

1 Q. The AMEC report, at page 47 of 231, states:

2 *...there is evidence of accelerated corrosion and pitting*
3 *resulting from deterioration of the inlet filter. The filter is*
4 *badly corroded and is now allowing unfiltered air to enter*
5 *the plenum and the engine.*

6 This is again referenced at page 51 of 231:

7 *The unit operates in a very high salt environment and*
8 *during the first 19 years of its operating life, and the last*
9 *five or more years, it has had inadequate inlet filtration.*
10 *This has affected the compressor blading and casing more*
11 *than the turbine.*

12 and at page 53 of 231:

13 *It is clear that in the high saline atmosphere at Holyrood,*
14 *operating with an increasingly ineffective inlet filter, the*
15 *unit has suffered considerable degradation during very few*
16 *hours of operation."*

17 Why was this major component of the gas turbine unit, the inlet filter, not
18 addressed during the last five or more years?

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21 A. In July 2010 during onsite inspections of the gas turbine, it was recognized that the
22 unit would require a more comprehensive condition assessment. The inspections
23 were performed by original equipment manufacturers on the exhaust stack, power
24 turbine, gearbox, generator and engine.

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26 During discussions with Camfil Farr, the manufacturer of the Farr-Dynavane inlet
27 filtration system, it was determined that the filtration system installed was not

1 suitable for the marine environment and that it was incapable of stopping the
2 corrosive effects due to the ingestion of salty air. This was the first time that Hydro
3 had been made aware of this and further inspections would be required for this
4 equipment, as well as all other gas turbine equipment, to develop a plan for
5 refurbishment. The gas turbine inspections took place in 2011 as part of the
6 condition assessment work on the equipment. The final report was issued to Hydro
7 in December 2011 and the unit was declared out of service in January 2012.

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9 The above report was received on December 2011. A decision to stop running the
10 gas turbine was made in January 2012. As a result, no action was taken on the gas
11 turbine inlet filters.