Q. RE: p. B-14 Install Fault Recorder – Upper Salmon Generating Station ($127,000)

6.1 Does the company have any reliability statistics, either from its own records or from the information of other utilities, that show that the installation of the equipment increases reliability?

6.2 During 1995 – 2000, what have been the reliability statistics with regard to faults, outages and downtime at this generating station?

A. 6.1 The installation of a fault recorder does not directly increase the reliability of the generating unit.

The fault recorder will provide more detailed information on the fault, resulting in a faster restoration and a shorter outage duration.

6.2 This station's reliability is affected by both the generating unit and associated transmission facilities. The number of forced outages for the transmission line TL234 from Upper Salmon to Bay d'Espoir according to year are:

2000	4
1999	2
1998	1
1997	0
1996	0
1995	1

The reliability statistics for the Upper Salmon Generating unit are as follows:

	1995-1999	2000
Incapability Factor (ICbF)	3.44	3.81
Derating Adjusted Forced Outage Rate (DAFOR)	0.75	0.47
Failure Rate (FAILRATE)	5.07	9.82

Incapability Factor (ICbF-%) – This factor indicates the percent of time a generating unit is not able to produce its rated output. The factor is calculated by dividing the total equivalent outage time (includes adjustments for deratings) by the number of unit hours.

Derating Adjusted Forced Outage Rate (DAFOR-%) – This factor gives the percent of operating plus forced outage time a unit was on a forced outage, adjusted for derating of the unit. It is calculated by dividing the total equivalent forced outage time by the total equivalent outage time plus the operating time.

Failure Rate (FAILRATE) – This factor is the rate a unit encounters a forced outage. FAILRATE is determined by dividing the number of forced outage by the operating factor.