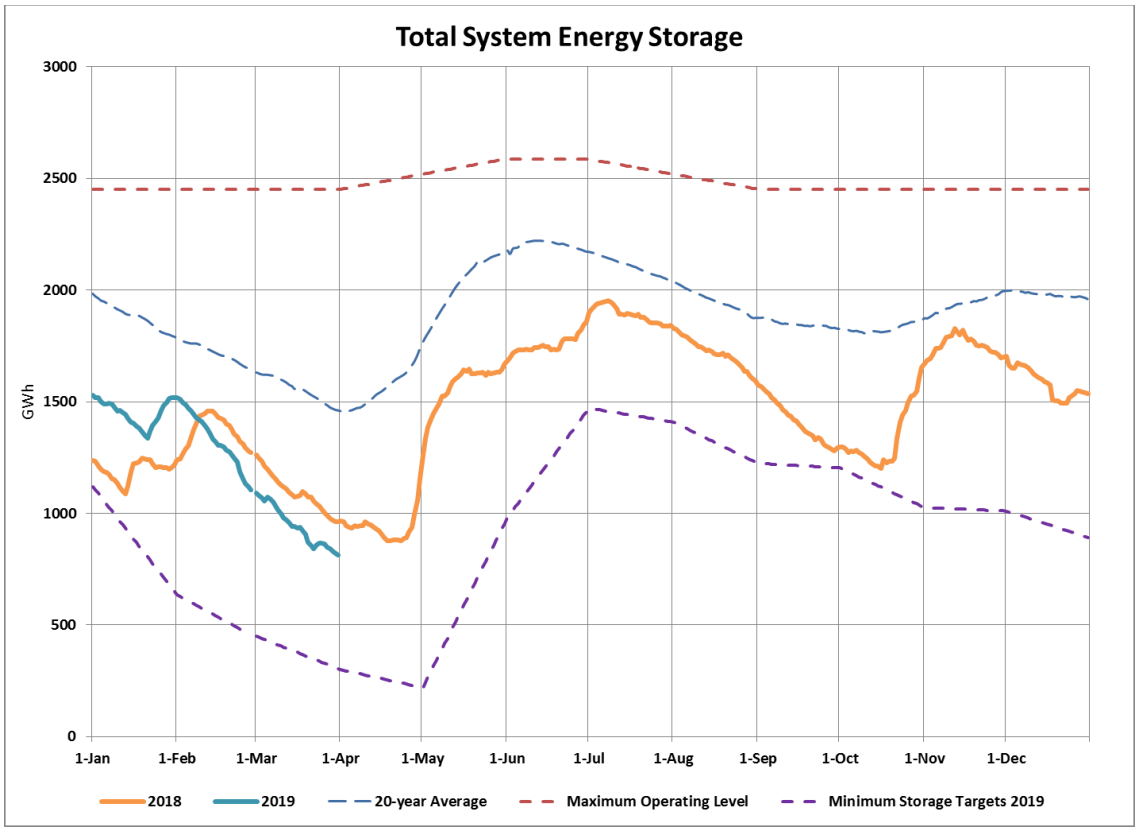

Figure 1: Total System Energy Storage for April 30, 2019

3.0 Production by Plant

Production during April 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 April 1 to 30, 2019[1]

		Generation (GWh)	Year to Date (GWh)
Newfoundland and Labrador Hydro Hydro Generation			
Bay d'Espoir Plant	Unit 1	41.5	164.4
	Unit 2	41.6	165.2
	Unit 3	28.5	132.3
	Unit 4	20.1	85.6
	Unit 5	7.5	63.7
	Unit 6	17.9	84.0
	Unit 7	90.1	354.6
	Bay d'Espoir Plant Total	*247.2*	*1049.8*
Upper Salmon Plant		54.2	209.7
Granite Canal Plant		23.8	90.3
Hinds Lake Plant		23.7	122.1
Cat Arm Plant	Unit 1	27.2	159.7
	Unit 2	27.2	163.4
	Cat Arm Plant Total	*54.4*	*323.1*
Paradise River		4.4	12.5
Star Lake Plant		12.5	49.6
Rattle Brook Plant		1.5	3.0
Nalcor Exploits Plants		61.0	221.2
Mini Hydro		0.2	1.1
Total Hydro Generation		**483.1**	**2082.4**
Newfoundland and Labrador Hydro Thermal Generation			
Holyrood	Unit 1	49.5	241.3
	Unit 2	18.6	224.6
	Unit 3	0.0	171.6
	Holyrood Units Total	*68.1*	*637.5*
Holyrood Gas Turbine and Diesels		0.6	5.7
Hardwoods Gas Turbine		0.1	0.4
Stephenville Gas Turbine		0.4	0.9
Other Thermal		0.1	0.2
Total Thermal Generation		**69.3**	**644.7**
Purchases			
Requested Newfoundland Power and Vale		0.0	0.1
Corner Brook Pulp and Paper Secondary		9.5	16.2
Corner Brook Pulp and Paper Co-Generation		5.1	20.7
Wind Purchases		18.2	71.8
Maritime Link Imports[2]		6.5	97.8
New World Dairy		0.3	1.1
Labrador-Island Link Imports[3]		62.7	204.7
Total Purchases		**102.3**	**412.2**
Total[4]		**654.7**	**3139.3**

[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

In April 2019, Holyrood Unit 1 was operated for 720 hours and Holyrood Unit 2 was operated for 275.6 hours; Holyrood Unit 3 was not operated. Total Holyrood generation was 68.1 GWh.

Standby units were operated for a total of 74.6 hours during the month. Total standby generation was 1.1 GWh. No standby generation was used for water management.

Imports on the Maritime Link through April 2019 were for ponding. Total imported energy over the Maritime Link was 6.5 GWh.

A total of 62.7 GWh was delivered to the system via the Labrador-Island Link in April 2019 as a result of testing activity.

5.0 Unit Deratings

Holyrood Unit 1 was capable of full load through the month of April 2019.

When online in April 2019, Holyrood Unit 2 was capable of operating at full load. On April 12, 2019, the unit tripped due to a failure of the turbine control valve camshaft bearings. The unit remained off-line for the remainder of April 2019 while the failure was investigated and restored. The unit was returned to service with full load capability on May 4, 2019.

Holyrood Unit 3 was taken off-line for its planned annual outage on March 30, 2019 with full load capability. The unit remained on planned outage for the entire month of April 2019.

The Stephenville Gas Turbine remains available at full capacity of 50 MW.

The Hardwoods Gas Turbine is currently derated to 25 MW following a unit trip on February 21, 2019 while placing End B in service. The trip occurred as a result of high exciter vibration, which occurs only when End B is being placed online. The Original Equipment Manufacturer, Brush, advises a delivery of 16 weeks for the required bearing components, resulting in a worst-case return to service of October 2019. In the interim, Brush has been engaged to complete a non-intrusive inspection of the bearing to

determine whether the unit can be placed in service while awaiting replacement components. A potential earlier return to service date cannot be determined until the inspection has been completed, which is scheduled for the week of May 20, 2019. Hydro intends to file a supplemental application to the 2019 Capital Budget Application for the bearing replacement project.