

**NLH-LAB-014.** Re: “Newfoundland and Labrador Hydro’s Proposed Network Addition Policy and Transmission Expansion Study”, Section 3.1.1, pages 31-32. “Given that such loads represent a very substantial portion of the load forecast for future years, and that the justification for the transmission additions recently approved (MFHVI) is indeed related to cryptocurrency mining loads, it is surprising that Newfoundland and Labrador Hydro has not seen fit to report in detail to the Board of Commissioners of Public Utilities on these issues.

It is recommended that Newfoundland and Labrador Hydro report to the Board of Commissioners of Public Utilities on a quarterly basis:

- 1) The number of cryptocurrency contracts signed, and their combined load;
- 2) The maximum non-coincident peak load drawn by each of these customers in the last quarter;
- 3) The total energy consumed by these customers in the last quarter;
- 4) The total number of pending cryptocurrency applications, and their combined loads.

In Board Order No. P.U. 9(2019) the Board of Commissioners of Public Utilities stated that “The Board of Commissioners of Public Utilities finds that the Project is reasonable and necessary to provide reliable service and meet load requirements and that it should be approved”. As the main justification for the Muskrat Falls Happy Valley Interconnection Project is reliability for the existing customer base, as accepted by the Board of Commissioners of Public Utilities, please advise how this impacts the recommendation noted above.

**RESPONSE:**

As noted in NLH-LAB-012, P.U. 9(2019) quotes Hydro’s assertion that “the main justification for the Muskrat Falls Happy Valley Interconnection Project is reliability for the existing customer base”, but the Board’s findings do not repeat this formulation. Rather, the Board wrote (at page 8):

The Board is satisfied that the information filed by Hydro shows that there are both reliability and capacity concerns in Labrador East, and that the Project is the least-cost alternative to address these concerns. The Board finds that the Project is reasonable and necessary to provide reliable service and meet load requirements and that it should be approved.

In any case, the quoted recommendation is forward looking. The fact that the MFHVI Project has been approved does not affect the relevance of this recommendation.

**NLH-LAB-015.** Re: “Newfoundland and Labrador Hydro’s Proposed Network Addition Policy and Transmission Expansion Study”, Section 4.5, page 55.

“However, the TES as filed is inadequate to support the NAP because:

- 1) While the Baseline Coincident Peak forecast is clearly set out (in Table 3 on page 11 of the TES), the “various load growth scenarios” called for in the definition of the Transmission Expansion Plan are not clearly set out;
  - 2) The Transmission Upgrades required to serve various load growth scenarios are not clearly set out in the TES, nor are their costs.”
- a) Please provide a detailed description of an improved methodology for the establishment of ranges of load growth scenarios beyond the baseline forecast. Please include how Newfoundland and Labrador Hydro should define the capacity and energy requirements of speculative unknown customers.
  - b) Please provide a detailed description of an improved methodology for the completion of system impact studies for speculative loads beyond the baseline load forecast. Descriptions should define how Newfoundland and Labrador Hydro should perform system analysis, identify transmission system upgrade requirement, develop detailed cost estimates, and determine existing customer impacts for the interconnection of unknown customers at undefined locations.
  - c) Please provide commentary of the number of such studies that should be carried out for Labrador East and Labrador West to clearly set out load growth scenarios to allow for the development of a Transmission Expansion Study that is adequate to support the Network Additions Policy.

**RESPONSE:**

Mr. Raphals states:

Hydro appears to have misunderstood the referenced passage, which concerned not the transmission planning methodology but rather the relationship between the Labrador Transmission Expansion Study (TES) filed on Oct. 31, 2018 (and revised on Nov. 5, 2018) and the Transmission Expansion Plan referenced in the NAP.

Since Hydro states in NAP that, “Hydro filed its Transmission Expansion Plan for the LIS on October 31, 2018”<sup>24</sup>, it appears to consider the TES to be the Transmission Expansion Plan. However, the NAP defines the

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<sup>24</sup> NAP, Appendix B, page 18 of 23.

Transmission Expansion Plan as follows:

The Transmission Expansion Plan identifies Transmission Upgrades required to serve various load growth scenarios and the estimated costs to implement each upgrade.

I have been unable to locate a clear statement in the TES of these “various load growth scenarios”, or of the estimated costs to implement the upgrades required to meet each scenario.

Furthermore, nothing in the TES suggests that it will be updated annually, as required by Appendix B of the NAP:

Hydro performs an annual assessment of the previous Transmission Expansion Plan for the LIS based on its current demand forecast. This assessment allows for the determination of the timing of transmission system additions and modifications necessary to ensure safe, reliable, and economical long-term operation. On this basis, a new Transmission Expansion Plan is developed.

It is for these reasons that I concluded that “the TES as filed is inadequate to support the NAP”.

- a) See LAB-NLH-013.
- b) N/A
- c) N/A