

1 Q. **Reference: Volume II, Install Partial Discharge Monitoring – Holyrood Gas Turbine, Tab 6, page**
2 **1, lines 18 to 20**

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4 The Holyrood Gas Turbine Generator is not equipped with a Partial Discharge
5 Monitoring System. Hydro has partial discharge monitoring on the other high
6 speed gas turbine generators, as well as other generating units such as the units
7 in Bay d'Espoir.

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9 Why was the Holyrood Gas Turbine supplied without partial discharge monitoring? In the
10 response explain how it is more cost effective to retrofit the generator now, rather than have it
11 included when originally supplied.

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14 A. At the time of procurement of the Holyrood Gas Turbine, Newfoundland and Labrador Hydro
15 (“Hydro”) did not have a standard of installing partial discharge monitoring on its high-speed
16 (3600 rpm) generators. Hydro did not have a solid case to include partial discharge monitoring
17 at the time and it was therefore not included in the original specification or included as part of
18 the engineering procurement and construction contract. There was a system installed on the
19 Hardwoods Gas Turbine generator at that time; however, this system had been installed in
20 response to potential issues on that unit that could be identified using portable partial discharge
21 monitoring equipment. Since then, Hydro has gained more experience with online partial
22 discharge monitoring and has begun installing these systems on its high-speed generators.