

1 **Q. Distribution**

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3 **Distribution Reliability Initiative (Pooled)**

4 **PUB 21.0 NP**

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6 **Distribution Reliability Initiative (Pooled)**

7 **Please provide an updated report on the Distribution Reliability Initiative that was**  
8 **filed with the Board with the 2006 Capital Budget.**

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10 A. The Distribution Reliability Initiative is aimed at identifying and addressing reliability  
11 related issues associated with the worst performing feeders on the distribution system.  
12 The initiative involves:

- 13  
14 • analyzing reliability data for the previous 5 year period;  
15 • identifying the 15 worst performing feeders in terms of SAIDI, SAIFI and customer  
16 minutes;  
17 • carrying out an engineering assessment on those feeders; and  
18 • based on the data and engineering assessments, proposing reliability based projects  
19 for the upcoming budget.

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21 The Distribution Reliability Initiative is one component of the capital budget planning  
22 process at Newfoundland Power. For the 2007 budget, upward cost pressure was  
23 identified related to the Rattling Brook Refurbishment project.

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25 After due consideration, it was decided to suspend the Distribution Reliability Initiative  
26 for 2007. Therefore, no formal Corporate Distribution Reliability Review was prepared.  
27 The Company anticipates that the initiative will formally resume in 2008.

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29 Although no formal Corporate Distribution Reliability Review was prepared, the  
30 Company monitors reliability statistics on an ongoing basis and will initiate engineering  
31 assessments of feeders if required. Customer Minutes of Interruptions, SAIFI<sup>1</sup> and  
32 SAIDI<sup>2</sup> from the 2006 reliability analysis of the fifteen worst performing feeders is  
33 presented in Tables 1, 2 and 3.

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<sup>1</sup> System Average Interruption Frequency Index ("SAIFI"). Distribution SAIFI records the average number of unscheduled outages related to distribution system failure.

<sup>2</sup> System Average Interruption Duration Index ("SAIDI"). Distribution SAIDI records the average hours of unscheduled outage related to distribution system failure.

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<p align="center"><b>Table 1</b>  <b>Five Year Average Unscheduled Distribution Related Outages</b>  <b>2001 – 2005</b>  <b>Sorted by Customer Minutes</b></p>			
<b>Feeder</b>	<b>Annual Customer Minutes of Interruption</b>	<b>Annual Distribution SAIFI</b>	<b>Annual Distribution SAIDI</b>
LEW-02	832928	3.90	9.10
BCV-02	705984	4.86	7.71
BOT-01	676529	2.46	6.99
GLV-02	606482	3.40	8.16
PUL-01	539202	2.79	5.73
GFS-06	498358	2.61	5.12
SMV-01	421093	2.53	6.84
LET-01	416822	2.19	3.77
HOL-01	380993	2.03	3.41
WES-02	376982	4.02	8.27
PUL-02	347684	2.41	3.74
CHA-01	334508	2.77	2.74
HWD-07	330788	2.62	2.38
NWB-02	320430	2.08	5.13
GBY-02	314584	2.13	5.94

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<p align="center"><b>Table 2</b>  <b>Five Year Average Unscheduled Distribution Related Outages</b>  <b>2001 – 2005</b>  <b>Sorted by SAIDI</b></p>			
<b>Feeder</b>	<b>Annual Customer Minutes of Interruption</b>	<b>Annual Distribution SAIFI</b>	<b>Annual Distribution SAIDI</b>
GPD-01	191268	2.04	13.62
LEW-02	832928	3.90	9.10
WES-02	376982	4.02	8.27
GLV-02	606482	3.40	8.16
WES-03	244143	2.20	7.89
BCV-02	705984	4.86	7.71
WES-01	172241	3.33	7.34
BOT-01	676529	2.46	6.99
SMV-01	421093	2.53	6.84
SUM-02	230342	2.72	6.60
GBY-03	303574	2.05	6.56
BUC-02	61248	2.78	6.38
GBY-02	314584	2.13	5.94
PUL-01	539202	2.79	5.73
NWB-02	320430	2.08	5.13

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**Table 3**  
**Five Year Average Unscheduled Distribution Related Outages**  
**2001 – 2005**  
**Sorted by SAIFI**

<b>Feeder</b>	<b>Annual Customer Minutes of Interruption</b>	<b>Annual Distribution SAIFI</b>	<b>Annual Distribution SAIDI</b>
BCV-02	705984	4.86	7.71
GBS-02	128971	4.42	4.87
WES-02	376982	4.02	8.27
LEW-02	832928	3.90	9.10
FER-01	149046	3.90	3.94
LOK-01	266116	3.64	4.26
GRH-02	227927	3.63	4.80
GLV-02	606482	3.40	8.16
GRH-03	114658	3.38	2.52
ROB-01	310450	3.34	4.82
WES-01	172241	3.33	7.34
CAB-01	273648	3.21	4.10
GLN-01	137121	3.09	3.45
MOB-01	266097	2.81	4.31
PUL-01	539202	2.79	5.73

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