Q. Further to PUB-NLH-268 please explain the steps that will be taken to prevent contact between the ac line conductors and the HVdc line conductors.

A. The transmission line design process includes an optimization of tower heights, Right of Way (RoW) widths, and span lengths between towers. An optimization is performed among these criteria to determine the most economical configuration for a given line voltage and loading condition.

RoW width is calculated using the spacing between the conductors and a calculation for the maximum amount of "blow-out" or horizontal swing of the conductor. The horizontal swing calculation is detailed in CSA C22.3 No. 1-10. The calculated minimum required RoW width for the Labrador-Island Link is 57.8 m, and therefore the width used for design was set at 60 m. Using these design standards, the conductor will not leave the RoW during operation and will not impact any object outside the RoW, including other transmission lines adjacent to the RoW.

The design of the transmission line on the adjacent RoW was also optimized in the same manner, and therefore the conductor in the adjacent ac RoW will also not come in contact with the dc infrastructure.