Q. Re: CBA, Rev. 1, vol. II, Wabush Substation Upgrades, Attachment 1 (Labrador West 46 kV System Expansion, Wabush Substation Recommended Upgrade), page 8 (p. 567 pdf)

Citation 1 (page 8, p. 567 pdf):

> As per Table 3, the firm transformer capacity at the Wabush Substation is 25.5 MVA when calculated in accordance with Distribution Planning methodology. On this basis, available transformer capacity is calculated in Table 6. The table indicates that, for a P50 load forecast, available capacity is at 2.5 MW for the coming winter and will be reduced to 1.4 MW by the end of the 25-year study period. For a P90 load forecast, available capacity is at 2.1 MW for the coming winter and will be reduced to 0.9 MW by the end of the 25-year study period.

Table 5: Available Firm Transformer Capacity at Wabush Substation (Assuming Distributing Planning Ratings for Power Transformers)

	Available Firm Capacity (MW)	
	P50 Forecast	P90 Forecast
2020–2021	2.5	2.1
2045–2046	1.4	0.9

> On the basis of the above, load growth in the range of 2.1 MW to 2.5 MW would trigger a requirement for increased transformer capacity.
>
> The operational risk associated with having limited available transformer capacity must be assessed in the context in the Town of Wabush, where there is an appreciable risk for incremental load above the baseline load forecast. In recent months, Hydro has been approached with multiple prospective developments in this area, including an industrial park. The cyclical nature of the iron ore industry is also a consideration where commodity price increases may result in rapid development in the area. (underlining added)

Citation 2 p. 11, p. 570 pdf):

> If Distribution Planning power transformer ratings are applied, load growth in the order of 2.1 MW to 2.5 MW could be accommodated before addition power transformer capacity is required. However, such an approach does not allow for any operational margin and transformer overloading would not be permitted.
>
> If unforeseen load growth were to occur in the Town of Wabush, such as a sudden boom cycle in the iron ore industry, there would be no capacity to accommodate new customers until additional transformer capacity were installed. As stated above, the resulting load restriction would be in effect for a period that may exceed two years while new transformers were being procured.

> It is also noted that such a restriction at the Wabush Substation would be more onerous than those currently in place in Labrador as all new customer interconnections would be prohibited, without exception.
>
> Alternatively, normal load growth could be permitted, but proponents of any major unforeseen developments in the Town of Wabush would be delayed until incremental transformer capacity were placed in service. Such an approach would be in line with existing load restrictions; however, it is Hydro's objective is that once the Network Addition Policy and the Labrador Transmission System Expansion Plan have been fully reviewed and recommended outcomes are in place, the transmission system shall be planned in a manner that has appropriate flexibility to accommodate economic development. (underlining added)

a. Please confirm that the reference to "load growth in the range of 2.1 MW to 2.5 MW" (Citation 1) refers to load growth over and above the 2045-46 P90 forecast.

A. The reference to "load growth in the range of 2.1 MW to 2.5 MW" (Citation 1) refers to load growth over and above the forecast for the winter of 2020–2021. When considering a P90 forecast, 2.1 MW of incremental load growth can be accommodated. When considering a P50 forecast, 2.5 MW of incremental load growth can be accommodated.