# DECISION

**IN THE MATTER OF a Board Order to Review Enbridge Gas New Brunswick Inc. Financial Results at December 31st, 2002 and December 31st, 2003**

**March 24, 2005**

## New Brunswick

## Board of Commissioners of Public Utilities

NEW BRUNSWICK BOARD OF COMMISSIONERS
OF PUBLIC UTILITIES

**IN THE MATTER** of a Board Order to
Review Enbridge Gas New Brunswick Inc.
Financial Results at December 31st, 2002
and December 31st, 2003

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## Introduction

### *Financial Review*

The Board, pursuant to its decision of June 23, 2000, has conducted a review of Enbridge Gas New Brunswick's (Enbridge) financial results for the periods ending December 31, 2002 and December 31, 2003. Enbridge submitted its regulatory financial statements to the Board on June 30, 2004. James Easson, CA, acting as a financial consultant for the Board in these matters, reviewed Enbridge's financial information for each year prior to the preparation and submission of their regulatory financial statements.

Enbridge Gas New Brunswick (EGNB) is a limited liability (private) partnership. As such, its actual financial statements are confidential. EGNB is required to prepare and file public regulatory financial statements that conform to the deemed capital structure of the enterprise and reflect a tax treatment consistent with a corporate business organization rather than a partnership. Mr. Easson reviews both the confidential and public financial statements to ensure that the adjusting entries that reconcile the confidential and public reports reflect the requirements of the Board.

Mr. Easson submitted his reports to the Board on July 4 and July 14, 2004. These reports addressed the reasonableness of Enbridge's expenditures and its compliance with directives issued by the Board in earlier decisions, for the reporting years of 2002 and 2003. In his review, Mr. Easson identified five items that required consideration by the Board:

1. The change in the basis used to calculate depreciation by EGNB in 2002, which he recommended for approval;

2. The need for a review of cost capitalization and amortization, in particular for items that would not normally be considered property, plant, and equipment (PP&E), to ensure that such expenses are appropriately classified and amortized over a period that reasonably reflects their estimated beneficial life;
3. The manner in which the Allowance for Funds Used During Construction (AFUDC) was recorded and reported in EGNB's regulatory statements;
4. A restatement (increase) of EGNB 2003 depreciation expense, which he recommended for approval; and
5. The manner in which EGNB proposed to treat a portion of pipe that had been removed from service in 2003 to facilitate relocation of the Vanier highway, and which was therefore no longer used and useful for the purposes of gas distribution.

### *System Gas Review*

System gas is the term used to describe the gas supplied by default in an otherwise competitive market. In New Brunswick, EGNB is responsible for procuring and supplying such gas to any and all customers, on a basis described in regulation, until such time as the customers select a competitive gas supplier.

Concurrent with the financial review for 2003 and pursuant to the Gas Distributor Marketing Regulation 99-62 (GDMR), the Board conducted a review of Enbridge's system gas service to ensure that:

1. There was no cross-subsidy between the sale and distribution of gas;
2. The prices charged for system gas and customer services were reasonable and sufficiently competitive to protect the interests of customers;
3. The price charged for system gas was calculated in accordance with Section 4 of the regulation; and
4. The system gas had been purchased in accordance with its gas purchase plan filed with the Board.

John Butler, P.Eng., acted as a consultant to the Board in these matters. He reviewed EGNB's system gas procurement and sales records. He concluded that the prices charged for system gas were reasonable and protected the interests of customers. Mr. Butler also provided an opinion that EGNB was in compliance with the GDMR for the 2003 year. System gas was supplied for the last three months of 2003 only.

*Hearing Process*

A paper hearing process was established to consider the reports of Messers Easson and Butler. EGNB's regulatory financial statements together with the reports were available to the public. The Maritime Natural Gas Pipeline Contractors Association Inc. was the only party to appear before the Board to request formal intervener status, which was granted.

The Board reviewed the evidence arising from the written portion of the proceeding and determined that it would benefit from hearing oral arguments concerning the three matters of apparent contention:

1) The appropriate accounting treatment and cost allocation for the Vanier highway pipe that was no longer used and useful,
2) The need for a review of cost capitalization and amortization practices of EGNB, and
3) The appropriate manner in which to account for the Allowance for Funds Used During Construction (AFUDC).

