Q. Further to the response to PUB-NLH-275, please explain why a power supply from Nova Scotia of up to 300MW is assumed, since the limit of power delivery from a single pole of the Maritime Link is less than 250MW (250MW less the power loss in the converters (total about 2%), and the power loss in the dc cable, which is unknown). What would be the date of any shortfall on the Island assuming this reduced availability to 250MW on the Maritime Link?

A. The power flow from Nova Scotia to the Island of Newfoundland via the Maritime Link is limited to 325 MW at the sending end due to loss of load criteria in New England. Analysis to date assumes a nominal 300 MW from the Maritimes delivered at Bottom Brook to account for HVdc transmission system losses. Power deliveries from the Maritimes to the Island of Newfoundland are considered "emergency" supply in the event of a complete loss of the Labrador- Island HVdc Link (LIL). Recall in the Hydro planning criteria loss of the LIL bipole is an N-1-1 contingency. Consequently, it is assumed that the full capacity of the Maritime Link is available to assist. If one pole of the Maritime Link is out of service at the same time as the complete LIL, the analysis considers an N-1-1-1 event.

If, however, only 250 MW were available from the Maritime Link during an outage to the LIL, the resulting total capacity would be in the range of approximately 1600 MW to 1630 MW[1]. Based on current load forecasts, the Hydro system load will exceed 1600 MW in around the year 2021.

[1] See Hydro's response to PUB-NLH-217.