Q. Reference: Vol 2, Tab 7, Cost of Service Study

(a) Please comment on the relative merits of including in the COSS (i) the amortization of deferral accounts that contain costs related to purchased power expense, (ii) the actual power purchase costs incurred by NP in the relevant year, and (iii) the forecast purchase power costs for the test year. In particular, in the view of NP, which approach results in the most appropriate revenue to cost ratios to use as a basis for determining the Relative to Average Rate Changes by Class as set out at Table 5-6 of the Evidence (Vol 1). Please provide supporting reasons.

(b) Please provide a working electronic copy of the COSS Model.

A. (a) Newfoundland Power uses the revenue to cost ratios from the cost of service study ("COSS") as a guide in assessing fairness in cost recovery among customer classes. Maintaining revenue to cost ratios for each class within a range of reasonableness (i.e., 90% to 110%) has been an accepted approach to ensure that there is no undue cross-subsidization among the various classes.[1] The use of a range of reasonableness recognizes that the sensitivity of results depends upon the approach chosen.[2]

The following outlines the relative merits of inclusion in the Cost of Service Study of (i) amortizations, (ii) actual costs and (iii) forecast costs related to purchased power.

(i) The inclusion of deferral account amortizations in the cost of service study permits the reconciliation of the costs included in the cost of service study to the financial results of the Company. The amortizations are effectively treated as purchased power costs because the costs that led to the amortizations were related to purchased power.

The inclusion of the amortizations related to purchased power costs in the current COSS increased both 2008 test year revenue and 2008 test year purchased power cost by $1.4 million. This represents less than 0.3% of 2008 revenues and costs. There would be minimal, if any, change in the cost of service study revenue to cost ratios had the amortizations been excluded in completing the cost of service study.

[1] This is consistent with the views of the Board as expressed in Order No. P.U. 7 (1996-97), where the Board stated: "The Board agrees with the philosophy that it is not necessary to achieve a 100% revenue to cost ratio for all classes and takes no exception to a variance of up to 10%, …".

[2] The methods used in cost of service studies can be subject to much debate between experts. As a result there is no one generally accepted methodology for allocating costs to customers. This informs the use of COSS in determining how revenue to cost ratios should be used for determining relative rate changes among classes.

(ii) The inclusion of actual purchased power costs, as opposed to weather normalized purchased power costs, would result in inconsistency with regulatory reporting and greater complexity in the cost of service study. Newfoundland Power's financial results for revenue and purchased power expense for regulatory and financial reporting are presented on a weather normalized basis, as is the current cost of service study. Removing weather normalization from purchased power costs for the cost of service study would necessitate other changes, such as removal of weather normalization from revenue, to ensure comparability. This would significantly complicate the cost of service study. Conceptually, removing the effects of abnormal weather appears reasonable in evaluating the revenue to cost ratios for the purpose of assessing fairness in cost recovery among classes.

(iii) In developing its cost of service study to be used in setting rates, the Company considers the impact of those costs that are forecast to vary from historical actual data. When considered appropriate, the Company will create a pro-forma cost of service study to reflect these effects.

For example, the cost recovery by class used in the Rate Design Report was based on the results of the 2006 embedded cost of service study adjusted to incorporate the 2007 wholesale purchased power rate, the results of the most recent depreciation study, and revenues based on customer rates in effect July 1st, 2008. The resulting cost recovery by class is not materially different than that resulting from the 2008 Cost of Service Study.

The Company's approach to using pro-forma cost of services studies when required provides a reasonable proxy for the use of forecast costs in completing a cost of service study.

(b) The electronic copy of the Cost of Service Study is available as Attachment A to response to Request for Information CA-NP-192 on the Newfoundland Power stranded website at the link *ftp.nfpower.nf.ca*.

Attachment B contains a hard copy of user documentation for the COS model.

Electronic Copy of the Cost of Service Study
is available on the
Newfoundland Power Stranded Website
at the link *ftp.nfpower.nf.ca*

User Documentation for the Cost of Service Model

Newfoundland Power Inc.

