

1 **Rattling Brook Rewind Generator G1, Volume 2, Appendix 1, page 3 (\$407,000)**

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3 **Q. What tests were conducted to determine the condition of windings in Generator**
4 **G1?**

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6 A. Newfoundland Power became concerned with the condition of the windings of generator
7 G1 because of the in-service failure of generator G2 in the spring of 2002. Both units G1
8 and G2 are of identical construction, have been exposed to identical operating and
9 environmental conditions, and have had similar duty cycles over the life of the plant. As
10 a result, a Partial Discharge test was conducted on generator G1 in early 2003. Although
11 the readings do not provide conclusive indication of imminent failure, there were
12 significant variations from those obtained on similar units including Rattling Brook G2,
13 which was rewound in 2002, and others of the similar vintage to generator G1 that have
14 not yet been rewound. The failure of unit G2 in 2002 in the circumstances described
15 above along with the results from the Partial Discharge test are the basis for the decision
16 to rewind generator G1 in 2004.