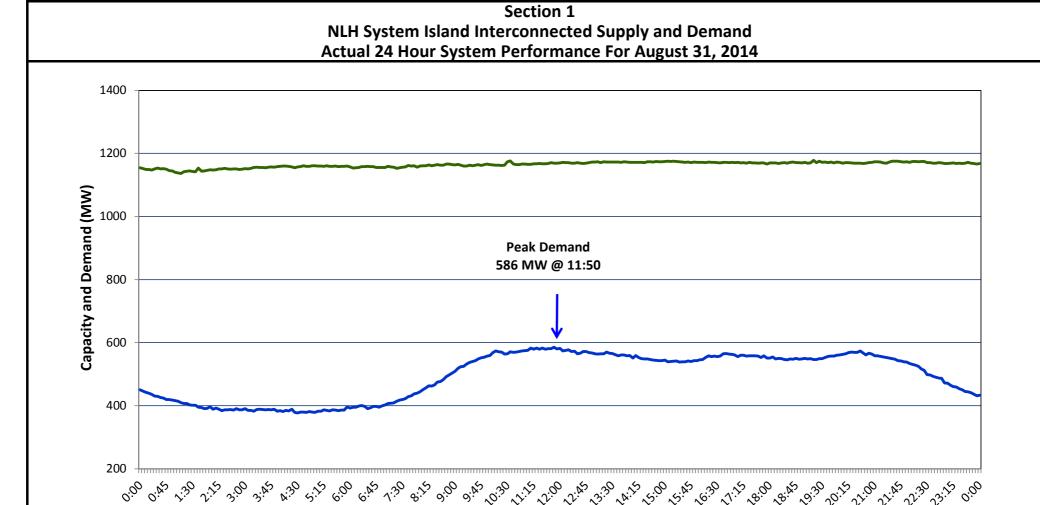
## **Newfoundland Labrador Hydro (NLH)** Supply and Demand Status Report Filed September 02, 2014



## \* Purchases include Nalcor Exploits, Star Lake, Rattle Brook, CBPP Co-Gen, Wind Generation and DLP Secondary

NLH System Demand

## Supply Notes for August 31, 2014

As of 0800 hours, May 21, 2014, Holyrood Unit 2 removed from service for annual maintenance (165 MW).

——NLH System Supply (including Purchases\* and Holyrood Station Service)

- As of 0858 hours, June 13, 2014, Stephenville Gas Turbine End A removed from service for annual maintenance (25 MW).
- As of 1100 hours, July 21, 2014, Holyrood Unit 1 removed from service for annual maintenance (170 MW).
- As of 0347 hours, July 25, 2014, Hardwoods Gas Turbine unavailable due to a forced outage (50 MW).
- As of 1000 hours, August 20, 2014, HRD Unit 3 derating adjusted from 100 to 120 MW (Air heater and condenser vacuum problem) (150 MW).
- As of 0900 hours, August 21, 2014, Bay D'Espoir Unit 7 derating adjusted from 120 to 100 MW (Vibration problem) (154 MW).
- As of 1814 hours, August 22, 2014, Stephenville Gas Turbine End B derated to 16 MW (25 MW).
- As of 1738 hours, August 27, 2014, Cat Arm Unit 1 derated to 53 MW (67 MW).

Section 2  NLH System Island Interconnected Supply and Demand									
September 1, 2014 NLH System Outlook <sup>3</sup>		Five-Day Forecast	Temperature (°C)		NLH System Demand (MW)				
				Morning	Evening	Morning	Evening		
Available NLH System Supply:4	1,110	MW	Monday, September 01, 2014	16	14	600	650		
Current St. John's Temperature:	16	°C	Tuesday, September 02, 2014	11	14	600	650		
Current St. John's Windchill:	N/A	°C	Wednesday, September 03, 2014	14	16	600	600		
NLH System Peak Demand Forecast:	650	MW	Thursday, September 04, 2014	17	15	600	600		
			Friday, September 05, 2014	11	18	600	575		

## Supply Notes for September 01, 2014<sup>3</sup>

At 0227 hours, September 01, 2014, Nalcor Grand Falls Unit 9 removed from service for annual maintenance (30 MW). Net impact to system 5 MW (the excess water utilised by other Nalcor Grand Falls Units 5 to 8).

- Notes: 1. Generation outages for running and corrective maintenance are included. These are not unusual for power system operations. They generally do not impact customer supply. The power system operators schedule outages to system equipment whenever possible to coincide with periods when customer demands are low and sufficient supply reserves are available. However, from time to time equipment outages are necessary and reserves may be impacted.
  - 2. Due to the Island Interconnected System being isolated from the larger North American grid, when there is a sudden loss of large generating units some customer's load must be interrupted for short periods to bring generation output equal to customer demand. This automatic action of power system protection, referred to as underfrequency load shedding, is necessary to ensure the integrity and reliability of system equipment. Underfrequency events typically occur 5 to 8 times per year on the Island Interconnected System and the resultant customer load interruptions are generally less than 30 minutes.

  - 4. Gross output including station service at Holyrood (24.5 MW) and improved hydraulic output due to water levels (35 MW). Includes Nalcor Exploits, Star Lake, Rattle Brook, CBPP Co-Gen. Excludes wind generation and DLP Secondary.

Section 3 Peak Demand Information Previous Day Actual Peak and Current Day Forecast Peak						
August 31, 2014	Actual NLH System Island Interconnected Peak Demand <sup>1</sup>	11:50	586 MW			
September 1, 2014	Forecast NLH System Island Interconnected Peak Demand		650 MW			
August 31, 2014	Actual Total Island Peak Demand <sup>2</sup>	11:20	703 MW			
September 1, 2014	Forecast Total Island Peak Demand		750 MW			

- Notes: 1. NLH System Island Interconnected is supplied by generation owned by NLH as well as NLH Power Purchases as detailed in Section 1 above.
  - 2. Total Island System Demand is supplied by NLH generation and NLH Power Purchases, plus generation owned and operated by Newfoundland Power and Corner Brook Pulp & Paper to meet their respective supply needs.