1	Q.	Reference: Volume I, 2020 Capital Projects Over \$500,000, Overhaul Diesel Units, page C-53,
2		lines 15 to 17
3 4 5 6 7		Hydro has determined, based upon the cost of replacement parts, that it may be cost comparable to replace the engine instead of overhauling an engine, if the engine is available with acceptable delivery.
8		Please describe, with examples, what Hydro would consider to be "cost comparable?"
9		
10		
11	Α.	Newfoundland and Labrador Hydro considers replacing an engine rather than overhauling cost
12		comparable when the overall cost of the purchase and installation of the replacement engine is
13		less than the purchase and installation of the overhaul parts. This approach is not available in all
14		cases; however, where it is an option the overall costs are compared and the least-cost
15		approach is taken. From a warranty perspective, the replacement engine is provided with a 12-
16		month warranty whereas the overhaul parts are provided with a warranty of 3 months.
17		
18		Depending on the specific case, savings may be realized in material cost, installation cost
19		(including travel costs), or both. In the case of the overhaul of a 150 kW unit, the replacement
20		engine cost was \$16,728 and the quoted overhaul parts cost was \$47,834; a savings of just over
21		\$30,000. A comparison of installation costs in this case indicates an additional savings of
22		\$15,000, for an overall savings of \$45,000. For the overhaul of a 1,275 kW unit, the engine cost
23		was \$365,000 while the quoted parts cost was \$364,000, an increase in material cost of \$1,000.
24		In this case the installation cost savings were approximately \$168,000 as the installation time
25		was reduced from nine weeks to two weeks. This results in an overall savings of \$167,000.