

1 **Q. INFORMATION SYSTEMS**

2  
3 **PUB 22.0 (RE: p. 61 & 62 of 73) Application Enhancements (\$1,087,000)**

4  
5 **PUB 22.6**

6 **Please provide details of the cost benefit analysis associated with improvements to**  
7 **the self-service application to include Interactive Voice Response (\$156,000).**

- 8  
9 A. The net present value analysis associated with improvements to the self-service  
10 application to include Interactive Voice Response is provided in Attachment A. The  
11 estimated labour cost savings, due to a reduction in the number of calls answered by  
12 Customer Account Representatives, is \$52,500 per year, based on 2004 labour costs. The  
13 labour savings are offset somewhat by increased hardware and software maintenance fees  
14 of \$12,000 per annum. The net present value analysis escalates the labour cost savings  
15 and cost increases as noted therein.

## NET PRESENT VALUE ANALYSIS

### Interactive Voice Reponse

|   |      | <u>Capital Impacts</u> |                         | <u>Ongoing Operating Expenditures</u> |                |                      |                |                                   |                   |                            |
|---|------|------------------------|-------------------------|---------------------------------------|----------------|----------------------|----------------|-----------------------------------|-------------------|----------------------------|
| <u>YEAR</u>                                   |      | <u>New Software</u>    | <u>CCA Tax Software</u> | <u>Cost Increases</u>                 |                | <u>Cost Benefits</u> |                | <u>Net Operating Expenditures</u> | <u>Income Tax</u> | <u>After-Tax Cash Flow</u> |
|   |      | A                      | B                       | <u>Labour</u>                         | <u>Non-Lab</u> | <u>Labour</u>        | <u>Non-Lab</u> | G                                 | H                 | I                          |
| 0   | 2005 | (\$156,000)            | \$78,000                | \$0                                   | \$0            | \$0                  | \$0            | \$0                               | \$28,174          | (\$127,826)                |
| 1   | 2006 | \$0                    | \$78,000                | \$0                                   | (\$12,204)     | \$54,075             | \$0            | \$41,871                          | \$13,050          | \$54,921                   |
| 2   | 2007 | \$0                    | \$0                     | \$0                                   | (\$12,411)     | \$55,697             | \$0            | \$43,286                          | (\$15,635)        | \$27,651                   |
| 3   | 2008 | \$0                    | \$0                     | \$0                                   | (\$12,635)     | \$57,925             | \$0            | \$45,290                          | (\$16,359)        | \$28,931                   |
| 4   | 2009 | \$0                    | \$0                     | \$0                                   | (\$12,862)     | \$59,663             | \$0            | \$46,801                          | (\$16,904)        | \$29,896                   |
| 5   | 2010 | \$0                    | \$0                     | \$0                                   | (\$13,087)     | \$60,707             | \$0            | \$47,620                          | (\$17,200)        | \$30,419                   |
| <b>Present Value (2005-2010) (See Note J)</b> |      |                        |                         | <b>Discount Rate:</b>                 |                | <b>7.03%</b>         |                | <b>\$15,664</b>                   |                   |                            |

#### NOTES:

A is the total capital cost.

B is the Capital Cost Allowance deduction. It was calculated using declining balance depreciation and the 50% rule for capitalizing additions.

C and D include any software maintenance fees and internal support costs associated with the project. The cost estimates are escalated to the current year using the GDP Deflator Index for non-labour and a general corporate cost escalator for labour.

E and F are the reduced operating costs. The cost estimate is escalated to current year using the GDP Deflator Index for non-labour and a general corporate cost escalator for labour.

G is the sum of columns C, D, E and F.

H is the impact on taxes from the CCA and operating cost deductions. It is equal to column B less column G times the tax rate.

I is the after tax revenue requirement, which is the sum of the capital expenditure (column A) plus operating expenditures (column Q) less the tax reduction (column G).

J is the present value of column I. Column I is discounted using Newfoundland Power's weighted after-tax cost of capital.