

1 **Volume 1, Section 2 – Customer Operations (sic)***
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3 **Q. (page 70, Table 28) The existing annual depreciation rates and those recommended**
4 **in the 2006 Study by asset class are provided in Table 28. Please explain why the**
5 **annual depreciation rate for Other Production is increasing from 3.91% to 4.73%**
6 **and detail the increase occasioned by this change in the Test Year's depreciation**
7 **expense.**

8
9 **A. Explanation**

10 Newfoundland Power's Other Production assets consist of 3 diesel generating units and 3
11 gas turbines that are typically used for backup generation during power outage
12 emergencies, or to support planned maintenance or upgrade activities.

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14 In recent years, capital improvements have been carried out on the Company's gas
15 turbines and diesel units to extend their lives and to keep the units in service. In fact,
16 since the last depreciation study was conducted in 2001,¹ the plant balance in Other
17 Production has increased significantly.

18
19 A significant amount of the balance added since 2001 was used to replace and refurbish
20 worn components, as well as improve the automation and protection of these units. As a
21 result, the units are now more reliable; and, the Company now has better technical data
22 available, and is in a much better position to maximize the service lives of these assets.

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24 Recording depreciation for component replacements at a gas turbine or diesel plant is
25 similar to that which would apply to the replacement of an engine or a transmission in a
26 utility line truck. For example, assume the line truck has a service life of 12 years and the
27 engine and transmission are replaced midway through the vehicle's life (i.e., at age 6).
28 The new engine and transmission have a life of 6 years, and should be depreciated over
29 that period, even though the line truck had an original life of 12 years. The overall
30 depreciation rate for the line truck must increase to properly account for the shorter life of
31 the replacement components.

32
33 Similar circumstances exist with respect to the Company's gas turbine and diesel plants.
34 Although the original assets may have had an estimated service life of 50 years, the
35 additions since 2001 have an expected life of only 20 years, and must be depreciated over
36 this shorter timeframe. The result is an increase in the overall depreciation rate for Other
37 Production assets from 3.91% to 4.73%.

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41 * Refer to Volume 1, Section 3 – Finance.
42

¹ The year-end 2005 plant balance for Other Production is approximately \$20.3 million compared with \$12.2 million at year-end 2001.

Test Year Depreciation Expense

The amount of Other Production assets subject to depreciation in the 2008 test year is forecast at \$20,986,000. Table 1 shows the increase in 2008 depreciation expense resulting from the increased rate.

Table 1
Forecast Increase in Depreciation Expense
2008 Test Year

Average Plant in Service (a)	Depreciation Rate (b)	Depreciation Expense (c = a * b)
Calculation of depreciation expense based on proposed depreciation rate:		
\$20,986,000	4.73%	\$992,638
Calculation of depreciation expense based on existing depreciation rate:		
\$20,986,000	3.91%	<u>\$820,553</u>
Increase in depreciation expense, before adjustment for reserve variance		\$172,085
Adjustment for reserve variance proposal ²		<u>\$186,189</u>
Forecast Increase in Depreciation Expense – 2008 Test Year		\$358,274

² As per Section 3.5.2, 2008 Depreciation Expense, of the Finance Evidence.