1	Q.	Re: evidence of J. R. Haynes, Page 32: Please provide detailed calculations
2		in support of the change from a system reserve requirement of 16% to 15%.
3		If Hydro plans its system capacity based on an LOLH target of 2.8 hours/
4		year, please explain the need for or derivation of this "reserve" requirement.
5		Is this just an estimate of the nameplate generation capacity over and above
6		the peak load carrying capability of the system at a 2.8 hours/year LOLH?
7		
8		
9	Α.	The calculation of reserve margin at criteria is a result of the generation
10		planning process and does not influence planning activities. It is used in the
11		rate setting process to allocate credit in test years to NP's generation assets.

## Determination of Percent Reserve at Criteria Based on Installed Capacity in 2005

Installed Capacity				
Newfoundland and Labrador Hydro				
TOTAL Hydro	927.3			
Holyrood	465.5			
Combustion Turbine	118.0			
Diesel	14.7			
Newfoundland Power				
Hydro	94.6			
Combustion Turbine	43.9			
Diesel	7.0			
CBP&P				
Hydro	121.4			
Abitibi Consolidated				
Hydro	58.5			
Non-Utility Generators				
Hydro	66.3			
	1017 2			
	1317.2			

From Strategist case: 2005 Base Case

While maintaining the load factor forecast for 2007 (from the 2005 PLF) at 60.98% (Based on peak of 1,637 MW and energy of 8,744 GWh), a peak demand of 1650.3 MW produces an LOLH of 2.80 hours/year.

Reserve Margin is therefore:

<u>1917.2 + 0 (interruptible)</u> -1 = 16.2% 1,650.3

## Determination of Percent Reserve at Criteria Based on Installed Capacity in 2006

Installed Capacity				
Newfoundland and Labrador Hydro				
TOTAL Hydro	927.3			
Holyrood	465.5			
Combustion Turbine	118.0			
Diesel	14.7			
Newfoundland Power				
Hydro	92.1			
Combustion Turbine	36.5			
Diesel	7.0			
CBP&P				
Hydro	121.4			
Abitibi Consolidated				
Hydro	58.5			
Non-Utility Generators				
Hydro	66.3			
TOTAL CAPACITY (2006):	1907.3			

From Strategist case: 2006 Base Case

While maintaining the load factor forecast for 2007 (from the 2006 PLF) at 59.3% (Based on peak of 1,569 MW and energy of 8,150 GWh), a peak demand of 1656.9 MW produces an LOLH of 2.80 hours/year.

Reserve Margin is therefore:

<u>1907.3 + 0 (interruptible)</u> -1 = 15.1% 1,656.9