

1 Q. If NL Hydro determines that spill is necessary, how does the choice of which
2 hydraulic asset to spill affect its regulated earnings and the earnings of the
3 unregulated Exploits and Star Lake assets? In particular, does NL Hydro prefer to
4 spill from its own assets or from those that it operates? Please explain.

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7 A. Regardless of ownership, the decision to spill is driven by the water level at each of
8 the reservoirs which Hydro has control. The primary deciding factor for controlling
9 water levels in a reservoir is the safety and integrity of the infrastructure and the
10 public affected by water discharges from the reservoir. A second factor is in
11 meeting the requirements under any agreement for managing flows related to
12 commitments for fish migration or habitat management. A third factor is to
13 minimize the downstream environmental impacts and damage due to the high
14 water flows which can occur when spilling of water must occur.

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16 Considering these factors, Hydro adjusts the discharge from the reservoirs to
17 maximize the total amount of energy produced by hydroelectric resources and
18 thereby minimizing the production from fossil fuel driven resources, primarily
19 Holyrood. In order to do this, Hydro manages the reservoir levels to balance the
20 probability of spill across each reservoir. This is accomplished by dispatching energy
21 production from each of the plants to draw down the reservoir storage levels and to
22 maintain them near the same level as a percentage of maximum operating level.

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24 The amount of production from plants not owned by Hydro can affect Hydro's
25 regulated net income through the RSP resulting from the differential between the
26 cost of purchases from these facilities and the average cost of production from
27 Holyrood established in the current rates. With Hydro's proposed power purchase

1 cost deferral mechanism, this will no longer occur. The income to the Exploits and
2 Star Lake operations is also affected through Hydro's production decisions. In the
3 circumstance where production decisions affect where spill occurs, Hydro has not
4 exercised a preference but maintained the principles as described above. In 2013,
5 this resulted in spill occurring at all facilities on the Island Interconnected System.
6 The Exploits generation spilled considerable amounts of water at Grand Falls,
7 Bishop's Falls and Star Lake. However, due to fish management reasons and plant
8 integrity reasons, opportunities to shut down the generation at Grand Falls and
9 Bishop's Falls were minimal.