

1 Q. With reference to Hydro's response to IC-NLH-009, and acknowledging that Brush  
2 Electric have identified that the use of 18-5 stainless steel for the subject retaining  
3 rings was discontinued in the late 1980's, what inquiries and investigation has  
4 Hydro made, and what measures has Hydro taken, to ensure that components of  
5 the 100 MW Combustion Turbine in the process of being installed at Holyrood will  
6 not be susceptible to corrosion or other wear and adverse conditions due to its  
7 close proximity to a coastal climate and coastal conditions?  
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10 A. With regard to Hydro's response to IC-NLH-009, and acknowledging that Brush  
11 Electric have identified that the use of 18-5 stainless steel for the subject retaining  
12 rings was discontinued in the late 1980's, Hydro has taken measures to ensure that  
13 the 120 MW Combustion Turbine in the process of being installed at Holyrood will  
14 not be susceptible to corrosion or other wear and adverse conditions due to its  
15 close proximity to a coastal climate and coastal conditions. Hydro is confident that  
16 the design and construction of the plant addresses corrosion concerns due to its  
17 proximity to coastal conditions. The tender document for supply and installation of  
18 the combustion turbine plant specified that the environmental site condition for  
19 the performance of the equipment is “[s]ea coast, salt and industrial pollution  
20 atmosphere”. In addition, it was specified that the plant be enclosed in a large  
21 building for protection from the weather and coastal conditions. The turbine inlet  
22 air filtration system is designed for these environmental conditions and will utilize  
23 high efficiency filters, which are designed to filter out salt particles. In addition, the  
24 materials and coating systems being used are designed to withstand the coastal  
25 conditions.

1           During execution of the project, compliance to these requirements is monitored  
2           through the shop drawing approval process. The retaining ring issue, which was a  
3           concern for the existing gas turbines at Hardwoods and Stephenville, is not a  
4           concern for this unit as it was manufactured after the use of 18-5 stainless steel, for  
5           the subject retaining rings, was discontinued.