

THE NEW BRUNSWICK BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF an application by the New Brunswick Power Corporation for approval of changes in its charges, rates and tolls.

DECISION

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IN THE MATTER OF The Public Utilities Act, R.S.N.B. 1978, Ch. P-27 as amended

IN THE MATTER OF an application by the New Brunswick Power Corporation for approval of changes in its charges, rates and tolls.

Board:

David C. Nicholson

- Chairman

B. Fernand Nadeau

Vice-Chairman

J.E. Stevens Claudette Stymiest CommissionerCommissioner

Paul E. LeBlanc

Commissioner

Ivan McLean

Commissioner

Frank E. Kane

- Commissioner

NB Power:

Thomas B. Drummie, Q.C. and L. Paul Zed,

Solicitors

The Large Power

Users Group:

E. Neil McKelvey, Q.C., James F. LeMesurier

and Cynthia J. Benson, Solicitors

The Power Commission

of the City of Saint John

and the City of Edmundston

Electric Department

David G. Barry, Q.C., Solicitor

McCain Foods Limited:

D.M Gillis, Q.C. and R.J. Gillis, Q.C., Solicitors

Public Intervenors:

Robert L. Kenny, Q.C., and Ivan Robichaud, Solicitors

Board:

Harry G. Colwell, Solicitor

TABLE OF CONTENTS

Page
mmary of Conclusions
croduction 1
ues From Previous Decisions 4
Transfer of \$16.0 million from Equity to Fuel Channel Removal Account
92-93
Load Forecast20Classification of Belledune Scrubber21Changes in Rate Design23Adjustment of Revenue to Cost Ratios27Point Lepreau Capacity Factor30Export Sales Stabilization Account32Generation Equalization Account33Disposal of PCB Equipment and Waste39Operations, Maintenance & Administration Expenses40Early Retirement Costs431992-93 Overall Results45
93-94
Outlook for 1993-94
her55
Informal Intervenors

SUMMARY OF CONCLUSIONS

ISSUES FROM PREVIOUS DECISIONS

Transfer of \$16.0 million from Equity to Fuel Channel Removal Account

The Board reaffirms its previous decision and directs NB Power to comply with its decision of May 22, 1991. (Page 5)

Return on Equity Approach to Regulation

The Board concludes that its decision to consider a return on equity test when setting rates for a future test period is appropriate. (Page 8)

Treatment of Guarantee Fee in Calculation of Return on Equity

The Board wishes to clarify its position in this matter. The Board recognizes that NB Power is obligated to pay the guarantee fee to the Province and that the fee must be recovered as part of the rate-setting process. The Board also recognizes that there may well be a value attached to the guarantee of NB Power's debt. That value would be the cost saving related to the reduction in interest rates which results from the Corporation's bond rating, compared to the rating it would enjoy if it were a self-sustaining operation. The Board would regard this cost saving as a reasonable charge to NB Power's customers.

The Board is prepared to consider any evidence that NB Power may provide in the future with regard to the value of the guarantee and to make the appropriate adjustments.

The Board considers that any part of the fee charged to NB Power which exceeds the benefit received is effectively a return to the owner and is equivalent to a dividend. (Page 11)

Demand Side Management

NB Power proposed to treat DSM costs in essentially the same way as the cost of supply side options. The Board considers this policy correct in principle. (Page 12)

The Board considers that the savings from DSM programs should be verifiable and directs NB Power to file its plans for accomplishing this. (Page 13)

Maintenance Costs

The Board will accept the \$3.1 million as being a reasonable amount for unplanned maintenance for 1992-93 but directs NB Power to continue to track the costs in this category in order to permit a proper review of future budgeted amounts. (Page 15)

Analysis of Costs of NB Coal

The Board believes it has done all it can to bring out the facts related to the use of NB Coal by NB Power. The government has issued a directive to NB Power and the Board must allow for recovery of the associated costs. It is the opinion of this Board that no further action can be contemplated at this time. (Page 19)

