

1 Q. Reference: ***Combustor Inspection Major and Overhaul, Holyrood Combustion***
2 ***Turbine report, August 29, 2016, page 2***

3 *“The Holyrood CT provides several critical functions in reliably supplying customer*
4 *demand requirements. It is operated to support spinning reserves on the Island*
5 *Interconnected System and provides a critical backup in the event of a contingency,*
6 *such as the loss of a major generating unit or the loss of a major transmission line.*
7 *The Holyrood CT, due to its strategic location, also provides power to the Avalon*
8 *Peninsula which is heavily reliant on the transfer of power over transmission lines*
9 *from outside of the Avalon Peninsula and the production of power from the*
10 *Holyrood Thermal Generating Station (HTGS). In addition, it is used to facilitate*
11 *planned generation and Avalon Peninsula transmission outages.”*

12 Please provide a table detailing the actual number of starts, equivalent starts and
13 equivalent base hours of operation over the in-service period from March 2015 to
14 present for each of the critical functions referenced above. For the purpose of the
15 table, the critical functions are to include (i) support of spinning reserve, (ii) backup
16 due to the loss of a major generating unit, (iii) backup due to the loss of a major
17 transmission line, (iv) planned generation outages and (v) planned Avalon Peninsula
18 transmission outages.

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21 A. Please see below for the requested table. It is important to note that the areas of
22 operation are not necessarily mutually exclusive. For example, the operation of the
23 Holyrood CT as a backup during the loss of a Holyrood unit will also provide for
24 spinning and Avalon reserves support. Note that Hydro has also included Testing so
25 that these hours and starts could be reflected.

Operation of the Holyrood CT for critical functions (March 2015 to present)

Critical Function	Actual Starts	Equivalent Starts	Equivalent Base Hours	Notes
Spinning Reserve	63	105.3	577.2	1
Loss of Major Generating Unit	23	39	1880.6	2
Loss of Major Transmission Line	-	-	-	3
Planned Generation Outages	22	46.8	235.6	4
Planned Avalon Transmission Outages	13	24.7	317.4	5
Testing	18	63.7	62.6	6
Totals	139	279.5	3073.4	

Notes:

1. Operation in this area includes for Spinning and Avalon Reserves which are generally load driven and / or due to deratings to generating equipment.
2. The primary drivers of operation in this area were (1) shorter duration outages to the Holyrood Thermal Generating Station (HTGS) units in 2015 and requirements to support Island and Avalon reserves, and (2) extended outages to HTGS Units 1 and 2 in January and February 2016 and requirements to support Island and Avalon reserves as well as for reservoir support.
3. For the period March 2015 to present, there was no reported operation of the Holyrood CT due to the unplanned loss of a major transmission line.
4. The primary driver of operation in this area was the planned Holyrood total plant outage in August 2015 and operation for Avalon transmission support.
5. The primary driver of operation in this area was the outage to transmission line TL201 in November 2015.
6. Testing of the Holyrood CT primarily occurred in the months immediately following the commissioning and in-service date of the unit.