Oral arguments were heard on Sept. 30, Oct. 28, Dec. 14 & 15, 2004. Summation finally occurred on Jan. 06, 2005. The participants compiled and provided additional information, at the request of the panel, after the first and second oral argument days.

## Vanier Highway pipe

At issue was the accounting treatment and allocation of costs for a portion of the pipe (dead pipe) leading from the city-gate station to downtown Fredericton. The pipe in question had been installed during 2000/01 and abandoned in-place during 2003. EGNB had valued the portion abandoned at $955,000, and reduced the amount of property, plant and equipment account (PP&E) as well as the accumulated amortization by the same amount. This treatment had left the net book value of PP&E, and thus the rate base, unaffected.

Mr. Easson's view was that this treatment had the effect of leaving the net book value of the abandoned pipe within in the rate base, where it would continue to earn a return, even though it had been removed from service and thus did not meet the "used and useful" test for such an asset. He recommended that the net book value of the pipe in question be removed from rate base on a permanent prospective basis.

The prudence of the original decision to place the pipe was also at issue. The risk of early retirement had not been identified during the hearing which approved the construction plan for the pipe in question. Neither was it obvious that retiring a normally long-lived asset after only two and a half years of service should be handled as a matter occurring in the normal course of business. The panel inquired as to the circumstances surrounding the original decision to locate the pipe and the possible potential for recovery of costs from the New Brunswick Department of Transportation.

### *Accounting Treatment for the Dead Pipe*

In initial argument, EGNB presented portions of the New Brunswick Natural Gas Distribution Act 1999 Uniform System of Accounts (USoA) that outlined alternative treatments for such cases. EGNB argued that their proposed treatment was appropriate and within the guidelines set by the USoA for normal retirement of assets, since assets are classified based upon their average lives and deviations from the average are normal and expected in particular instances.

The Board reviewed the submission and noted that the USoA provided guidance for the accounting treatment of extraordinary events. Based on the evidence presented in the matter, the panel was satisfied that the circumstances leading to the abandonment of the pipeline were sufficiently unusual to fit the definition of extraordinary. EGNB was advised of that preliminary view in a letter of October 12th, 2004 as follows:

"The Board confirms that the accounting treatment for the abandoned portion of the pipe along the Vanier highway should be that which is described for extraordinary events in the USoA, its net book value being written off against income during 2003".

### *Prudence*

The Board reviewed the documentation provided to it by EGNB and the intervener and heard testimony from EGNB staff regarding the time pressures related to the decision to proceed with installation of the pipe. The staff also discussed the estimated cost and practicality of alternative routes, the information available to EGNB staff regarding proposed future highway modifications available at that time, together with the circumstances under which EGNB waived future actions for cost recovery from New Brunswick Department of Transportation in respect of this matter. Testimony was given that the other most reasonable route from city gate to downtown Fredericton along the river road was more expensive than using the Vanier route. This was true even if the cost of the "dead pipe" and its replacement were included in the costing of the Vanier route. ***The Board finds that EGNB acted prudently in its decision to place the pipe in its original location and should thus be entitled to eventually recover its costs from ratepayers. Any incremental loss arising from the accounting treatment described above should therefore be carried forward in the deferral account approved by the Board.***

## Cost Capitalization and Amortization Practices

At issue was the treatment of the operation and maintenance costs (O&M) that were capitalized. Enbridge stated that it incurred O&M costs, such as direct sales and marketing costs, which were investments in the development of the gas market. Fixed amounts of O&M costs were identified during the utilities budgeting process and were capitalized during the year.

The capitalized costs were included in the "distribution mains" category of property and depreciated annually at a rate of 2.43 percent. The depreciation period for these costs was over 40 years and Mr. Easson took issue with the inclusion of these costs in any account with such a long depreciation period.

Mr. Easson stated that due to the nature of those costs that such an amortization period was inappropriate. The benefit period for those capitalized O&M costs should be considerably less than 40 years. Mr. Easson recommended that the utility be required to carry out a comprehensive analysis of its capitalized costs and identify costs that may not be considered as property, plant and equipment. A benefit period should then be determined for those similar costs and then a reasonable amortization period could be established.

