

1 Q. For the budget item identified below, answer the following questions.

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3	<i>Budget Item</i>	<i>Amount</i>	<i>Description</i>
4	B-14	\$127,000	Upper Salmon Generating Station

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6 (a) Further to PUB-6.1, provide reliability statistics and/or instances, either  
7 from Hydro's own records or from the information of other utilities, that  
8 show the installation of the proposed equipment increases reliability  
9 through the reduction of outages.

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11 (b) For each instance shown in the response to PUB-6.2, provide the  
12 date, time and duration as well as the cause of the outage. In addition  
13 indicate the likely reduced outage time had the fault recorder been in  
14 place for each outage.

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16

17 A. (a) A fault recorder assists in the identification of the fault and verifying  
18 the performance of the protective relaying systems. It is useful in  
19 identifying any problems and hence aids in faster restoration of the  
20 equipment.

b)

<b>Date</b>	<b>Time</b>	<b>Duration</b>	<b>Cause</b>
07-24-2000	00:50	6 mins.	Lightning
08-21-2000	02:13	2 mins.	Lightning
11-09-2000	10:42	2 hrs, 41 mins	Relay malfunction
11-16-2000	10:13	31 mins.	Relay malfunction
05-08-1999	20:38	26 hrs.	Broken crossarm
08-26-1999	16:09	4 mins.	Lightning
12-19-1998	07:26	8 hrs, 17 mins.	Fallen tree on the line
07-24-1995	12:54	6 mins.	Lightning

1                   For the outages caused by lightning, a fault recorder would not have  
2 reduced the outage time. However, for the other outages caused by  
3 fallen trees, broken cross-arm and relay malfunction, a fault recorder  
4 would have assisted in identifying the problem and the location of the  
5 fault and hence reduced outage times. The exact amount of reduction  
6 in outage times cannot be quantified.