1992-93

Load Forecast

The Board strongly recommends that NB Power include the effects of price elasticity in its future load forecasts. (Page 20)

Classification of Belledune Scrubber

The Board concludes that NB power's classification of generating plant costs in the 1993-94 cost of service study is inconsistent and results in an undue bias. The Board directs NB Power to revise its 1993-94 cost of service study in accordance with the approved 40/60 split as soon as possible. (Page 22)

Changes in Rate Design

Residential Rate

The Board approves the rate as proposed. (Page 24)

General Service I Rate

The Board considers these changes to be constructive and approves the rate as proposed. (Page 24)

General Service II Rate

The Board considers that no customer should experience an increase in excess of approximately 8%. The Board therefore does not approve the rate as presently filed and directs NB Power to modify the rate so that the increase experienced by any customer in this class will not exceed more than approximately 8%. (Page 25)

Small Industrial Rate

The Board approves the proposed rate. (Page 26)

Other Rates

The Board has reviewed the other rate changes and approves them as submitted. (Page 26)

Adjustment of Revenue to Cost Ratios

The Board finds that the differential rate adjustments proposed by NB Power are reasonable under the circumstances and constitute an appropriate response to the Board's stated requirements for narrowing the range of revenue/cost ratios. (Page 29)

Point Lepreau Capacity Factor

While the allowance may be slightly conservative, it does not appear to the Board to be unreasonable. (Page 31)

Export Sales Stabilization Account

The Board considers that the calculations are appropriate and comply with the Board's directive in the Accounting and Financial Policies Decision. (Page 32)

Generation Equalization Account

The Board considers that the proposed methodology is a fundamental change to the philosophy underlying the Generation Equalization Account and not simply a refinement. The Board considers that the original rationale of basing adjustment on the actual performance remains valid and that the evidence presented does not justify any change from this principle. (Page 36)

Disposal of PCB Equipment and Waste

The Board is concerned that known costs which should have been provided for in previous years are being carried forward to be recovered from future customers.

The Board accordingly directs NB Power to make an estimate of the cost necessary to dispose of the PCB waste in storage at March 31, 1993 and record a provision therefore. (Page 39)

Operations, Maintenance & Administration Expenses

NB Power's Operations, Maintenance & Administration Expenses (OM&A) is the area in which the Corporation can exercise the most control over expenses. (Page 40) The 1992-93 projection represents an overall increase of more than \$10 million in OM&A from the previous year, on a comparable basis.

The Board does not consider that an increase of \$10 million, approximately 4%, in OM&A, year over year, represents effective control of costs. (Page 41)

Early Retirement Costs

The Board directs NB Power to record the estimated costs of early retirement of the year ending March 31, 1993 as an expense for the year. (Page 43-44)

1992-93 Overall Results

The Board therefore considers that the increases that took effect on October 1, 1992 will not result in excessive earnings for NB Power during 1992-93. (Page 45)

1993-94

Outlook for 1993-94

NB Power was not prepared to discuss the 1993-94 year with sufficient precision to permit a calculation of the appropriate revenue requirement. (Page 46)

The Board believes that the public would have been better served if the 1993-94 year had been thoroughly reviewed at this public hearing. (Page 47)

The Board is concerned that the lack of relevant information for 1993-94 means that either no plans existed or that plans did exist but NB Power did not wish to discuss them publicly.

(Page 48)

NB Power's evidence was that, under traditional accounting approaches, the effect of bringing Belledune into production would be an additional revenue requirement in 1993-94 of \$91.4 million. An increase in rates of over 12% would be required to produce an additional \$91.4 million. It would now be extremely difficult to hold a public hearing to discuss the accounting alternatives to deal with these additional costs before July. Therefore, decisions will be made by NB Power, in private and on a tentative basis, as to the accounting methods to be used. (Page 49)

The Board considers that the continuation of the increases of October 1, 1992 will not, under any of the projections presented during the hearing, result in excessive earnings for NB Power in 1993-94. The Board, therefore, approves the increases implemented by NB Power on October 1, 1992 (with the one exception discussed above) on a final basis. (Page 50)