2008 Cost of Service Study

General User Instructions

The purpose of this user documentation is to provide a description of the various inputs to the COS model as well as to provide instructions for using the model.

The model is made up of six Excel workbooks with each workbook containing various worksheets associated with inputting data, calculating results, and displaying the various output schedules. Each workbook has a "Control Sheet" where all applicable Macros are set up. The Macros are usually required to import data from other workbooks. Please note that all workbooks must be open for the COS Model to operate correctly.

Listed below is a description of each workbook.

BFA Summary 2008.xls
This workbook has two worksheets and is used for inputting various revenue, sales and customer information by the various class breakdowns required for the COS Study. All required input data is highlighted in red. This is essentially a data source workbook.

General Inputs 2008.xls

The main purpose of the General Inputs workbook is to enter data required for other workbooks. Also, Schedule 5.1 (Classification Splits) is generated in this workbook. Listed below is a brief description of each worksheet where input data is required. All input data is highlighted in red.

Control Sheet - Mainly used to list the various sources of input data.

Other Data - Various input data mainly from Returns from the Annual Report to the PUB.

Specifically Assigned Cost - Used for inputting plant data specific to a particular customer.

CPF Streetlighting - Various Street Lighting plant used to derive functional factors.

Data From Hydro's Cost of Ser. - Data from various Hydro's Cost of Service Studies.

Functional Factors - Input data used to create various functional factors.

5.1 Summary of Alloc. Fact. - Schedule 5.1 is derived in this worksheet. Various functional and classification factors are input directly into this worksheet.

Expenses 2008.xls

This workbook generates the expense Schedule 3.1. Three of the worksheets require input data.

Control Sheet – Weighted O&M allocation factor is input in this worksheet. There are two Macro Buttons in this worksheet. One is to "Update Pivot Tables". This must be run when any data in this workbook is changed. The other Button "Input Data From General input" is used to import required data from the "General Inputs 2008" workbook.

3.1 Exp Net of GEC, RSA & MTA - Schedule 3.1 is derived from this worksheet. Detail operating expenses are directly input into this worksheet. You must run the Macro "Update Pivot Tables" in the "Control Sheet" of this workbook whenever detail expense data is updated.

Assets_2007-2008.xls

This workbook creates the plant Schedules 2.1, 2.2, 2.3, 2.4 & 3.3. There are two worksheets that require updating.

Control Sheet - There is one Macro in this worksheet. The Macro button allows you to import the required data from the "General Inputs 2008" workbook.

Summary of Plant Items - All plant related data is input in this worksheet.

Eng_Dem_Cust Alloc 2008.xls

This workbook creates Schedules 4.1, 4.2, 4.3, 4.4, 4.5 & 4.6. For the most part, these are summaries of the various class allocation factors. There are four worksheets that require updating.

Control Sheet - There is one Macro in this worksheet. The Macro button allows you to import the required data from the "General Inputs 2008" workbook.

4.1 Load and Customer Stats. - Schedule 4.1 is derived from this worksheet. Some Customer and load factor data by class of service is input directly into this worksheet.

4.2 Loss Factors - Schedule 4.2 is derived from this worksheet. The loss factors are directly input into this worksheet.

4.3 Cust Alloc - Schedule 4.3 is derived from this worksheet. The various customer class weighting factors are input into this worksheet.

Fully Distributed Cost 2008.xls

This workbook creates Schedules 1.1, 1.2, 1.3, 1.4, 1.5, 1.6,1.7, 3.2, 5.2, 5.3 & 5.4. For the most part, these are the main COS Study output Schedules. There is no direct data input into this workbook. Data from the other supporting workbooks is imported into this workbook through several Macro buttons located in the "Control Sheet". The Macro buttons used to import the data are listed below:

1. Import Data From Class Allocator Workbook - "Eng_dem_Cust Alloc 2008.xls"

2. Import Data From Bill Frequency Analysis - "BFA Summary 2008.xls"

3. Import Data From General Input File - "General Imputs 2008.xls"

4. Import Data From Asset Data File - "Assets_2007-2008.xls"

5. Import Data From Expense Data File - "Expenses 2008.xls"