

1 Q. Reference PUB-NLH-268 and PUB-NLH-270: Given the distance between the
2 midpoints of the AC OHL and the HVDC OHL in the two figures provided, there seem
3 to be a risk that in the event of a collapse of the HVDC OHL tower both the HVDC
4 OHL and the AC OHL could collapse. Has Hydro considered this scenario? If so, what
5 would be the impact on the supply of energy to consumers? If not, why not?
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8 A. Yes, Hydro has considered this scenario in the design of the Labrador Island
9 Transmission Link, and as further explained below, the HVdc structures are
10 designed to fail in a manner so as not to fall outside the HVdc line right of way and
11 thus not affect adjacent HVac lines.
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13 Although cascade (inline) failure is the typical failure mode for transmission, the
14 Labrador Island Transmission Link structures have been designed so that in the
15 event of a transverse overload (perpendicular to the line routing) suspension
16 structures will fail above the guy wire attachment. The top of the structure above
17 the guy wire attachment would not exit the right of way, and would therefore not
18 reach the parallel transmission lines. Other failure modes cause the tower to
19 crumble and not fall outside the right of way, being restrained by the guy wires
20 which are designed to be stronger than the structures.