Deferral of Common Costs for Belledune

If there is a reasonable chance that another unit or units will be built at Belledune, the Board considers that it would

be appropriate to defer the recovery of the relevant portion of the common costs until such time as the additional unit or units are built. (Page 51)

Escalating Charge Depreciation for Belledune

The Board considers that it would be appropriate to give serious consideration to the use of the escalating charge method of depreciation for the Belledune generating station. (Page 52)

Deferral of Costs - Rate Smoothing

If, after all reasonable efforts have been made to maximize revenues and to minimize costs, a sharp rate increase would still be necessary, the Board would be prepared to consider a rate smoothing proposal as long as certain conditions were met. (Page 53)

Minimum Filing Requirements

The discussions at this hearing clearly demonstrate that further improvements are necessary and possible. (Page 59)

Comments on Process

In its decision on the Accounting and Financial Policies of NB Power, a number of legislative changes were recommended. The changes would facilitate the information gathering process and allow public hearings to proceed more efficiently and with less

expense. The Board still believes these changes would be beneficial to the process and result in further cost savings. (Page 60)

INTRODUCTION

The New Brunswick Power Corporation (NB Power) applied, on October 6, 1992 to the Board of Commissioners of Public Utilities (the Board) for approval of a general increase in its rates for services offered within New Brunswick. This application was made pursuant to Section 38 of the <u>Public Utilities Act</u> (the Act).

The application requested approval of increases which NB Power had implemented on October 1, 1992. The ability of NB Power to implement increases in its rates prior to receiving the approval of the Board was made possible by an amendment to the Act effective May 20, 1992. Previously, NB Power was required to obtain Board approval in advance of any change in its rates. The amendment does require NB Power to apply to the Board within thirty days of the date on which the change takes effect.

The changes were projected to result in an average rate increase of 5%. The increase was not distributed uniformly among the customer classes. The proposed effective percentage increases were:

Residential	6
General Service I	2
General Service II	5
Small Industrial	2
Large Industrial	5
Street Lights & Unmetered Service	4.5
Water Heaters (Rental)	8
Wholesale	5

A pre-hearing conference dealing with procedural matters was held on November 5, 1992. A Motions Day was held on December 22, 1992 to provide an opportunity for parties to present motions regarding the need for NB Power to provide further information. The Large Power Users Group (LPU) also presented a motion that NB Power's application should be dismissed. In its decision of January 13, 1993 the Board denied the LPU motion for dismissal. The Board directed NB Power to file certain additional information prior to the start of the public hearing. The Board, as a result of considerable discussion on Motions Day, also commented on the issue of the information that should be available with respect to the 1993-94 year. The Board provided its views on what constitutes a "future rate period" and the potential difficulties of an application under Section 38.

The public hearing to review NB Power's application commenced on February 8, 1993 and concluded on February 22, 1993 after nine days of hearing.

The LPU consisted of the following companies:

Brunswick Mining and Smelting Corporation Limited Fraser Incorporated Irving Oil Limited Irving Paper Limited Miramichi Pulp & Paper Inc.
NBIP Forest Products Inc.
St. Anne-Nackawic Pulp Company Ltd.
Stone Consolidated Incorporated

The Power Commission of the City of Saint John and the City of Edmundston Electric Department will be referred to as the Wholesale Customers in this decision.

The witnesses who testified on behalf of NB Power were:

Mr. K.B. Little Mr. J.A.F. Cook Mr. A. Gilliss	 Vice-President, Finance Partner, Deloitte & Touche, Fredericton Vice-President, Corporate Planning & External Marketing
Mr. W. Marshall Mr. C.F. Baird	 Senior Engineer, Power Supply Planning Senior Vice-President, Engineering & Operations
Mr. D.M. Reid Mr. C. Flynn Mr. A. Cormier Mr. N. Bhutani	- Director, Budgets & Cost Control - Senior Advisor, Strategic & Technical Affairs - President, NB Coal Limited - Manager, Rates & Load Forecasting

ISSUES FROM PREVIOUS DECISIONS

Transfer of \$16.0 million from Equity to Fuel Channel Removal Account

In its decision on Accounting and Financial Policies dated May 22, 1991 the Board stated as follows:

"Accordingly, for regulatory purposes, the Board orders NB Power to transfer \$16,000,000 from earnings invested in the business to the fuel channel removal account and to recompute future charges to customers." (Page 40).

