

1 **Volume 1, Section 2 – Customer Operations**
2

3 **Q. (page 24) What are the costs in each of the past five years of the programs that have**
4 **lead to the improvements in SAIDI and SAIFI? Please provide a comparison of**
5 **these costs to the resulting improvement in system-wide distribution SAIDI and**
6 **SAIFI. Please show forecast reliability improvement at the time the expenditure**
7 **was committed and actual reliability improvement measured after project**
8 **installation.**

9
10 A. The only project *directly* aimed at improving reliability over the past five years is the
11 Distribution Reliability Initiative (the “DRI”). However, all upgrades to plant, while not
12 solely aimed at reliability improvement, will contribute to an overall improvement in
13 reliability.
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15 Table 1 shows the costs associated with the DRI project from 2002 to 2006.
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Table 1
DRI
Capital Expenditure
(\$000s)

	2002	2003	2004	2005	2006
DRI	1,092	1,546	763	1,065	3,365

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20 The impact of the DRI on distribution SAIDI for the feeders concerned is shown on
21 Graph 6 (page 26) of the Company evidence.
22

23 Newfoundland Power does not *forecast* SAIDI and SAIFI improvement resulting from
24 the DRI, on either individual feeder reliability or overall system reliability. However, the
25 DRI has resulted in improvement in the performance of the Company’s worst performing
26 feeders which is now comparable with the Company average.
27

28 In addition to the DRI (which specifically target distribution reliability improvement), the
29 Company’s ongoing capital maintenance also impacts overall system reliability. This
30 reflects the widely accepted engineering principle that system reliability is largely a
31 function of the condition of electrical system assets.

1 Table 2 shows the actual costs associated with upgrades to plant, including the DRI, from
2 2002 to 2006.

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Table 2
Plant Upgrades
Capital Expenditure
(\$000s)

	2002	2003	2004	2005	2006
Plant Upgrades	29,980	33,164	28,150	27,523	32,181

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6 Please refer to the response to CA-NP-65 for information on system-wide distribution
7 SAIDI and SAIFI performance.