

1 **Re: Upgrade Power Transformers**

2 Q. On what does Hydro rely for its assertion at p. 5 of Tab 13 that it is typically
3 more cost effective and reliable to replace power transformers in a planned
4 mode rather than a reactive mode?

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7 A. In a planned mode, Hydro will monitor the Degree of Polymerization (DP)
8 number of each transformer and once it begins to approach the replacement
9 criteria, Hydro would initiate a capital budget proposal to replace the unit
10 within a three to five year window. Under this planned approach, the
11 replacement can be executed in a logical organized manner. Time would be
12 available to call public tenders and obtain competitive prices for equipment.
13 Internal labor, equipment and system outages could be properly planned to
14 take full advantage of system conditions and constraints.

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16 In a reactive mode, the execution of the replacement would be done under
17 emergency conditions. Costs for materials and equipment would be at a
18 premium, since they would be required immediately. Internal labor and
19 equipment would not have been planned, and therefore interruptions to
20 regular operations would have to occur to focus attention to the reaction to
21 the emergency situation. Costs to react to emergencies are always higher
22 than costs to execute a planned objective.