

1 Q. **Re: Page 26, Section 5.1**

2 Please compare actual winter peak loads for each of the past 3 winter periods with
3 peaks forecasted at a time of year roughly comparable with that used in the current
4 report, and explain and quantify where possible each source of variance.

5

6

7 A. Table 1 provides a comparison of actual winter peak demands by customer class for
8 each of the past three winter periods using forecasts that were generated six
9 months prior to each respective winter peak. The forecasted peak is a model based
10 forecast, and not a guarantee of actual. Further, the variances noted are not
11 material and are generally within the expected ranges that would occur from a peak
12 analysis model. Therefore, there is no definitive explanation for the variances
13 between the model and actual peaks.

Table 1: Customer Class Demand at Island Interconnected System Peak¹

	Winter Peak Period		
	2015/2016	2016/2017	2017/2018
Forecast - Utility Demand ²	1,505	1,492	1,497
Actual - Utility Demand	1,465	1,503	1,452
Variance	-40	11	-45
Forecast - Industrial Demand	188	159	180
Actual - Industrial Demand	168	155	171
Variance	-20	-4	-9

¹ Adjusted for any applicable customer curtailments.

² Utility demand includes Newfoundland Power and Hydro Rural.

Utility Demand Variance

- The utility demand variance for 2015-2016 is generally explained by weather conditions that were less onerous than average historical weather conditions on a peak day. Actual temperatures were warmer than historical average temperatures and wind speeds were close to historical average wind speeds on the day of the winter 2015-2016 peak;
- The utility demand variance for 2016-2017 is within the model variance expectations and cannot be attributed to any specific weather condition or system condition; and
- The utility demand variance for 2017-2018 is generally explained by weather conditions that were less onerous than average historical weather conditions on a peak day. Temperatures were much warmer than historical average temperatures but wind speeds were much higher than historical average wind speeds on the day of the winter 2017-2018 peak.

Industrial Demand Variance

- The industrial demand variance for 2015-2016 is generally explained by lower load requirements for Vale at the time of the system peak;
- The industrial demand variance for 2016-2017 is generally explained by slightly lower load requirements for Vale and North Atlantic Refining at the time of the system peak; and
- The industrial demand variance for 2017-2018 is generally explained by slightly lower load requirements for Vale at the time of the system peak.