

1 Q. Please refer to Appendix C10, section 4.3, objective 3. It is noted that under some
2 conditions very high temporary over-voltages could occur as a consequence of
3 blocking of the Labrador Island Link. The report states that the Maritime Link VSC
4 converter may be able to control this over-voltage. Has it been established whether
5 or not the Maritime Link VSC converter will be able to provide the necessary ac
6 voltage control?

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9 A. Preliminary simulations have been performed with the Maritime Link modeled as
10 VSC as described in Hydro's response to PUB-NLH-032. As illustrated in the figures
11 below, the results of the simulations indicate that the overvoltage conditions
12 resulting from the trip of the Maritime Link are within an acceptable envelope.

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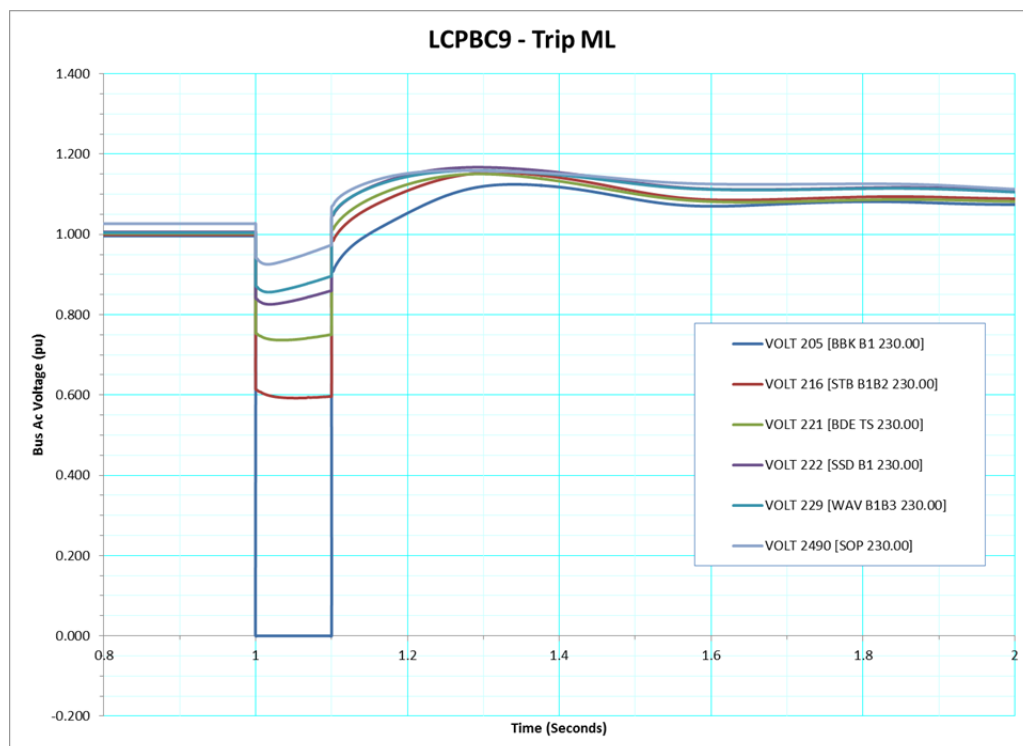


Figure 1 – Summer Day Case – Maritime Link Trip

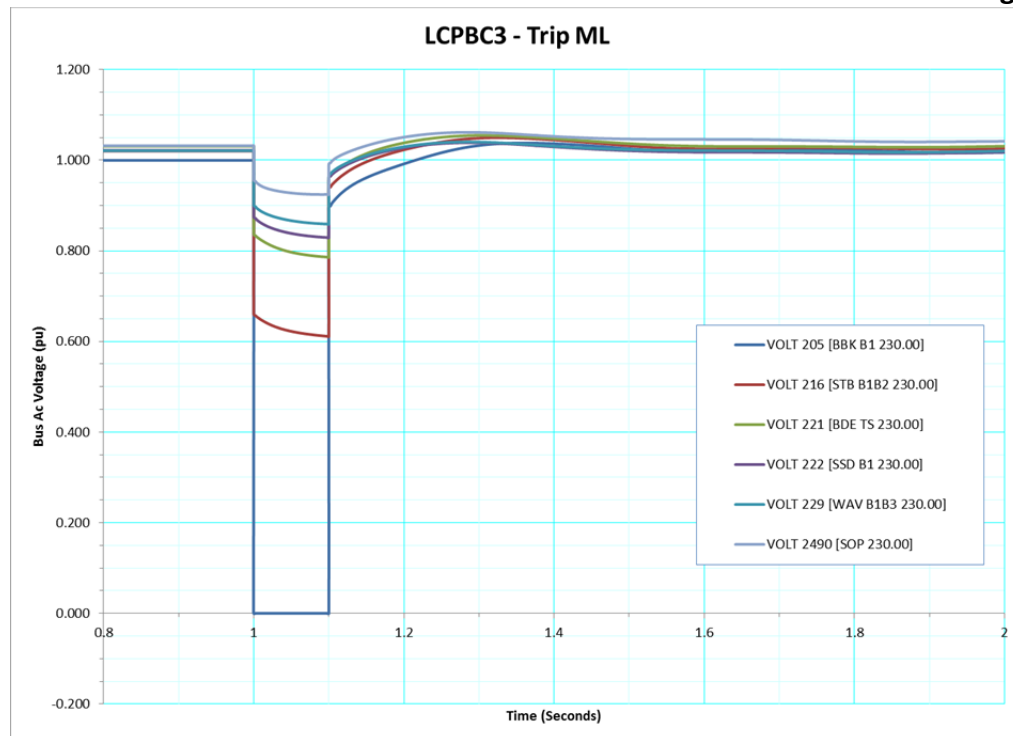


Figure 2 – Winter Peak Case – Maritime Link Trip

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Joint studies between Hydro, Emera and the HVdc system vendors in the final design stage will assess the full capabilities of the Bottom Brook converter to provide the necessary ac voltage control as demonstrated in the preliminary analysis.