**Q. INFORMATION SYSTEMS**

**PUB 23.0 (RE: p. 65 & 66 of 73) Customer Systems Replacement ($144,000)**

**PUB 23.2**
**Please provide details of the cost benefit analysis associated with enhancing the Customer Service System.**

A. The net present value analysis associated with Customer Systems Replacement is provided in Attachment A. The estimated labour cost savings, due to a reduction in labour required to run the Customer Service System nightly batch programs, is $61,280 per year, based on 2004 labour costs. The net present value analysis escalates the labour cost savings as noted therein.

**NET PRESENT VALUE ANALYSIS**

# Customer Systems Replacement

| | | Capital Impacts | | Ongoing Operating Expenditures | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | New | CCA Tax | Cost Increases | | Cost Benefits | | Net Operating | Income | After-Tax |
| | YEAR | Software | Software | Labour | Non-Lab | Labour | Non-Lab | Expenditures | Tax | Cash Flow |
| | | A | B | C | D | E | F | G | H | I |
| 0 | 2005 | ($144,000) | $72,000 | $0 | $0 | $0 | $0 | $0 | $26,006 | ($117,994) |
| 1 | 2006 | $0 | $72,000 | $0 | $0 | $63,118 | $0 | $63,118 | $3,208 | $66,326 |
| 2 | 2007 | $0 | $0 | $0 | $0 | $65,012 | $0 | $65,012 | ($23,482) | $41,530 |
| 3 | 2008 | $0 | $0 | $0 | $0 | $67,612 | $0 | $67,612 | ($24,422) | $43,191 |
| 4 | 2009 | $0 | $0 | $0 | $0 | $69,641 | $0 | $69,641 | ($25,154) | $44,487 |
| 5 | 2010 | $0 | $0 | $0 | $0 | $70,860 | $0 | $70,860 | ($25,595) | $45,265 |
| | **Present Value (2005-2010) (See Note J)** | | | **Discount Rate:** | | **7.03%** | | | | **$81,587** |

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.

**PUB 23.2 NP**
**Attachment A**
NP 2005 CBA