In Exhibit 1, NB Power presented the following evidence:

- "Q. Mr. Little, in the decision of this Board of May 22, 1991 on the accounting and financial policies of NB Power at pages 36-40, there is a discussion of the fuel channel removal account. The Board pointed out that NB Power had transferred \$13,300,000 from equity to the fuel channel removal account and ordered that for regulatory purposes an additional transfer of \$16,000,000 should be made with charges to customers subsequent to 1988 being calculated on the basis of an annual charge spread over the period of service of Pt. Lepreau prior to the projected removal of the fuel channels. What is NB Power's position on this determination?
- A. NB Power would like the Board to reconsider its decision on the \$16,000,000 transfer from equity to the fuel channel removal account.
- Q. What is the problem with transferring \$16,000,000 from equity to the fuel channel removal account?
- A. We believe that the transfer constitutes retroactive rate making and that it prevents recovery of a legitimate cost from customers."

Mr. McKelvey stated in summation:

"Now my point is obviously it is agreed that what you are doing with this \$16 million is requiring future customers to pay it when it should have been paid by those in the past. . . . They knew there was going to be a cost and they should have put some estimate in there, even though it wasn't at that point capable of being exact," (Transcript page 1038)

The Public Intervenor stated his opinion that:

"Because the issue of retroactive rate making is not applicable to this matter and because the principle of intergenerational equity should be upheld, the Public Intervenor requests the Board to reject the application by NB Power to reconsider its decision on a \$16 million transfer from equity to the fuel channel removal account." (Transcript page 1056)

The Board has carefully considered the evidence submitted by NB Power in support of its request for the Board to revisit its previous decision and the opinions expressed by the intervenors. The Board reaffirms its previous decision and directs NB Power to comply with its decision of May 22, 1991.

Return on Equity Approach to Regulation

In its decision on Accounting and Financial Policies dated May 22, 1991 the Board concluded that, for the purposes of setting rates, it was not appropriate to focus solely on the debt to equity and interest coverage ratios, and stated:

"The Board agrees with both Dr. Kalymon and Mr. Carmichael that the proper approach must include consideration of the net income of NB Power and considers it desirable that the appropriate amount of net income be clearly established. The rates can then be set accordingly. The Board is of the view that an appropriate net income will result in debt to equity and interest coverage ratios that are appropriate for NB Power." (Page 75)

The Board recognized that this concept had not been thoroughly canvassed at the hearing and stated that it would welcome any comments on its recommended approach.

In Exhibit 1, NB Power stated:

"Generally speaking, we believe that a return on equity approach adds a useful third dimension to the question of the appropriate level of net income, so long as it does not take precedence over the utility's more traditional tests when conditions warrant otherwise. We also believe that, subject to the foregoing, the utility's cost of debt is appropriate as a rate of return so long as NB Power is a Crown Corporation and the Government has not established any market-based rate of return criteria."

Under cross-examination by Mr. Barry, Mr. Little confirmed this position as follows:

"I don't think I have expressed difficulty with the Board's return on equity test as an addition to the other two tests. I don't know whether the Board intended it to be a cap on the rate of return or whether it was intended to be a third measure, which does have some value." (Transcript page 734)

The LPU agreed with the Board's recommendation as

follows:

"We support the Board's decision that rate of return on equity at the embedded cost of capital should be applied. But we do agree that it should only be one of the factors involved, the others being interest coverage, which the Board in the finance and accounting hearing said was the most important, and also the debt/equity is a lesser important one." (Transcript page 1041)

