PUB 13.0
(RE: p. 41 & 42 of 82) Transformers ($4,975,000)

PUB 13.1

Q. Please provide a summary of the work that has been completed on transformers for the years 1998 to 2001, and forecast for 2002. Please include for each area affected the customer growth to which the installation of new transformers can be attributed, the number and cost of new transformers, the number and cost of replacement transformers, and any reasons for any anomalies that have occurred. Please provide an overview of the work that is expected to take place over the next five years, from 2003 to 2007.

A. Table 1 provides a summary of historical customer growth (based on gross new residential customers) for the period 1998 to 2001 and the forecast for 2002, to which the installation of new transformers can be attributed.

Table 1
Customer Growth (gross residential customer additions)

Area	1998 (actual)	1999 (actual)	2000 (actual)	2001 (actual)	2002 (forecast)
St. John's	911	1,030	1,153	1,240	1,270
Avalon	320	363	413	332	363
Burin	93	95	71	54	76
Bonavista	132	154	167	163	170
Gander	140	152	129	114	155
Grand Falls	119	128	129	130	134
Corner Brook	192	203	148	149	144
Stephenville	157	97	129	124	139
Total Company	**2,064**	**2,222**	**2,339**	**2,306**	**2,451**

The Company estimates transformer requirements by area based upon (1) the forecast growth in the number of new residential customers, (2) forecast requirements for general service purposes, and (3) the need for replacement transformers.

Historical experience is part of the estimation of all transformer requirements. While historical ratios of transformers per new customer have a part in the estimation process, the ultimate estimate of new installations is not a simple arithmetic calculation based upon ratios. The ultimate estimate reflects judgement of regional engineering personnel based upon knowledge of local factors.

The Company does not maintain separate annual breakdowns of actual transformer installations by cause on an operating area basis. To respond to this request for information, the Company has estimated the breakdown of the number and cost of transformers to serve new customers (both residential and general service), and the number and cost of transformers for replacements, for each year from 1999 to 2003.

Table 2 provides a summary of the work that has been completed on transformers for the period 1998 to 2003 which reflects the Company's estimates.

Table 2
Transformer Activity

	New Installations		Replacement Transformers		Total Transformers	
Year	**Number**	**Cost ($000s)**	**Number**	**Cost ($000s)**	**Number**	**Cost ($000s)**
1998 (actual)	no breakdown available				2,699	3,634
1999 (actual)	1,092	1,531	1,182	1,658	2,274	3,189
2000 (actual)	1,333	1,994	1,504	2,249	2,837	4,243
2001 (actual)	1,281	2,230	1,334	2,320	2,615	4,550
2002 (forecast)[1]	1,392	2,248	1,820	2,818	3,212	5,066
2003 (budget)	1,464	2,388	1,586	2,587	3,050	4,975

The breakdown provided in Table 2 is an estimate of actual transformer utilization, and provides a reasonable representation of transformer utilization on a corporate basis.

Newfoundland Power does not forecast distribution transformer requirements in detail more than one year in advance.

[1] This forecast reflects approximately 300 additional transformers acquired to replace transformers damaged by the extraordinary lightning storms experienced in the 3rd Quarter of 2002.