

1 . **Summary Report – Additional Cost of Service Information, Section 3.4.1, page 9,**
2 **lines 19-23**

3

4 Please explain, in detail, how Hydro derived the conversion rates of 602 kWh per
5 barrel for the 2018 Test Year and 583 kWh per barrel for the 2019 Test Year from
6 the forecast production for each year?

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9 A. Hydro’s methodology for determining the conversion rates for the 2018 and 2019
10 Test years in its Expected Supply Scenario remains consistent with the methodology
11 detailed in Hydro’s response to PUB-NLH-043.

12

13 Please refer to NP-NLH-292 Attachment 1 for the calculation of conversation rate.

Table 2
Holyrood Fuel Conversion Rate
Regression

Line No	SUMMARY OUTPUT									
	<i>Regression Statistics</i>									
1	Multiple R	0.991032538								
2	R Square	0.982145492								
3	Adjusted R Square	0.981401554								
4	Standard Error	2.585836868								
5	Observations	51								
	ANOVA									
		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>				
6	Regression	2	17655.1508	8827.575399	1320.198361	1.10141E-42				
7	Residual	48	320.9545108	6.686552308						
8	Total	50	17976.10531							
		<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>	
9	Intercept	130.5581893	25.66683696	5.086648953	5.99763E-06	78.95155484	182.1648239	78.95155484	182.1648239	
10	Average Unit Load (kW)	0.001406916	2.75098E-05	51.14227765	1.59091E-43	0.001351604	0.001462228	0.001351604	0.001462228	
11	Heat Content (BTU/bbl)	-0.000758311	0.000167815	-4.518724624	4.06151E-05	-0.001095727	-0.000420896	-0.001095727	-0.000420896	
	Calculation of 2018 and 2019 Test Year Conversion Rate:									
		2018	2019							
12	Unit net average loading (kW)	93,377	69,890							
13	Fuel Heating Content (BTU/US gal)	152,400	152,400							
14	Station Service Factor	6.2%	6.2%							
15	Unit gross average loading (kW)	99,539	74,502	Line 12 / (1 - Line 14)						
16	Fuel consumption rate (bbl/hour)	155	120	Line 9 + (Line 15 x Line 10) + (Line 13 x Line 11)						
17	Net fuel conversion factor (kWh/bbl)	602	583	Line 12 / Line 16						