Q. **Reference: Specifically Assigned Assets**

With reference to Section 3.3 Specifically Assigned Assets, at page 5 of 2020 Capital Projects Overview, and Hydro's planned 2024 project to replace the neutral bushings on Come-By-Chance Transformers T1 and T2, what is Hydro's criteria for "suspecting" that neutral bushings are contaminated with PCBs? Are the same criteria applied to all of Hydro's transformers? Is it possible that the neutral bushings are not contaminated with PCBs? Is there a means of determining, without replacement, whether the neutral bushings are contaminated?

A. Although it is possible that the neutral bushings are not contaminated with PCBs,[1] oil-filled units (where the oil acts as an electrical insulator) have been known to contain PCBs for equipment prior to 1985. The bushing manufacturer is unable to confirm that its oil-filled bushings do not contain PCBs; therefore, Newfoundland and Labrador Hydro ("Hydro") suspects the neutral bushings are contaminated with PCBs. The same criterion applies to all of Hydro's transformers.

The neutral bushings on Come By Chance Transformers T1 and T2 can be tested without replacement; however, the bushings would need to be removed from the transformer to attempt sampling since the fill plug is at the bottom of the bushing. Hydro's experience is that these plugs are difficult to remove and there is a risk of contamination (e.g., air, moisture, or other foreign material) entering the bushing during sampling. Further, given that these bushings are 47 years old, they are approaching the end of their useful lives.

In general , as stated in the "2020 Capital Budget Application": "Hydro does not sample due to small quantity of oil in bushings and the risk of contamination during sampling. Bushings which are known or suspected of having unacceptable PCB levels are replaced."[2]

[1] Polychlorinated biphenyl "PCB").

[2] "2020 Capital Budget Application," Newfoundland and Labrador Hydro, August 1, 2019, vol. II, tab 7 "Terminal Station Asset Management Overview," ver. 4, at pp. 19/30 to 20/1–2.