

Q. SUBSTATIONS**REBUILD SUBSTATIONS (POOLED), p. 10 of 81, \$710,000****PUB 3.0**

In 2004, according to Appendix A, p. A-1, of Section 2.1 2006 Rebuild Substations, 594,218 customer minutes of outages were caused by gap type lightning arrestors. Please provide a breakdown of the areas that were involved, the number of customers that were affected, and the duration of each outage.

- A. In 2004 there were 3 major outages caused by gap type lightning arrestor failures in substations. A breakdown of these outages is outlined below:

Table 1 2004 Customer Outage Minutes due to Gap Type Lightning Arrestor Failures				
Area Affected	Date	Customers Affected	Duration (minutes)	Total Customer Minutes
Port Au Port Peninsula	01-Apr	1,745	96	167,520
		862	56	48,272
Mount Pearl	29-May	1,172	33	38,676
		1,462	34	49,708
		1,669	35	58,415
		983	37	36,371
		1,429	62	88,598
Freshwater, Placentia, Argentia	12-Aug	1,095	93	101,835
		53	91	4,823
Total				594,218

These 3 outages represent 18% of the total 2004 customer minutes of unscheduled outages due to failures in substations.