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November 23, 2017

Hon. Siobhan Coady Minister of Natural Resources Government of Newfoundland and Labrador Confederation Building P.O. Box 8700 St. John's, NL A18 4J6

Minister Coady,

As requested, this letter contains data and additional detail regarding the operation of Newfoundland and Labrador Hydro's Holyrood gas turbine to date in 2017.

Table 1 shows the monthly production and cost of fuel figures for the Holyrood gas turbine for 2017 and 2016.

Table 1 - Holyrood GT Monthly Detail

| Holyrood Gas Turbine Monthly Variances | | | | | | |
|---|----------------|-------------------|----------------|--------------------|--------------------|-----------------|
| Month | 2017 \$ | 2016 \$ | Variance \$ | 2017 kWh | 2016 kWh | Variance kWh |
| January | 1,981,173 | 8,146,933 | (6,165,760) | 7,250,773 | 41,160,030 | (33,909,257) |
| February | 2,574,505 | 7,911,127 | (5,336,622) | 10,804,010 | 40,783,594 | (29,979,584) |
| March | 2,492,177 | 1,188,424 | 1,303,753 | 9,546,426 | 5,758,263 | 3,788,163 |
| April | 757,890 | 1,478,796 | (720,906) | 2,890,195 | 6,843,474 | (3,953,279) |
| May | 691,925 | 157,093 | 534,832 | 2,747,028 | 670,500 | 2,076,528 |
| June | 70,502 | 17,093 | 53,409 | 343,398 | 47,000 | 296,398 |
| July | 26,096 | 70 | 26,027 | 1,555,080 | 32,359 | 1,522,721 |
| August | 2,847,953 | - | 2,850,534 | 9,236,000 | - | 9,236,000 |
| September | - | 789,573 | (789,573) | 954 | 3,474,233 | (3,473,279) |
| October | 978,161 | 212,322 | 765,839 | 3,904,234 | 915,127 | 2,989,107 |
| Total | 12,420,381 | 19,901,430 | (7,478,468) | 48,278,098 | 99,684,580 | (51,406,482) |

To the end of October 2017, the cost of fuel consumed by the gas turbine in 2017 is approximately \$12 million, as compared to approximately \$20 million for the same period in 2016. This also compares to \$134 million incurred in fuel costs for the Holyrood Thermal Station in 2017 to end of October.

For a period this past summer, the gas turbine was operating at increased production. From July 31 to Aug 23, 2017 there was a "total plant outage" at the Holyrood Thermal Generating Station

(HTGS). This was a planned outage during which all three generating units were removed from service in order for Hydro to safely conduct its required planned maintenance program on systems that are common to all three units. During that period in particular, the gas turbine was operated to ensure appropriate system reliability while the HTGS was offline for maintenance.

Whenever there are planned outages to generation or transmission equipment for maintenance purposes on the Avalon Peninsula, the Holyrood gas turbine is typically run to ensure adequate electricity reserves and maintain a reliable power system. If, for instance, the gas turbine was not running during these occasions and another transmission line trip occurred, it could potentially result in customer outages until the gas turbine was started.

The fuel cost associated with running the gas turbine in August 2017 is \$2.8 million. There was no total plant outage in 2016, and therefore there were no costs in August 2016.

As outlined in the table, the higher production and fuel costs overall in 2016 is a result of increased operation of the unit in January and February of 2016. This was partially due to the fact that dry conditions in late 2015 and early 2016 resulted in low reservoir levels and necessitated the use of more thermal generation.

Hydro is confident in its ability to reliably supply customers now and as we head into the winter period. The combustion turbine continues to be an important component in Hydro's system.

ennifer Williams

Vice President, Production