

1 Q. The Teshmont report seems to have been finalized in late 2014, with only minor
 2 changes since. Is data used by Teshmont consistent with Hydro’s current
 3 assumptions? If not, please explain the differences.

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6 A. The analysis performed by Teshmont was initiated in 2014. Since this time, Hydro’s
 7 assumptions have been updated for the parameters described below.

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9 **1. IIS Demand**

10 With respect to IIS demand, the Teshmont analysis was performed using load flow
 11 cases with a P50 peak of 1788 MW in 2017 and a P50 peak of 1744 MW in 2018¹.

12 This compares to the updated load forecasts used in Hydro’s Energy Supply Risk
 13 Assessment from the table below.

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Table 1 – Island Interconnected System Coincident Demand (MW)

Forecast	P50				P90			
	Winter 2016/17	Winter 2017/18	Winter 2018/19	Winter 2019/20	Winter 2016/17	Winter 2017/18	Winter 2018/19	Winter 2019/20
Base Case (Apr 4, 2016)	1733	1758	1752	1760	1801	1831	1819	1827
Post Budget Sensitivity	1720	1740	1730	1730	1780	1800	1790	1790
Notes:	1. Forecast MW includes transmission losses and Holyrood station service requirements. 2. Reductions in peak demand between Winter 2017-18 and Winter 2019-2020 are primarily the result of the decreased transmission losses associated with the completion of TL267. 3. The post budget sensitivity is indicative only of the direction the NL budget is expected to have on IIS peak demand. This should not be considered a fully analysed forecast.							

¹ It is noted that the 2018 peak includes load growth of 2.7 MW over 2017 and a reduction in transmission losses of 24.5 MW as a result of power flow over the LIL and the introduction of TL267. Holyrood station service load is also reduced by 23.5 MW. The 2018 case includes 1.9 MW of station service load at Soldiers Pond.

1 **2. Gross Continuous Unit Ratings**

2 Since the initiation of the Teshmont Study, Hydro has updated its assumptions with
 3 respect to the Gross Continuous Ratings for certain units in the IIS to better reflect
 4 the firm capability. Variations between capacities assumed for the Teshmont study
 5 and current values are summarized in the table below.

Table 2 – Variations in Gross Continuous Unit Ratings

Unit	Capacity in Teshmont Study (MW)	2016 Gross Continuous Unit Rating (MW)
Newfoundland Power Hydro	96.2	76.4
Rattle Brook	4.0	0
Nalcor Exploits	87	63
CBPP Co-Gen	15	8
Holyrood Gas Turbine	120	123.5

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7 **3. Capacity Assistance Agreements**

8 Since the time of the study, Hydro has established capacity assistance agreements
 9 with Corner Brook Pulp and Paper and Vale² for a total of 90.8 MW. These
 10 agreements are not considered in the Teshmont Analysis.

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12 The impact of the variations to these assumptions is discussed in Hydro's response
 13 to PUB-NLH-622.

² It is noted that Vale's sources of real and reactive power including generators and filter banks and not included in the Teshmont Study.