

1 Q. C-16, Tab 7: Install Backup System for Raw Water Supply and Clarifier -Holyrood;
2 \$955,600

3 As the Holyrood plant has been in operation without a backup raw water system for
4 decades and the AON Reed Stenhouse Inc. recommendation was made in 2007.

5 Provide an explanation why this work is necessary now at this stage of plant
6 operations.

7
8
9 A. This work is necessary now because a reliable supply of raw water is required at all
10 times at Holyrood whether the plant operates in thermal generation mode or
11 synchronous condensing mode. However, it is believed that the requirement is
12 most important when the plant is in generation mode. The Holyrood facility is still
13 required for a significant period of time as a thermal generating station and
14 thereafter as a synchronous condensing station. The plant will continue as a
15 thermal station into 2017 at an increased capacity factor with extended periods of
16 time at high demand compared to its historical profile and will be required
17 thereafter to 2020 for regular thermal generation exercising and back-up
18 generation as required. After 2020, a reliable raw water supply will also be
19 required; however, its criticality will be less than when the plant was required for
20 thermal generation operation.

21
22 For a period of time Hydro accepted the risk of failure associated with operating the
23 plant with the existing raw water supply system. However, with the critical nature
24 of the plant for baseload generation in the immediate term, and the general
25 requirement of reliable supply to 2020, the risk increases with age and plant usage
26 and is no longer acceptable.