

1 **Q: Reference: *Review of Newfoundland and Labrador Hydro Power Supply***  
2 ***Adequacy and Reliability Prior to and Post Muskrat Falls Final Report*, page ES-**  
3 **3.**

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5 *"Adequate backup capacity will be new combustion turbines or firm, dependable*  
6 *capacity from Nova Scotia via the Maritime Link."*

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8 **The load centre for the island interconnected system is located on the Avalon**  
9 **Peninsula which is currently supplied by Hydro's Holyrood Thermal**  
10 **Generating Station and transmission lines passing through the Isthmus of the**  
11 **Avalon which is a narrow corridor exposed to extreme weather conditions.**

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13 **Considering that Hydro plans to retire the Holyrood Thermal Generating**  
14 **Station, to what extent has Liberty considered the need for backup generation**  
15 **located on the Avalon Peninsula to mitigate the risk of transmission line failures**  
16 **on the Isthmus of the Avalon regardless of whether or not firm capacity may be**  
17 **available over the Maritime Link?**

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20 **A.** Liberty has suggested in its report that backup generation is required. As noted in our  
21 response to NP-PUB-006, we have not evaluated the optimum location for that  
22 generation. Liberty would expect Hydro to plan future generation, and its location,  
23 based on load flow and dynamic power stability studies. In order to identify the  
24 optimal rating and location for the new generation such studies should consider  
25 credible outage scenarios, including outages of the LIL, Maritime Link and critical  
26 HVac lines in the IIS.