

In reference to Schedule “B”, page 18 of 82:

Q. Please provide a copy of all engineering studies and reports and revisions to equipment standards, as referenced on page 19 of Schedule “B”.

A. Page 18 of Schedule B to the Company’s 2003 Capital Budget Application lists the projects to be undertaken in 2003 in the Rebuild Substations category. Attached are copies of engineering studies, reports and applicable equipment standards (as referenced on page 19 of Schedule B) associated with specific projects.

The projects included in the Rebuild Substations category and any applicable study, report or equipment standard are listed below.

1. Replace switch connectors - various substations

This item involves the replacement of deteriorated switch connectors which have a high probability of failure. The connectors to be replaced have been identified primarily through the use of infrared thermography. Attached is a copy of the Infrared Thermography Inspection Guidelines (Attachment A) and examples of the results of the infrared thermography process for specific switch connectors (Attachment B).

2. Re-terminate feeders aerially at Greenhill and Marystown Substations

This item involves the replacement of feeder terminations at the above noted substations. For reliability and safety reasons it is necessary to replace the existing conductor with conductor of higher ampacity. Attachment C is a copy of the pertinent section of the System Planning Technical Criteria: Conductor Ampacity. Attachment D is a copy of the pertinent section of the Distribution Planning Guidelines: Cable Ampacity.

3. & 4. Trepassey Substation upgrade and Safety clearances - regulators at Frenchman’s Cove and Gillams Substations

These items involve modifications to substation layout in order to eliminate insufficient physical clearances for electrical equipment. Attachment E is a copy of pertinent sections of Substation Standards: Design Clearances.

5. Site and foundation upgrades at Blaketown, Clarenville and St. John’s Main Substations as well as others identified through foundation inspections

The specific location of other substations to be upgraded under this category will be based on site assessments completed as part of the *Inspection and Testing of Substation Concrete Pads and Foundations* report (Attachment F). Work to be completed under this category at Blaketown, Clarenville and St. John’s Main Substations was identified prior to obtaining this report.

1 6. Projects < \$50,000

2 There are three projects in this category. One involves the installation of a bypass
3 switch at Monkstown Substation, the second involves rebuilding a section of Grand
4 Beach Substation, and the third involves upgrading transmission line 404L
5 terminations at Wheelers Substation. There are no specific reports or studies
6 associated with the planned work at the Grand Beach or Wheelers Substation.

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8 The installation of the bypass switch at the Monkstown Substation will eliminate the
9 need for outages to customers when work is required on the recloser equipment. The
10 installation of the bypass switch is required to meet current equipment standards.
11 Attachment G is a copy of the pertinent sections of Substation Standards: Feeder Dead-
12 Ending.