

1 Q. **Re: GRK-NLH-004**

2 Citation:

3 “Through its generation planning process, Hydro will maintain levels of reserve  
4 generation throughout the combined Labrador and Island power system reflecting  
5 generator forced outage probabilities for all generating units in the province, including  
6 the units at Muskrat Falls.”

7 Please specify the forced outage probabilities used in Hydro’s planning for Muskrat  
8 Falls.

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11 A. The forced outage rates used in the Muskrat Falls analysis of the generation  
12 expansion options are as follows:

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Category	Forced Outage Rate (%)
Existing Hydroelectric	0.90
New Hydroelectric	0.90
Existing Combustion Turbine	10.62
New Combustion Turbine	5.00
New Combined cycle Combustion Turbine	5.00
Holyrood Thermal	9.64
Diesel	1.18
Hydroelectric Purchases	2.26
Customer-owned Hydroelectric	3.19
Labrador Island Link (per pole)	0.89