

1 Q. Reference: Study, Appendix B, page 13

2 Preamble:

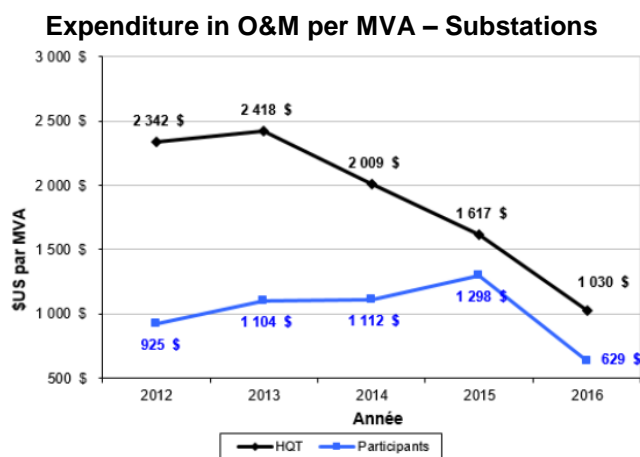
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“For the purpose of this study, the operating and maintenance (“O&M”) costs were calculated using the April 2018 Transmission O&M Cost Benchmark Study, prepared by Christensen Associates Energy.”

Table 3: Fixed O&M Benchmark Template

Category	Fixed O&M Costs	Comments
230 kV AC Transmission Line	\$4,611/km	
315 kV AC Transmission Line	\$5,489/km	Common Route Factor of 0.6 applied if on common ROW ¹³
315 kV Terminal Station Facilities	\$4,060/MW	Based on Surge Impedance Loading of Line (328 MW for 315 kV)
DC Transmission Line	\$5,003/km	
DC Converter Facilities	\$13,228/MW	

7 Hydro-Québec TransEnergy (HQT) benchmarks annually similar expenses but reports
8 industry benchmarks from P.A. Consulting and the Canadian Electricity Association (CEA) of
9 a different order of magnitude:



Docket R-4058-2018, exhibit HQT-3, document 3, Figure 11, p.15 (http://publicsde.regie-energie.qc.ca/projets/471/DocPri/R-4058-2018-B-0010-Demande-Piece-2018_07_27.pdf)

1 Please provide the other O&M benchmarking studies NLH has participated in, acquired or
2 has access to.

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5 A. Newfoundland and Labrador Hydro does not have access to other benchmarking studies on
6 transmission operating and maintenance costs. The “Transmission O&M Cost Benchmark
7 Study,” prepared by Christensen Associates is the only benchmarking study Newfoundland
8 and Labrador Hydro has available.