The Public Intervenor noted:

"...that interest coverage, debt/equity ratios, and return on equity, are not independent of each other, but rather the return on equity is strongly influenced by the interest coverage allowed or achieved, and the particular debt/equity ratio that exists at a point in time." (Transcript pages 1056-7)

The Public Intervenor concluded:

"Now the point to be made here is that interest coverage is a cumbersome and unwieldy tool for deriving return on equity. The Board should be cautious of any unintended effects associated with the use of interest coverage to derive a return on equity, particularly in periods when NB Power's debt/equity ratios increase as a result of borrowings to finance capital expansion. The relevant figure to evaluate is the net income the utility expects to achieve in a given period rather than a specific interest coverage ratio." (Transcript page 1057)

The Wholesale Customers' position was:

"...I think it is subsection 42 (1), which calls for recovery of sufficient costs to allow the appropriate interest coverage ratios and debt to equity ratios that are important.

I point out again that there is no right to a return on equity for NB Power. Although you concluded in the accounting and financial decision that a return on equity, and I quote your words, "an appropriate net income will result in debt to equity and interest coverage ratios that are appropriate for NB Power", I think that was at page 75, and also that "an appropriate return on equity is a normal cost for a properly managed corporation", on page 76. I believe you should revisit that aspect of the decision." (Transcript pages 1101-2)

The Board concludes that its decision to consider a return on equity test when setting rates for a future test period is appropriate. In addition, the Board confirms that the appropriate rate of return on the equity component of NB Power's capital structure should be the embedded cost of NB Power's debt.

Treatment of Guarantee Fee in Calculation of Return on Equity

The decision on Accounting and Financial Policies dated May 22, 1991 states:

"The guarantee fee is an annual payment from NB Power. It is the view of the Board that this fee represents a return to the Province due to its ownership of NB Power. Therefore, the Board will deduct the amount of the guarantee fee from the amount calculated as the appropriate return on equity when setting the rates of NB Power." (Page 79)

Again, the Board recognized that this concept had not been thoroughly canvassed at the hearing and stated that it would welcome any comments on its recommended approach.

In Exhibit 1, NB Power disagreed with the Board's proposed treatment and stated:

"The Board has acknowledged that the guarantee fee is a cost (December 6, 1991 decision, page 38) and that NB Power is obliged by legislation to pay it. Removal of an amount equal to the guarantee fee from the allowed net income in the Board's return on equity test effectively disallows recovery of that cost. Recovery is allowed in other jurisdictions and we believe that it should be allowed here as well, particularly since section 42 of the Public Utilities Act requires provision for the full recovery of all NB Power's costs as particularized under section 20 of the Electric Power Act."

Mr. Little was asked:

"If the Board agrees with NB Power's recommendations on non-exclusion of the guarantee fee from the return on equity test, what implications would this have for the appropriate level of net income?"

He responded:

"The net income target would increase by the amount of the guarantee fee."

Mr. McKelvey stated:

"The next point I want to deal with is the guarantee fee. We support the Board's decision. Now when Mr. Little was questioned by Mr. Barry..., he said: NB Power's finances were always guaranteed by the Province prior to 1988, or prior to the implementation of the guaranteed fee? Mr. Little: yes.

Question: And no charge was ever made prior to that? Answer: That's correct.

...Obviously, I submit, that this is a means of raising money by the government." (Transcript page 1039)

The Public Intervenor stated:

"We believe that there is a distinction to be made between return on equity invested by the Province in the utility and a fee for guaranteeing the debt issued by NB Power. Therefore, we would argue that the guarantee fee should be treated as an expense and not subtracted from an amount calculated as the appropriate rate of return.

Now having said this, the Public Intervenor requests the Board to make no change in the way in which it currently treats the guarantee fee until such time as the Province directly or through NB Power provides some defence for the current level of this guarantee fee. We note with some concern that the rate has jumped from .00479 in 1988 to .006489 in 1992, an increase of 35 percent." (Transcript pages 1058-9)

Mr. Kenny concluded:

"Without some evidence on the record as to the reasonableness of the rate charged by the Province to NB Power, it is probably that only a portion of the rate is attributable to the fee for guaranteeing the debt, and the remaining portion is nothing more than a thinly disguised transfer of profit, whether the utility makes any profit or not.