***The Board, during the hearing, directed Enbridge to undertake the study of the capitalized costs and file a report by February 14, 2005. The Board received the report while this decision was in preparation.***

## Allowance for Funds Used During Construction

At issue was the appropriate accounting treatment of the Allowance For Funds Used During Construction (AFUDC) in EGNB's regulatory statements. The matter had been the subject of inquiry by the Board previously, resulting in a Board order of October 17, 2003. Mr. Easson's opinion was that the accounting entries made by EGNB in response to that order did not result in compliance with the orders intent, but rather achieved the same result that had prompted the Board order in the original instance.

This issue was clearly the most contentious of the hearing and dominated oral argument. In addition to reviewing the written evidence and hearing the arguments on the public record, the Board conducted an *in camera* review of EGNB's private financial statements of the limited-liability partnership and the adjustments that yielded the regulatory income statements they had filed.

Mr. Easson presented analysis and argument that clearly demonstrated, subject to certain assumptions, that EGNB's accounting treatment overcharged ratepayers by a portion of the AFUDC. He also demonstrated that his recommended treatment would result in a fair and equitable allocation of AFUDC to EGNB.

EGNB presented analysis and argument that clearly demonstrated, subject to certain assumptions, that Mr. Easson's accounting treatment did not fully compensate the gas utility for use of its funds to finance construction of property, plant and equipment (PP&E). It also demonstrated that its recommended treatment would result in fair and equitable compensation of EGNB for financing construction work in progress (CWIP).

The essence of this dispute lay in the different assumptions that Mr. Easson and EGNB made as to the appropriate contents of the income statement.

Mr. Easson's working assumption and position appears to have been that the income statement that is filed publicly with the Board for regulatory review purposes should reflect the historical operating performance of the utility for the year in question, adjusted only to reflect Board decisions regarding deemed capital structure, return on equity and income tax. In particular, he assumed that the interest expense and return on equity shown on the public income statement included all of the interest that EGNB would have paid during the year, together with all of the return on equity it was permitted to receive, if it had be organized and financed in the manner approved by the Board. The interest would normally be expected to include:

1. Interest on long-term debt used to finance existing PP&E,
2. Interest on debt used to finance construction work in progress (CWIP*)*, as well as
3. Interest paid to finance short-term (operational) cash deficiencies.

The return on equity would normally be expected to include the return earned on CWIP. Under these circumstances it is clear that any allowance for AFUDC must be shown as either an interest expense credit, or its equivalent, on the income statement.

EGNB's working assumption, and the basis of their argument, was that the public income statement should not show any interest expense or return on equity beyond that which would have been paid to finance assets that are in the rate base. Given this assumption, which is the basis upon which they prepared their public financial statements, EGNB proposed to record no expense credit (or equivalent) for AFUDC on the public income statement. The testimony of Ms. McShane is clear on this point:

> *"In the first instance Enbridge and I do not believe that it is appropriate to include AFUDC as a revenue in the regulatory income statement."*
>
> \- McShane, Transcript, Sept. 30, p.30

> *"What Enbridge would do in its financial statements is similar to what NB Power would do in its financial statements [include AFUDC]. What Enbridge has gone on to do is taken its financial statements and made the requisite adjustments to turn them into regulatory statements."*
>
> \- McShane, Transcript, Sept. 30, p.36

In EGNB's view, AFUDC properly belongs only in the financial statements prepared for financial reporting purposes. In EGNB's case, such statements are private and confidential statements, not public statements. The accounting entries they had made in respect of AFUDC in their public financial statements, and which Mr. Easson questioned, were an attempt to reconcile this position with the Board order.

In support of their position EGNB submitted evidence of other gas utilities practices, among them Heritage Gas, the Nova Scotia gas distribution utility that is also in a development stage, which have similar provisions for accumulation of deferred losses for eventual inclusion in their rate base. In argument, EGNB referred the Board to a number of filings from the Heritage Gas General Tariff Application.

The first such document put forward for consideration was Schedule 3.1, a table giving Heritage Gas Limited's revenue requirements for 2003 (actual) and 2005 through 2008 (forecast). The argument was that, since this document did not show any allowance for AFUDC, EGNB's income statements should not do so.

