

1 Q. Sunnyside and Holyrood Breakers: Please verify the accuracy of the information in
2 the tables below and explain why the material and consultant costs for the overhaul
3 of HRD B1B17 was much higher than for the overhaul of SSD B1L03, as indicated in
4 the table below from Hydro's letter to the Board dated May 5, 2014: Allowance for
5 Unforeseen Events-Holyrood BL17 230 KV Breaker Overhaul.

6 **Table 7.1**

7 **Sunnyside B1L03 230kV Breaker Final Overhaul Project Cost**

Category	Cost (\$000)
Labour	38.9
Overtime	26.6
Materials	72.1
Consultants	15.0
Travel	8.3
Total	160.9

Table 7.2

Holyrood B1L17 230kV Breaker Final Overhaul Project Cost

Category	Cost (\$000)
Labour	36.9
Overtime	49.0
Materials	165.9
Consultants	108.2
Total	360.0

1 A. Hydro verifies that the project costs of overhauls of breaker B1L03 at Sunnyside
2 and breaker B1L17 at Holyrood are accurate. The difference in the overhaul cost
3 stems from the fact that the breakers are of different vintage and complexity.

4
5 Sunnyside breaker B1L03 is a Brown Boveri type DCVF-245, manufactured in
6 1966. This style of breaker is of relatively low complexity (compared to later
7 type DLF breakers), and Hydro crews typically overhaul these breakers without
8 the services of an on-site representative. In addition, the major components for
9 these breakers are refurbished in house, thus keeping material costs low.

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11 Holyrood breaker B1L17 is a Brown Boveri Type DLF 245, manufactured in 1973.
12 This breaker is of much higher complexity than the earlier DCVF breakers and
13 Hydro requires the services of an on-site representative for all aspects of the
14 overhaul. The result being much higher consultant costs. In addition, material
15 costs for the DLF breaker are much higher due to the fact that Hydro does not
16 refurbish major components in-house, and must send them to the manufacturer
17 for refurbishment.