Q. Please refer to page 49 of the Upgrade Transmission Line Corridor Report. Please explain how the Maritime Link HVDC scheme was represented in the additional transient stability study performed with this link in service. In the response include the type of HVDC scheme represented (LCC or VSC), the operating mode of the scheme, i.e. import or export to/from Newfoundland, whether the Maritime Link supported the Newfoundland ac network through ac voltage control or reactive power control during the event and whether the Maritime Link change operating mode (import/export and/or reactive power) during the event.

A. For the purposes of this investigation, the Maritime Link was modeled as a VSC system using the PSS®E HVDC Light® Open model Version 1.1.10 from ABB. The case discussed on page 49 of the Upgrade Transmission Line Corridor Report is representative of a peak load condition where 158 MW is being exported from Newfoundland to Nova Scotia. The system is configured to operate in an ac voltage control mode at Bottom Brook Terminal Station. The system is specified with active power limit of +/-250 MW per pole and a maximum reactive power limit of +/-125 MVAR per pole.