1

10 11

Q. Please provide reliability and availability data for Ratting Brook over the past 10 years, and expected figures going forward following the refurbishment (page 2 of 65, Schedule B, Volume I).

A. The Company uses the Plant Availability statistic as the key measure of overall plant reliability and availability. Plant Availability data for Newfoundland Power's hydroelectric plants were not recorded prior to 1998.

Table 1 shows the Plant Availability statistics for both generating units at Rattling Brook for the period 1998 to 2006.

Table 1 Plant Availability (%)		
Year	Unit 1	Unit 2
1998	97.96	94.07
1999	95.94	97.56
2000	90.99	90.26
2001	87.78	83.26
2002	99.50	12.41
2003	95.18	97.21
2004	69.57	97.26
2005	99.29	97.56
2006 1	98.38	96.71

<sup>&</sup>lt;sup>1</sup> 2006 data is inclusive to June 30, 2006.

12 13 14

15

16 17 It is not possible to reliably forecast plant availability figures for future periods, given the many variables that can influence the availability of a hydroelectric plant. However, the replacement of equipment and infrastructure that is beyond its useful service life will tend to positively influence plant availability by reducing the future likelihood of unplanned failures of equipment.

18 19 20

21

22

The planned refurbishing or replacing of equipment is more cost-effective than refurbishments or replacements carried out on an emergency basis. In 2002, the stator winding of Unit 2 failed. The generating unit was rewound on an unplanned basis, resulting in availability of only 12.41% for that year.

23 24 25

26 27

28

29

30 31

In order to avoid a similar occurrence on Unit 1, which is of the same vintage, the Company replaced the windings on a planned basis in 2004. As Table 1 shows, plant availability for the planned rewinding in 2004 was 69.57%, a significant improvement over the 2002 availability for Unit 2. Unplanned failures result in longer plant downtime, higher capital costs for equipment replacement due to expedited delivery requirements and, in many instances, greater production losses than if the problem had been addressed on a planned basis.