

1 Q. **2017 General Rate Application - Operations**

2 Page 3.24, lines 14-16 – Provide details of the calculation of station service of 6.2%
 3 and explain how it reflects 2018 and 2019 test year conditions and the effects of
 4 recent capital improvements, such as the variable frequency drives of the forced
 5 draft fans.

6
 7

8 A. The station service factor is calculated using historical data (2011-2015) of Holyrood
 9 Gross Plant Production and Net Plant Production as follows:

10

$$\text{Station Service Factor [\%]} = 1 - \frac{\text{Net Plant Production [GWh]}}{\text{Gross Plant production [GWh]}}$$

13

14 Table 1 provides the gross and net plant production and resultant station service
 15 factor.

Table 1 Holyrood Gross Plant Production and Net Plant Production

	Holyrood Thermal Generating Station		
	Gross Plant Production [GWh]	Net Plant Production [GWh]	Station Service Factor [%]
2011	948.9	885.3	6.7
2012	916.9	855.8	6.7
2013	1024.4	957.4	6.5
2014	1400.3	1315.3	6.1
2015	1543.2	1458.5	5.5
Total	5833.7	5472.4	
Average			6.2

- 1 This five year period captures recent changes to station service load, including
- 2 variable frequency drives of the forced draft fans, as well as changes to plant
- 3 operation, such as annual average loading.