> *"[. . .] schedule 3.1 shows the actual revenue requirement for 2003. And then the other years are forecast. But 2003 actual would be the corresponding actual of Enbridge Gas.*
>
> *And what I wanted to focus you on in that particular schedule is that on line 4 there are income taxes that were in the revenue requirement and the proposed return on rate base, which is the cost of capital applied to rate base. And the only revenue requirement is the income taxes plus the proposed return on rate base.*
>
> *Now there were no sales, if you follow down to line 7. There is nothing under "Other Revenue". So the revenue deficiency is simply the -- which*

> *is on line 10 -- is simply the sum of the income taxes and the total proposed return on rate base.*
>
> *And a couple of pages behind that, page 7, 8 and then page 37 and 38 were just the backup sheets to show what the rate base calculation was, what the proposed return on rate base numbers were in terms of background. And they follow through to the return on rate base number that was at line 5 on schedule 3.1.*
>
> *So at no point on this regulatory actual statement for 2003 did we see an AFUDC number."*
>
> McShane, Transcript, Sept. 30, p.44

The Board notes that the document in question was not, in fact, an actual income statement filed for annual regulatory review purposes, but was a prospective estimate of future revenue requirements that happened to include a sub-set of the 2003 operating results that would normally be reported on an income statement. The Board further notes that, as part of the same General Tariff Application, Heritage Gas did provide a statement of earnings and retained earnings showing AFUDC and accounting for it in a matter that this Board considers proper.

Unsatisfied with the evidentiary record, arguments and summations, the Board consulted a number of authoritative sources during deliberations and relies upon them in this decision. These sources are: The Uniform Accounting Regulation for New Brunswick Gas Distribution Utilities (Regulation 99-62), the Canadian Institute of Chartered Accountants (CICA) Handbook, the Ontario Energy Board's Accounting Procedures Handbook, and the draft guideline Disclosures by Entities Subject to Rate Regulation prepared by the CICA's Accounting Standards Board. These references offered guidance in the matter as summarized below.

***NB 99-62 Regulation***

This regulation prescribes the duties of Gas Distributors in keeping accounts and prescribes the form in which these accounts should be kept. The uniform system of accounts (USoA), appended to the regulation, provides both general and detailed instructions as to the nature of the accounting process and a chart of accounts.

The USoA offers the following guidance respecting generally accepted accounting principles (GAAP).

> *"The Board recognizes that generally accepted accounting principles ("GAAP") are the accepted medium for the communication of financial information to the public.*
>
> *The Board therefore acknowledges that gas distributors in New Brunswick are expected to maintain accounting records in accordance with GAAP, the principal source of which in Canada is the Handbook of the Canadian Institute of Chartered Accountants ("CICA").*
>
> *The Board recognizes that the regulatory process introduces certain specific cause-and-effect relationships in the matching of a gas distributor's revenues and expenses, which may require special applications of GAAP.*
>
> *Accordingly, gas distributors are required to use this USOA in conjunction with the CICA Handbook in the determination of appropriate accounting policies and practices, but with due regard for the need to reflect Board decisions or orders arising from the regulatory process in the application of GAAP. In the event of a conflict between the CICA Handbook and this USoA, the USoA governs."*

(Uniform System of Accounts for Gas Distributors, Part 1,
Section 2. Generally Accepted Accounting Principles)

This clearly states that generally accepted accounting principles (GAAP), principally represented by the CICA handbook, are normally used to communicate financial information to the public. ***It is noteworthy that it makes no distinction between***

***regulatory and non-regulatory financial information.*** If it is to be communicated to the public, the normal expectation is that it will conform to GAAP. It indicates that the normal process of matching revenue and expenses for a distributor may require special considerations and establishes the precedence of Board orders and the uniform system of accounts over the CICA handbook.

The USoA goes on to detail the manner in which accounts are to be kept. Account numbers are grouped. On the balance sheet, assets run from 100 to 199, while liabilities and shareholders equity accounts run from 200 to 299. Income statement accounts (revenues and expenses) run from 300 to 399.

