

1 Q. At page 4, lines 4-6, of Hydro's Report regarding the Replacement on Excitation
2 Transformers (Bay d'Espoir), Hydro states:
3 "Efficiencies in engineering, project management, and bulk procurement, as well as
4 disposal of the existing transformers and their fluid, reduce the overall cost when all
5 transformers are replaced as part of one project."

6 Please provide details for the reduction in overall costs expected if all transformers
7 are replaced as part of one project (including details of the anticipated cost
8 savings), versus the cost of replacing only RT1, RT2, RT6 and RT7 at this time.

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11 A. The current plan is to remove fluid for an average of two units at one time and then
12 ship the tanks and cores for disposal together. The extra cost to remove fluid from
13 one transformer at a time due to single replacement projects is \$4,500 per
14 transformer. The additional cost to dispose of a transformer tank and core would
15 be \$4,000 when disposing of the equipment individually. Engineering and Project
16 management costs would add an extra \$65,000 per separate project to engineer
17 and acquire transformers individually. As well, there is a lost opportunity to achieve
18 a discount (10% or \$7,200 per transformer) on orders of multiple transformers
19 compared to purchasing one per contract. Installation costs are assumed to be
20 equal and not factored into the above savings, however when repeating the same
21 installation in a short timeframe, there are improvements. The addition of the
22 above savings offsets the marginal cost to replace RT5 at the same time as the
23 other transformers.