Q. **Newfoundland and Labrador Hydro - EFLA Consulting Engineers Report - Structural Capacity Assessment of the Labrador Island Transmission Link, April 30, 2020 ("EFLA" Report)**

With respect to the April 30, 2020 EFLA report's page 24, statement that "Allowable conductor tension limits were verified in all sections using the same settings from the "as-designed" in using the ruling span concept analysis in the PLS-CADD" please:

a. Confirm that incorrect ruling spans (average span length between tension towers) used can cause either excessive sag or excessive tension, and if cannot be confirmed explain why not.

b. Describe how actual "as-built" ruling spans for each line section were verified to be the same as the "as-design" ruling spans.

c. State whether any "as-built" ruling span lengths were different from "as-design" ruling span lengths, and were any changes considered in the study.

d. Describe whether and how the reported removal of a strand in the "as-built" conductor was considered for determining tension limits for that LIL line section.

A. a. The study used the correct ruling spans as the work was based on the as-built PLS-CADD files. Note that the ruling span is not the average span length in a tension section. Other calculation methods could result in slightly different sags and tensions being calculated for the spans but is not considered significant enough to cause concern. The ruling span method used for this study is considered industry standard.

b. Please refer to Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NLH-082.

c. Please refer to Hydro's response to PUB-NLH-082.

d. Hydro confirms that the conductor file used in the PLS-CADD model has been modified by the manufacturer to represent the actual cable as installed.