

1 Q. (Re: September 2014 Report submitted as part of Application, page 5, lines 10 to  
2 12) It is stated "*As demonstrated in the 2010 capital budget proposal, voltage*  
3 *conversion is the most efficient and economical way to obtain these desired*  
4 *results*". Would this have been the case had Hydro assessed the project in the 2010  
5 capital budget proposal based on the current project cost estimate? Please provide  
6 supporting documentation.

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8 A. The *Labrador City Distribution System Upgrading Study* (2008, submitted as part of  
9 Capital Budget Application for 2010, Volume II Tab 9) was completed to assess  
10 issues on the system when demand went beyond the design capacity of 52 MW.  
11 The study found that beyond 52 MW, the existing system would be subject to poor  
12 voltage regulation, low voltages, and more frequent component failures due to  
13 excessive heating. The study determined that in order to serve additional load  
14 growth, it would be necessary to convert the system to a higher distribution  
15 voltage. The study assessed two alternatives: convert to 25 kV; or 12.5 kV. The  
16 study found "The major difference in cost for the two alternatives is for the station  
17 and line construction" (page 55 of 71) and "distribution upgrading and conversions  
18 is common to both alternatives and are expected to have the same cost" (page 57  
19 of 71). The report found the "25 kV upgrading plan is selected as the favoured  
20 alternative" (page 58 of 71).

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22 Currently, the increased budget cost is significantly attributable an underestimation  
23 of the amount of materials, mainly transformers, required for this project. This  
24 underestimation and therefore requested budget increase would be common and  
25 of similar magnitude if the project was to convert to 25 kV or 12.5 kV. Therefore,  
26 the required investment in conversion to 25 kV would still be the most appropriate  
27 for load growth and reliability in Labrador City.