Q. **Reference: Reliability and Resource Adequacy Study 2022 Update, Volume I, page 29.**

Table 6 shows the resultant planning reserve margin of 36%.

a) Provide the derivation of the planning reserve margin of 36%, in a form similar to Island LOLE Calculator October 10, 2018 R2.xlsm, provided by Hydro in March 2019;

b) Explain why the planning reserve margin has jumped so much compared to previous values (14% in the 2018 RRAS and 16% in the 2019 Update); and

c) Provide an analysis that shows the value of LOLH equivalent to LOLE=0.1 for the assumptions underlying the 36% planning reserve margin, in a form similar to *LOLE Calculator - Benchmarking Study #1.xlsm*, provided by Hydro in March 2019.

A. **a)** Please refer to PUB-NLH-252, Attachment 1 for a spreadsheet containing the derivation of the Planning Reserve Margin.

b) As stated in the "Reliability and Resource Adequacy Study – 2022 Update," "The proposed planning reserve margin has increased by 20% compared to the 2019 Update, primarily due to the increase in the LIL bipole forced outage rate assumption from 0.0114% to 5%."[1]

c) Please refer to PUB-NLH-252, Attachment 1 for a spreadsheet containing the calculation of the equivalent loss of load hours.

[1] "Reliability and Resource Adequacy Study - 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022, vol. I, p. 30/3–5.