Regarding AFUDC in particular, the USoA identifies account number 324, Allowance For Funds Used During Construction – Credit as an income statement expense account used to record AFUDC that has been capitalized during the fiscal year. This account is credited, and the associated debit is to a balance sheet account, as follows:

> *"This account shall be credited with the allowance for funds used during construction ("AFUDC") that has been capitalized during the fiscal year.*
>
> *The concurrent debit shall be to Account No. 115, "Construction Work in Progress - Gas Distributor Plant", or Account No. 116, "Other Gas Distributor Plant Under Construction", or to the specific subsidiary CWIP account for the project.*
>
> *The AFUDC rate shall be based on a reasonable allowance for the use of funds expended during the construction period, whether or not such funds have been borrowed, and shall require approval by the Board."*
>
> Reg. 99-62, Appendix, Part II, 324.

***CICA Handbook***

Section 1520.01 of the CICA handbook provides that the income statement should be a fair representation of the results of operations for the period. This constitutes the first and primary guiding principal to be used to develop an income statement for presentation to the public. The Handbook goes on to direct that the income statement should distinguish, among other items, the revenue recognized for the period and the interest expense (Sections 1520.03 (a) & (m), respectively).

Regarding the balance sheet, section 3061.23 of the CICA handbook indicates that the cost of plant, property, and equipment listed as assets on the balance sheet includes AFUDC allowed by the regulator.

### *Ontario Energy Board (OEB) Accounting Procedures Handbook (APH)*

The OEB Accounting Procedures Handbook offers guidance that is generally applicable to rate-regulated enterprises. Its advice is consistent with the CICA Handbook and the NB USoA. The OEB Guidelines distinguish borrowed funds and other funds in AFUDC, and maintains an AFUDC account for each (Article 410, p.15).

### *Accounting Standards Board*

The Accounting Standards Board draft guideline Disclosures by Entities Subject to Rate Regulation contrasts treatment of rate-regulated *vs.* unregulated entities. Among others matters, it clearly identifies the circumstances that give rise to AFUDC and distinguishes it from the accounting treatment accorded non-rate regulated companies, which are limited to capitalizing only the interest expenses related to CWIP.

### *Financial Reporting using GAAP*

Regarding the general nature of financial information filed publicly with the Board, the USoA clearly anticipates that GAAP will normally be followed. Deviations from GAAP are only to be made to the extent that they are necessary to comply with specific provisions in the USoA or as a result of Board order. This serves the public interest by ensuring that such information is reasonably comparable with that of non-regulated enterprises, so that members of the public can make discretionary decisions based on the contents of the public financial statements. Adhering to GAAP generally, and the USoA particularly, also serves the public interest by facilitating the kind of comparative assessment of EGNB's operations against other utilities (benchmarking) that is the foundation of "alternative regulation" in general, and performance-based regulation in particular.

***For these reasons, the Board directs EGNB to complete and file its public financial statements prepared for regulatory purposes in a manner that is consistent with GAAP to the maximum extent possible. Where specific requirements of the USoA or Board orders require deviations from GAAP, these deviations are to be noted in the regulatory financial statements filed with the Board.***

*Format of Public Financial Reports for Regulatory Purposes*

The Board has satisfied itself that the USoA adopted by regulation for this province are reasonably consistent and congruent with those of other jurisdictions. To facilitate reporting and to enhance inter-comparability of EGNB's financial performance with that of utilities in other jurisdictions, the balance sheet and income statement submitted for regulatory purposes should present the balances in the ***general accounts*** as defined in the USoA. ***EGNB is directed to consult with Mr. Easson to implement a plan and timetable for reporting financial results in a format consistent with the USoA.***

*Reporting of AFUDC*

As noted previously, New Brunswick regulation 99-62, pertaining to Natural Gas Distributors is clear on the matter of recording AFUDC in the balance sheet and the income statement filed for regulatory purposes. ***EGNB is directed to file their reports to the Board in conformance with this regulation.***

Consistent with this direction, EGNB's income statements filed for regulatory purposes will be expected to show:

1. Interest expenses in the sum of:
    a. Interest on debt, at the deemed rate and ratio, sufficient to cover the debt associated with the rate base assets;
    b. Interest on debt, at the deemed rate and ratio, sufficient to cover debt associated with CWIP; and
    c. Any other interest paid on debt associated with operations of the rate-regulated business of the utility.
2. The required return on equity for rate-base assets and CWIP.

