1 In reference to Schedule "B", page 64 of 82 – Substation Telephone Circuit Protection, 2 project cost \$141,000: 3 4 Q. Please provide specific examples of the problems incurred by the Company in each 5 of these locations to justify this expenditure. 6 7 The Company's telecommunications service provider, Aliant Telecom Inc., requires A. 8 compliance with IEEE 80-2000 and IEEE 367-1987 standards for the delivery of 9 telecommunications services to substations and hydro plants. (IEEE is the acronym for

The Institute of Electrical and Electronics Engineers Inc.)

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Inspections have identified five (5) locations where current telephone circuit protection does not comply with these IEEE standards and where upgrading is required in 2003. This project will involve modifications to the station teleline such as conduit rerouting or upgrading.

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An additional part of this project involves field measurements of soil resistivity and the calculation of ground potential rise at substations where non-compliance with these standards is suspected and where this testing is not being conducted as part of other projects. Soil resistivity testing will be conducted at five substations in 2003.

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This project also involves the completion of an engineering study into Newfoundland soil resistivity conditions in general and the implications of this with respect to teleline isolation at the Company's substations. The study will verify and calibrate the methods used in calculating ground potential rise at substations for Newfoundland conditions. A consultant will be hired to complete this study.