Q. Reference: CAN/CSA-C22.3 No. 60826-10, Design Criteria of Overhead Transmission Lines. The referenced standard CAN/CSA-C22.3 No. 60826-10 states in Section 6.2.5 on page 47:

> *"τ is the air density correction factor. When limit wind speeds are known to be strongly correlated with an altitude and/or temperature significantly different from the assumptions of 15oC and sea level, the correction factor τ given in Table 5 can be applied…"*

Was the air density correction factor 'τ' applied by Hydro in its assessment of whether or not the design of the Labrador Island Link met the CAN/CSA-C22.3 No. 60826-10 standard for 1:150 and 1:500 year return periods? If so, please provide the air density correction factors. If not, why not?

A. Air density correction factors are related to air temperature and altitude. Table 5 from CAN/CSA-C22.3 No. 60826:10 was used to calculate the air density correction factors (t) for each loading zone as per the following table.

Zone	Load Cases	V_{RB} (kph)	Temp (°C)	Min Altitude (m)	t
1, 8b & 10	Max Wind (km/h)	105	-20	0	1.14
	Wind +Ice (km/h)	60	-5		1.08
2a, 2b & 2c	Max Wind (km/h)	135	-20	0	1.14
	Wind +Ice (km/h)	95	-5		1.08
3a, 3b, 4b, 4a, 6 and 8a	Max Wind (km/h)	120	-20	0	1.14
	Wind +Ice (km/h)	60	-5		1.08
5	Max Wind (km/h)	150	-20	185	1.12
	Wind +Ice (km/h)	105	-5		1.06
7a, 7b & 7c	Max Wind (km/h)	180	-20	365	1.09
	Wind +Ice (km/h)	125	-5		1.03
9 11a & 11b	Max Wind (km/h)	130	-20	0	1.14
	Wind +Ice (km/h)	60	-5		1.08