1 Q. Reference: Hydro's 2015 & 2016 Supply Cost Recovery Application Evidence, 2 October 11, 2017, Page 6. Hydro states: 3 "...the use of the Holyrood GT in 2015 was in support of spinning reserves and to 4 5 provide generation during the loss of a major generating unit, and also required to reliably facilitate planned generation and transmission outages." 6 7 8 Did Hydro utilize the Holyrood GT to provide spinning reserve during 230kV 9 transmission line outages in 2015 and 2016? If so, for each occurrence please 10 provide (i) the duration the Holyrood GT was used, (ii) the average loading of the 11 Holyrood GT, and (iii) the cost of fuel consumed. 12 13 14 A. Please refer to Tables 1 and 2 for (i) the duration the Holyrood Gas Turbine (GT) was 15 used, (ii) the average loading of the Holyrood GT, and (iii) the cost of fuel consumed 16 to facilitate planned outages to transmission lines serving the Avalon Peninsula in 17 2015 and 2016. In each case a major transmission line into or on the Avalon 18 Peninsula was planned out of service and the Holyrood GT was operated to keep 19 the remaining transmission line(s) within post contingency static and dynamic 20 reliability limits. Note that Hydro does not have the resolution in its data to provide 21 actual fuel cost data for periods less than a month and therefore has provided an 22 approximate for each period using the total fuel cost for the month prorated by the 23 energy produced during the period divided by the total energy for the month.

Table 1 2015 Holyrood Gas Turbine Usage

Holyrood Gas Turbine Start Time	Holyrood Gas Turbine Stop Time	Operation Time (Hours)	Reason for Operation	Line Outage	Average Loading (MW)	Approximate Fuel Costs (\$000)
11/3/2015 6:57	11/3/2015 20:59	14.0	Planned Avalon Peninsula transmission outages	Planned TL201 outage	81.3	233.7
11/4/2015 6:30	11/4/2015 22:57	16.5	Planned Avalon Peninsula transmission outages	Planned TL201 outage	71.3	241.6
11/5/2015 6:25	11/5/2015 22:57	16.5	Planned Avalon Peninsula transmission outages	Planned TL201 outage	78.4	265.7
11/6/2015 6:35	11/6/2015 21:37	15.0	Planned Avalon Peninsula transmission outages	Planned TL201 outage	56.6	174.5
11/8/2015 9:34	11/8/2015 23:28	13.9	Planned Avalon Peninsula transmission outages	Planned TL201 outage	55.6	158.7
11/9/2015 6:35	11/9/2015 23:02	16.5	Planned Avalon Peninsula transmission outages	Planned TL201 outage	77.2	261.5
11/10/2015 6:25	11/10/2015 23:07	16.7	Planned Avalon Peninsula transmission outages	Planned TL201 outage	68.5	234.8
11/11/2015 11:47	11/11/2015 23:58	12.2	Planned Avalon Peninsula transmission outages	Planned TL201 outage	74.2	185.9
11/12/2015 6:34	11/12/2015 22:01	15.5	Planned Avalon Peninsula transmission outages	Planned TL201 outage	99.0	315.1
11/29/2015 7:50	11/29/2015 12:36	4.8	Planned Avalon Peninsula transmission outages	Planned TL201 outage	45.5	44.8
12/17/2015 15:57	12/17/2015 21:07	<u>5.2</u>	Planned Avalon Peninsula transmission outages	Planned TL201 outage	39.0	<u>44.8</u>
Total TL201 Outages		146.8			71.6	2,161.1
11/13/2015 13:29	11/13/2015 16:42	3.2	Planned Avalon Peninsula transmission outages	Planned TL217 outage	52.6	34.6
11/14/2015 9:12	11/14/2015 14:00	<u>4.8</u>	Planned Avalon Peninsula transmission outages	Planned TL217 outage	<u>45.2</u>	<u>44.6</u>
Total TL217 Outages		8.0			48.2	79.2

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Table 2 2016 Holyrood Gas Turbine Usage

Holyrood Gas Turbine Start Time 4/23/2016 6:46	Holyrood Gas Turbine Stop Time 4/23/2016 12:38	Operation Time (Hours) 5.9	Reason for Operation Planned Avalon Peninsula transmission outages	<u>Line Outage</u> Planned TL206 outage	Average Loading (MW) 39.7	Approximate Fuel Costs (\$000) 51.0
Total TL206 Outage	4/23/2010 12.36	<u>5.9</u> 5.9	riailileu Avaloii reililisula trafisilissioii outages	Flatified TL200 Outlage	39.7 39.7	51.0
9/20/2016 7:23	9/20/2016 21:49	14.4	Planned Avalon Peninsula transmission outages	Planned TL237 outage	39.9	133.2
9/26/2016 6:49	9/26/2016 22:33	15.7	Planned Avalon Peninsula transmission outages	Planned TL237 outage	40.0	145.5
9/27/2016 6:40	9/27/2016 22:25	15.8	Planned Avalon Peninsula transmission outages	Planned TL237 outage	39.6	145.2
9/28/2016 7:02	9/28/2016 22:37	15.6	Planned Avalon Peninsula transmission outages	Planned TL237 outage	39.8	143.7
9/29/2016 6:53	9/29/2016 23:07	16.2	Planned Avalon Peninsula transmission outages	Planned TL237 outage	40.0	150.2
9/30/2016 6:32	9/30/2016 13:38	<u>7.1</u>	Planned Avalon Peninsula transmission outages	Planned TL237 outage	<u>39.6</u>	<u>65.2</u>
Total TL237 Outage		84.8			39.8	783.0