Accordingly, the Public Intervenor requests the Board to leave its treatment of the guarantee fee unchanged until such time as it receives sufficient evidence to support the rate level set by the Province." (Transcript page 1060)

The position of the Wholesale Customers was:

"The government has always been responsible for the debt. Nothing changed in 1988 or indeed in 1990. In fact in our view it is simply a political decision by many governments, not just our own, to find a way to recover funds from their ownership of a public utility." (Transcript page 1104)

Mr. Barry concluded:

"We have heard no rationalization sufficient to convince us that the fee is anything other than an equity return to the shareholder, as the Board has determined, and it should be continued to be treated as such. Accordingly, our recommendation is to reaffirm your earlier decision." (Transcript page 1104)

The Board has carefully considered this evidence and wishes to clarify its position in this matter. The Board recognizes that NB Power is obligated to pay the guarantee fee to the Province and that the fee must be recovered as part of the rate-setting process. The Board also recognizes that there may well be a value attached to the guarantee of NB Power's debt. That value would be the cost saving related to the reduction in interest rates which results from the Corporation's bond rating, compared to the rating it would enjoy if it were a self-sustaining operation. The Board would regard this cost saving as a reasonable charge to NB Power's customers.

No evidence has been filed with the Board to justify the precise amount of the fee. The Board notes that the percentage presently charged to two other Canadian electric utilities is considerably lower. The Board considers that any part of the fee charged to NB Power which exceeds the benefit received is effectively a return to the owner and is equivalent to a dividend. Therefore, the Board believes that it should be deducted from the amount calculated as the appropriate return on equity when setting the rates of NB Power. The Board is prepared to consider any evidence that NB Power may provide in the future with regard to the value of the guarantee and to make the appropriate adjustments.

Demand Side Management

NB Power's Demand Side Management (DSM) program was based on an integrated resource planning study completed in December 1991. It sought to develop 110 MW of savings by the end of 1996-97 and thereby defer construction of a 100 MW combustion turbine. A summary of the plan filed as part of Exhibit 1 indicated cumulative costs of \$29.8 million and net benefits having a present value in 1992 of \$47.0 million.

The latest load and resources review projects a reduced rate of load growth with the result that capacity deficiency is now expected to occur some years later than 1996. NB power is now reviewing both the optimum level and timing of its DSM program and hopes to complete its study by June 1993. The Board requests that NB Power file a copy of the study as soon as it is available.

The accounting policy proposed for DSM expenditures was also described in Exhibit 1. In summary, NB Power proposed to treat DSM costs in essentially the same way as the cost of supply side options; deferring the costs of longer-life measures until the year in which capacity benefits would first be realized and then amortizing the costs over a ten-year period. For programs providing only short-lived benefits costs would be amortized over a three-year period.

This treatment would preserve intergenerational equity by placing the costs on the customers who would reap the benefits. The Board considers this policy correct in principle.

NB Power evaluates the results achieved by DSM programs on the basis of adoption of energy-saving measures and not by measurement of actual savings. The Public Intervenor submitted that the results should be audited.

The Board considers that the savings from DSM programs should be verifiable and directs NB Power to file its plans for accomplishing this.

Maintenance Costs

Maintenance is a major expense for NB Power. During the review of the previous general rate increase, NB Power did not provide any details of its anticipated maintenance expenses for the 1991-92 year.

The corporation also included, as part of the Corporate Division budget for 1991-92, a "Contingency Fund/Account" in the amount of \$5.0 million. This account was to cover maintenance items of an unforeseen and abnormal nature. The account had not existed in previous budgets. As well, NB Power indicated that there were no specific criteria for determining whether the cost of a given event should be covered by the account. In addition, the rationale for the \$5.0 million amount was unclear, and for these reasons, the Board disallowed it.

