

**In reference to Schedule “B”, page 20 of 82 – replacement and spare substation equipment – at a project cost of \$1,107,000:**

**Q. Please provide all studies, engineering reports and inspection reports which justify each and every project listed therein.**

A. Attached are studies, engineering reports and inspection reports used in the evaluation of projects outlined in Schedule B page 20 of 82.

*(i) Replace deteriorated breakers and reclosers at Rattling Brook, St. Georges and Pasadena Substations.*

Attachment A provides the Substation Inspection forms for Rattling Brook and St. Georges substations. The Pasadena reclosers are 21 years old and are the only two of that type in the system. Because of their age and the minimal number in the system, it is not justifiable to purchase spare material and parts to keep these units in working order. Therefore, it was decided to retire them in 2003.

*(ii) Replace Batteries and Chargers*

This project involves the purchase of replacement equipment for station battery banks and battery chargers which have failed during testing or while in service. For 2003 the budgeted amount includes one 125Vdc battery bank, five 48Vdc battery banks, and four battery chargers. Attachment B provides the Maintenance Standard MST001 Test Procedure for the Battery Capacity Test.

*(iii) Replace step-up transformers at Fall Pond, West Brook and grounding transformers at Gander Substations.*

Attachment C provides pictures of the transformer requiring replacement at Fall Pond and Substation Inspection forms for the West Brook and Gander substations.

*(iv) Replace transformer #2 cables at Hardwoods Substation*

The requirement to replace the cables for Hardwoods T2 transformer resulted from the failure, in 2002, of one of three cables supplying the transformer. These cables have been in service for 30 years. A study was not required to justify the replacement of the cables.

*(v) Replace oil filled equipment at Big Pond & King’s Bridge Substation*

The replacement of oil filled equipment with non-oil filled equipment at Big Pond Substation next to Bay Bulls Big Pond Water Supply and the installation of oil containment pans under transformers at Kings Bridge substation are part of the Company’s environmental initiatives to decrease environmental risks. A study was not required to justify the replacement of this oil filled equipment situated next to a water supply.

1            *(vi) Spare Equipment*

2            Spare substation equipment is used to facilitate emergency repairs should equipment  
3            in a substation malfunction or is damaged, and to replace equipment that must be  
4            removed from service in order to perform regular maintenance. The Company's  
5            stock of spare and replacement substation equipment is comprised of items purchased  
6            annually to be used as spare equipment, as well as malfunctioning or damaged  
7            equipment that has been removed subsequently assessed and deemed repairable. The  
8            items purchased under this budget item are established based upon recent events and  
9            trends with respect to substation equipment.