

1 Q. Reference: Gas Turbine Failure Analysis - Final Report, January 11, 2017,  
2 Performance Improvements (PI) Limited Report, page 6 of 21. Please explain why  
3 the oil was not replaced in the Stephenville gas turbine following the lube oil  
4 analysis trend report which stated that the oil's oxidized condition was at "Upper  
5 Critical" level and required replacement (ref sample No 130090 dated March 16,  
6 2015).

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9 A. Hydro did not replace the oil at the Stephenville Gas Turbine post sample number  
10 130090 due to discussions with the laboratory late in 2014. At the time, the  
11 laboratory stated that the "Upper Critical" (UC) limits being flagged were for  
12 reciprocating engines and not applicable to gas turbines. They stated that the UC  
13 limit for oxidation for gas turbines should be 100. Thus, the reading of 66 was not  
14 of concern and the oil was not replaced. Hydro continues to work with the  
15 laboratory to ensure that the appropriate test methodologies and limits are being  
16 applied to the gas turbine lube oil samples.

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18 In 2014, the management of the gas turbine fleet was transitioning into its  
19 dedicated centre of management, and the team was building. Therefore, this  
20 information related to why the oil was not changed was not readily available when  
21 the report was submitted on January 11, 2017, and was discovered as part of the  
22 current analysis. Hydro reiterates that the gas turbine team continues to work with  
23 the laboratory to ensure that appropriate test methodologies and limits are being  
24 applied to the gas turbine lube oil samples.