The Board directed NB Power to provide additional information on its maintenance costs at the time of the next general rate application and NB Power did so. The total maintenance costs which were identified consisted of three separate categories: non-recurring maintenance, planned preventative maintenance and unplanned maintenance.

Most of the discussion at the hearing concerned the third category - "Unplanned maintenance" which was a replacement for the "Contingency Fund/Account". NB Power foresees the need to incur the costs that are included in this category but has no way of knowing, in advance, where, when or for what purpose the money will be spent. This is because the following criteria must be met

before an activity is considered to be unplanned maintenance:

- 1) The activity must be such that it could not have reasonably been anticipated at the time of budgeting.
- 2) The activity must affect the safe, reliable and efficient operation of a plant, transmission or distribution system.
- 3) The activity must arise from an unforeseen or abnormal condition requiring major repairs which is identified during a planned inspection or is caused by a premature equipment failure or environmental conditions, i.e., storm, flood, fire, etc.
- 4) The magnitude of the activity must exceed \$25,000.
- 5) The work cannot be deferred to the next fiscal year without having a major cost implication, having an unacceptable impact on reliability, creating a safety hazard, or being in violation of a regulation.

The Board is of the view that the above criteria are reasonable guidelines for determining when an item is unplanned maintenance.

The Board considers that the unplanned maintenance category is appropriate but there remains the matter of determining the proper amount. NB Power did not specifically track dollars in this category until the 1991-92 year in which \$1.4 million were spent. For 1992-93, NB Power originally budgeted \$5.0 million but revised this to \$3.1 million, of which \$2.1 million was incurred by August, 1992. The Board will accept the \$3.1 million as being a reasonable amount for unplanned maintenance for 1992-93 but directs NB Power to continue to track the costs in this category in order to permit a proper review of future budgeted amounts.

Analysis of Costs of NB Coal

The Board, in its decision of December 6, 1991, stated:

"The Board is concerned that the continued use of NB Coal may not be the least cost alternative. Therefore, in future rate hearings, the Board will require NB Power to file a proper analysis of the costs of the use of NB Coal and all the reasonable alternatives. Further, the Board will expect that NB Power will choose the least cost alternative." (Page 31)

In Exhibit 1, NB Power provided an analysis of the costs of indigenous NB Coal supplied by NB Coal Limited (NBCL). The analysis indicated the estimated average total cost per ton for 1992/93 for the Grand Lake and Dalhousie plants as \$73.67 and \$93.13 respectively.

The Grand Lake units must use coal and imported coal was not available in 1992-93. Accordingly, a comparison of the cost of coal with the cost of imported oil is only appropriate for Dalhousie.

In his evidence, Mr. Flynn indicated that NB Power believes that the fixed costs should be removed from the price of coal for purposes of comparisons with other fuels. These fixed costs, which are estimated at approximately \$12.0 million per annum on page 3-79 of Exhibit 1, arise as a result of NB Power's financial obligations to NBCL. They will be incurred regardless of the level of production of coal by NBCL. The Board concurs with NB Power's position regarding these costs for purposes of comparison.

Mr. Flynn indicated that the estimated fixed costs for 1993-94 will amount to \$37.73 per ton produced by NBCL and the

Board believes that this estimate would be approximately correct also for 1992-93. Accordingly, the following cost comparison for Dalhousie has been calculated by the Board:

Total cost per ton on Exhibit 1 \$93.13

Less fixed costs 37.73

ADJUSTED COST PER TON \$55.40

To permit a proper comparison the adjusted cost per ton must be converted to a cost per million British thermal units (MMBtu). This cost for coal is \$2.37 which compares to a cost for oil of \$1.93.

NB Power indicated that the comparable estimated costs for 1993-94 at Dalhousie are \$2.92 per MMBtu for NB Coal and \$2.40 for oil.

The Board concludes from these comparisons that it would have been more economical to use oil than coal in 1992-93 and that the projected costs for 1993-94 lead to the same conclusion.