3. The full amount of the AFUDC capitalized during the fiscal year. This shall be shown as a single entry that has the effect of increasing the net income reported for the year by the full amount of the AFUDC.
4. An AFUDC amount that does not exceed that which results from summing the products of EGNB's average monthly CWIP and one-twelfth of the approved weighted cost-of-capital.

The balance sheet filed for regulatory purposes shall show the full amount of AFUDC capitalized during the year.

The Board is satisfied that accounting for AFUDC in this way will fairly and equitably compensate EGNB for financing CWIP, provided that EGNB's public financial statements meet the standards set by GAAP and the USoA. This point is illustrated in the example provided in Schedule "A" attached.

When accounted for in the way described in USoA, as directed in this decision or in GAAP, the integrity of both the company's balance sheet and income statement are maintained. For a utility like EGNB, which records net losses each year during the development period and carries them forward for eventual recovery from future ratepayers, it is particularly important that the net loss be correctly stated. To do so and to simultaneously meet the requirements described in this decision, it is essential that the full amount of the AFUDC capitalized on the balance sheet be reflected on the income statement, either as a credit against expenses or as a revenue item.

## *Summary of Board Orders Arising from this Hearing*

1. ***The Board agrees with the recommendation that assets should be amortized based on the following assumptions:***
   a. ***Assets in service on or before January 1 of any fiscal year and remaining in service at the end of the same fiscal year shall be subject to one full year of depreciation.***

*b. Assets entering service after January 1 of any fiscal year and remaining in service at the end of the same fiscal year shall be subject to one-half year's depreciation.*

*The Board approves of the use of these assumptions in the amortization of EGNB's assets for 2002 and subsequent years.*

2. *The Board accepts that the amortization originally recorded by EGNB for 2004 was understated by approximately $158,000 and approves of its correction.*

3. *The Board confirms that the accounting treatment for the abandoned portion of the pipe along the Vanier highway should be that which is described for extraordinary events in the USoA, its net book value being written off against income during 2003.*

4. *The Board finds that EGNB acted prudently in its decision to place the pipe in its original location and should thus be entitled to eventually recover its costs from ratepayers. Any incremental loss arising from the accounting treatment described above should therefore be carried forward in the deferral account approved by the Board.*

5. *The Board directed Enbridge to undertake the study of the capitalized costs and file a report by February 14, 2005. The Board received this report while this decision was in preparation.*

6. *The Board directs EGNB to complete and file its public financial statements prepared for regulatory purposes in a manner that is consistent with GAAP to the maximum extent possible. Where specific requirements of the USoA or Board orders require deviations from GAAP, these deviations are to be noted in the public financial statements filed with the Board.*

7. *The Board directs EGNB to consult with Mr. Easson to implement a plan and timetable for reporting financial results in a format consistent with the UsoA including those years which were the subject of this review, the years 2002 and 2003.*

8. *Regarding AFUDC, the Board directs EGNB to file their financial reports to the Board in conformance with Regulation 99-62. Consistent with this direction, EGNB's balance sheet filed for regulatory purposes shall show*

***the full amount of AFUDC capitalized during the year. Among other items, EGNB's income statement filed for regulatory purposes shall show:***

***a. Interest expenses in the sum of:***

***i. Interest on debt, at the deemed rate and ratio, sufficient to cover the debt associated with the rate base assets;***

***ii. Interest on debt, at the deemed rate and ratio, sufficient to cover debt associated with CWIP; and***

***iii. Any other interest paid on debt associated with operations of the rate-regulated business of the utility.***

***b. The required return on equity for rate-base assets and CWIP.***

***c. The full amount of the AFUDC capitalized during the fiscal year. This shall be shown as a single entry that has the effect of increasing the net income reported for the year by the full amount of the AFUDC.***

***d. An AFUDC that does not exceed that which results from summing the products of EGNB's average monthly CWIP and one-twelfth of the approved weighted cost-of-capital.***

Dated at the City of Saint John, New Brunswick this 24th day of March, 2005.

BY THE BOARD

Lorraine R. Légère
Board Secretary

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## SCHEDULE "A"

### Illustrative Example of Accounting for AFUDC

Consider a gas utility capitalized with *50 %* debt with interest at *7 % per annum* and *50 %* equity at a return of *17 % per annum,* resulting in a *12 %* weighted cost of capital. The utility has PP&E assets totaling *120 M$* prior to a *12 M$* construction program, which occurs entirely within the reporting year.

