

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

3 With respect to the statement on page 31 of the April 30, 2020 EFLA report that, "It was not part
4 of this study to assess the suitability of the terrain category selection or local wind effects used
5 in the design assumption for the LITL" please:

- 6 a. Describe why the terrain categories selected by the designers were not verified in the EFLA
7 study.
- 8 b. Provide a depiction of the categories and a list of their mileages for the DESIGN loading.
- 9 c. Provide Hydro's comparison of that categorization and those mileages with expected terrain
10 conditions assuming anticipated vegetation management methods.

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- 13 A. a. Please refer to Newfoundland and Labrador Hydro's response to NP-NLH-022.
- 14 b. While it was out of the scope for EFLA Consulting Engineers ("EFLA") to analyze these
15 selections (refer to PUB-NLH-080), please Table 1, which shows the terrain categories per
16 zone.
- 17 c. While it was out of the scope for EFLA to analyze these selections (refer to PUB-NLH-080),
18 please see the below table which was developed from a forestry density analysis for each
19 section of the Labrador-Island Link ("LIL"). This table was used for planning purposes for
20 Right-of-Way ("ROW") clearing, but can be used as an indication of tree density in each
21 region. As shown in the table, each zone of LIL has well over 50% tree coverage with an
22 average of 85 percent and a density range of 30 m³/ha to > 90 m³/ha. Alpine zones in
23 particular that have been classified as terrain category B, have 70-99 percent tree clearing of
24 dense vegetation. The vegetation management methods during operations will be used to
25 limit vegetation growth within LIL's ROW and has no bearing on terrain factor selection.

Table 1: Terrain Categories by Zone

	Zone	Description	Length (km)	Terrain Category	% Trees Cleared	Predominant Veg. Density
Labrador	1	Average Zone 1	272.3	C	93	30 to > 90 m3/ha
	2a	Labrador High Alpine	12.3	B	84	30 to 60 m3/ha
	2b	Labrador High Alpine	63.1	B	84	30 to 60 m3/ha
	2c	Labrador High Alpine	22.1	B	73	30 to 60 m3/ha
	3a	Average Zone 2	12.4	C	50	30 to 60 m3/ha
	3b	Average Zone 2	13.1	C	50	30 to 60 m3/ha
Newfoundland	4b	Average Zone 2	12.8	C	76	30 to > 90 m3/ha
	4a	Average Zone 2	56.2	C	76	30 to > 90 m3/ha
	5	HOSJ High	18.9	B	76	30 to > 90 m3/ha
	6	Average Zone 2	70.1	C	98	30 to > 90 m3/ha
	7a	LRM High Alpine	23.2	B	98	30 to > 90 m3/ha
	7b	LRM Extreme Alpine	8.1	B	98	30 to > 90 m3/ha
	7c	LRM High Alpine	12.9	B	98	30 to > 90 m3/ha
	8a	Average Zone 2	12.9	C	98	30 to > 90 m3/ha
	8b	Average Zone 1	74.6	C	99	30 to 60 m3/ha
	9	Alpine	7.8	B	99	30 to 60 m3/ha
	10	Average Zone 1	221	C	98	30 to 60 m3/ha
	11a	Eastern Zone	177	C	87	30 to 60 m3/ha
	11b	Eastern Zone		C	87	30 to 60 m3/ha