PUB 10.0
(RE: p. 31 & 32 of 82) Rebuild Transmission Lines ($4,129,000)

PUB 10.1

Q. In the previous plan to relocate the Gas Turbine from Salt Pond to Wesleyville, what role was played by the age of line 301L and the age of the system transformer at Salt Pond?

A. A copy of the analysis of the impact of the relocation of the Gas Turbine from Salt Pond to Wesleyville on the reliability of supply to the Burin Peninsula was filed in response to Request for Information PUB 5.4 during the 2002 Capital Budget process.

Transmission line 301L extends from Salt Pond Substation to Greenhill Substation as part of a 66 kV looped transmission system that encompasses the lower part of the Burin Peninsula. The looped system effectively provides redundancy of supply to that area from the 66 kV infeed at the Salt Pond Substation. Because the analysis of the gas turbine relocation focused on the bulk supply of electrical energy to the Burin Peninsula, the condition of 301L was not relevant to the analysis. However, since the looped configuration enables supply to be maintained on the 66 kV system in the event of the failure of an element of the system, it is important that 301L be maintained in good condition.

The age of the 138/66 kV system transformer at Salt Pond was not considered in the analysis of the impact of relocating the gas turbine from Salt Pond to Wesleyville. The loss of a large power transformer is an unusual event. Newfoundland Power had not experienced any difficulties with the system transformer at Salt Pond, and the likelihood of such an occurrence was considered to be minimal.