The construction program results in an average balance of CWIP of *2 M$* per month for six months. The AFUDC is calculated at a rate of one-twelfth of the annual weighted cost of capital, or *1 %* of the average CWIP balance per month, yielding *20 K$* per month for six months. Both the *2 M$* per month CWIP and the *20 K$* per month AFUDC are capitalized into PP&E during the fiscal year. The six month construction program thus results in *12.12 M$* being added to PP&E, increasing the balance to *132.12 M$*. By being included in the rate base in this way, the utility is fully and fairly compensated for its investment by those ratepayers who benefit from the investment.

The *12.12 M$* invested in the project will normally be derived from various sources: retained earnings, operating cash flow surplus (if any), short & long-term debt, and equity injections. For simplicity, and because it is reasonable to assume that the operating surpluses and retained earnings so used would otherwise be available to distribute to shareholders as dividends, we normally simply assume that it comes from debt and equity according to the normal and approved capital structure. In this case, we'd assume that *50%* came from debt *(6.06 M$)* carrying 7% interest, and 50% came from equity *(6.06 M$)* requiring a 17% return.

Partly offsetting the *12.12M$* of additional assets recorded on the balance sheet (*120 K$* of which is AFUDC) is *6 M$* of debt, representing the debt incurred to undertake the project. The debt is a liability on the balance sheet, so the net result is an increase in owners' equity equal to *6.12 M$*. Of this, *6 M$* must have come from owners' equity contributions or retained earnings, as it was cash money that had to be spent on the goods and services needed to complete the capital project. That leaves *120 K$* of owners' equity that has been created on the balance sheet by inclusion of the AFUDC and for which an accounting must be made.

It is worth noting at this point that GAAP allows a non-rate regulated company to capitalize only the ***interest*** associated with debt incurred to finance the project during the construction period. At *7 %* p.a. roughly *35K$* would appear on the balance sheet as "Interest Capitalized" in the *6* month construction program and would similarly require that an accounting be made.

Accounting for the *120 K$* of assets that arise from capitalizing the AFUDC requires an adjustment on the income statement. The income statement is designed to summarize the ***operating*** results for the year. Its general format lists revenue from the year's operations, deducts expenses associated with the year's operations and reports the difference as a net income or loss.

Interest on outstanding debt is an operating expense, and will be recorded on the income statement as such. In our example, interest expense would include *7%* interest on the *60M$* debt previously incurred to buy the *120 M$* of PP&E that was on the books before the construction program (*4.2 M$*), interest on the debt associated with new assets that entered service before year's end (*~157.5 K$, assuming the 1st months construction was in the rate base for 7 months, the 2nd for 6 months, etc. )*, the interest paid on debt associated with financing the construction work in progress (CWIP, *~35 K$*), and the interest on any operating loans. Put simply, the income statement will record total interest expenses recorded in the company's books, and it effectively charges that interest to the ratepayers of the company during that year.

The interest associated with CWIP is a portion of the AFUDC, and has been capitalized for recovery from future ratepayers. Therefore it cannot be charged against income during the current year. It should be netted out of the operating statements interest expense by way of a *35 K$* interest credit entry in the income statement. Doing so would leave *85 K$* remaining (AFUCD of *120 K$* minus *35 K$* interest credit), and for which a further accounting is necessary.

This *85 K$* must come from somewhere, because it has been recorded as an asset on the balance sheet. It represents the return on equity associated with CWIP during the year reported and should appear as such on the income statement. Because this return on equity is a portion of the AFUDC, it too has been capitalized for recovery from future ratepayers and cannot legitimately be earned in the current year. It can be netted out by simply increasing the amount of the interest credit previously described, from *35 K$* to the full amount of the AFUDC *120 K$*. This is the treatment described in the USoA.

This can also be accomplished by moving that portion which is not interest *(85 K$),* or all of the AFUDC, to the top of the income statement, where it is recorded as a revenue item. Since income equals revenue minus expenses, moving an item that reduces expenses to the revenue portion of the income statement means that it must increase the recorded revenue, if the correct net income (or loss) is to be reported.