Q. Re: "Newfoundland and Labrador Hydro Cost of Service Methodology Review Application," Pre-Filed Testimony of Andrew McLaren, August 5, 2019. p. 20/6-12.

It is stated with respect to classification of the Labrador Transmission Assets ("LTA") facilities that:

"The Christensen Associates report states the LTA facilities are being put in place to enable least cost operation of the combined Churchill Falls and Muskrat Falls generation facilities and that they will improve network reliability while facilitating energy transfers outside the Province. The fact that the LTA improves network reliability suggests it has characteristics in common with network transmission assets, rather than simply being a generation lead. For those reasons, InterGroup recommends classifying the LTA 100% to demand, consistent with Hydro's other transmission assets."

a) From a cost causality perspective, would it be more appropriate to describe the purpose of the LTA as the means to facilitate least-cost operation of the combined Churchill Falls and Muskrat Falls?

b) Does The InterGroup Consultants Ltd. agree that virtually all transmission facilities contribute to network reliability, regardless of whether they are explicitly built for the following:

i. Facilitation of dispatch (e.g., integration of Churchill Falls and Muskrat Falls);

ii. Generation leads; or

iii. Satisfaction of reliability requirements in view of North American Electric Reliability Corporation reliability standards?

c) Does Manitoba Hydro include its HVDC facilities within the pool of transmission assets used to determine transmission charges under Manitoba Hydro's conforming Open Access Transmission Tariff? How are similar assets treated by BC Hydro?

A. a) The question is not clear. Mr. McLaren has already noted that Christensen states that LTA is about least cost operation of generation facilities and improving network reliability while facilitating energy transfers outside the province. It is not clear how (a) differs, except that the word "generation facilities" has been dropped. Does "Churchill Falls" in the question refer to the generating facility, the company (CFLCo) or a larger group of assets? Does "Muskrat Falls" refer to generation or some larger pool of assets? Regardless, Mr. McLaren has accepted the Christensen evidence as portrayed in the quote noted in the preamble to the question.

b) Yes, but only in the most token sense. In the same way any asset procured by Hydro, including all generation and distribution as well as general assets like trucks for line personnel, contributes to network reliability.

Network transmission assets, in contrast, represent a group of assets that work together to ensure that an overall complement of generation, delivered to the "grid", can be reliably brought to the various distribution system delivery locations. In this manner, LTA facilities are about far more than just a single facility connection or generator lead. They are AC in nature, they are part of a coordinated network operation, and changes in flows (loads generation output) anywhere on that part of the AC network will affect flows on the LTA. In this manner, it is effectively identical to all other manner of transmission assets.

It is only in the most notable outstanding cases where a high voltage wires component of a power system is not functionalized as Transmission, and not classified consistently with all transmission (100% to Demand) – with generator leads being the most common exception. The LTA does not resemble a generator lead, as compared to its close resemblance to grid transmission. For this reason, it is appropriate to functionalize the asset to Transmission and classify based on 100% Demand.

c) No, Manitoba Hydro does not include DC wires facilities in its Open Access Transmission Tariff. Mr. McLaren is not aware of whether BC Hydro includes DC wire facilities in its Open Access Tariff. In terms of asset values, BC Hydro has far more limited "generation integration" transmission than Manitoba Hydro or NLH, i.e., far fewer DC wire facilities.