

In reference to Schedule “B”, page 27 of 82 – The Virginia Waters Transformer – a project cost \$1,150,000:

Q. Please provide the statistical analysis of the growing customer base in Virginia Waters, Torbay Road, Stavanger Drive, and Logy Bay areas. Please provide statistical analysis of future growth in that area.

A. Newfoundland Power does not keep statistics indicating forecast customer growth by substation. Most of the load growth in the Torbay Road and Stavanger Drive area is commercial in nature. Since 1995, approximately 20 new commercial premises have been connected in the immediate Stavanger Drive area alone. The total connected load for these premises is approximately 7,125 kVA.

In addition to this rapid and high level of commercial growth, subdivisions in the area have seen growth and developers have indicated to Newfoundland Power that there are approximately 160 new lots under development with an estimated 700 to be completed over the next 15 years.

Transformer loading at the Virginia Waters substation indicates increased demand due to the increased growth in this area. Historical increases in demand since 1997 have been used as a basis to estimate the transformer loading over the next 5 years. This information used in conjunction with data on current and potential customers in the area is used to assist in determining when the capacity of the existing transformers will be exceeded.

The two existing transformers are rated at 25 MVA each. In 2001, the peak load on the two transformers was 23.8 MVA and 22.6 MVA respectively. In the area served by the Virginia Waters transformers, the peak load is forecasted to exceed rating in 2003. The historical and forecast peaks for the substation by year are shown in Table 1.

Table 1		
Transformer Loading at Virginia Waters		
Year	Peak Load (MVA)	
Actual	T1	T2
1997	17.8	17.3
1998	17.8	17.3
1999	18.2	17.3
2000	18.2	17.3
2001	23.8	22.6
Forecast		
2002	24.7	22.7
2003	25.3	23.2
2004	26.0	23.8
2005	26.6	24.3
2006	27.2	24.9
2007	27.8	25.5