However, under cross-examination by Mr. Gillis, Mr. Flynn indicated certain concerns of NB Power:

"We had discussions in-house regarding, you know, the appropriateness of that level of burn and we also were aware of the implications of the relative cost of NB Coal versus imported coal, and we decided that we should take the issue to government to make them aware of what the commercial aspects of NB Coal were. And as a result of that, the government saw fit to I would say formalize what has probably been government policy for many years, this government, previous government." (Transcript pages 194-5)

The formalization referred to by Mr. Flynn is an Order in Council dated November 5, 1992, which reads:

"Under subsection 3(7) of the Electric Power Act, the Lieutenant-Governor in Council determines that NB Power be required to purchase up to 450,000 tons per year of indigenous New Brunswick coal until such time as the Government of New Brunswick believes a change is warranted and this Order in Council is amended or revoked." (Interrogatory NBP (PCCSJ)2)

The Board believes that, in effect, the government has directed NB Power to purchase up to 450,000 tons of coal per annum from NBCL, and it is the view of the Board that the utility must comply with this directive.

The Public Intervenor suggested:

"If NB Power believes that there is a social objective in maintaining the NB Coal operation, then it should seek to recover costs of this social objective by way of a subsidy from the Government of New Brunswick. It should not attempt to place the burden of the social objective on the ratepayers." (Transcript page 1064)

Mr. Kenny continued:

"The Public Intervenor requests the Board to remove from the revenue requirements of the utility for the fiscal years '92, '93 from '93, '94, all expenses associated with the use of NB Coal above those of the least cost alternative." (Transcript page 1065)

Mr. Gillis claimed:

"The position I take is that NB Power requesting that the government pass an Order in Council does not demonstrate good business practice whatsoever. And that gets back to Section 2 of the object of the Act.

It demonstrates quite the contrary. There is serious concern on the part of senior management of NB Power that they could not justify burning New Brunswick coal at Belledune, and management wished to blame the government for that decision. So on that basis, management wrote the Order in Council, sent it to the government and had the Lieutenant-Governor in Council pass it as a fait accompli.

I suggest on such basis such expense based upon such Order in Council should not be allowed, as it is unreasonable, excessive and it has been precipitated by something which was poor business practice." (Transcript page 1085)

Mr. Barry stated:

"The last issue dealt with under tab 3 was the treatment of NB Coal costs. Although it appears that Order in Council 92-910, I believe it is, and subsection 3 (7) of the Electric Power Act, probably requires you to allow for the recovery of the cost, we believe you should take it into account in how you choose to regulate and establish rates." (Transcript pages 1105-6)

The Board has carefully considered the evidence and comments from the Intervenors. It is clear from this hearing and evidence adduced at the previous rate hearing, that, at certain times, the cost of NB Coal has been lower than that of alternative imported fuels although the overall savings have not been established with certainty. No one can predict if and when such conditions will prevail again at which time, NB Power will have secured a supply of indigenous coal through maintaining the operations of NB Coal.

Through this discussion, the Board believes it has done all it can to bring out the facts related to the use of NB Coal by NB Power. The government has issued a directive to NB Power and the Board must allow for recovery of the associated costs. It is the opinion of this Board that no further action can be contemplated at this time.

1992-93

Load Forecast

NB Power regularly prepares twenty-year load forecasts which project the firm electricity requirements of the system. It is a strategically important document since it constitutes the starting point for much of the financial and facilities planning activities.

NB Power uses various means to forecast the requirements of its different customer classes but there is no explicit recognition of price elasticity. In fact, Mr. Bhutani stated that the Corporation does not have any data on the price elasticity of demand for any of its customer classes. The Board is concerned by this omission. It is reasonable to assume that higher prices for electricity will result in some curtailment of demand.

There have been two increases in rates in recent years and there may well be further significant increases. This means that a forecast which fails to account for the price elasticity of demand may overstate future load requirements. The Board strongly recommends that NB Power include the effects of price elasticity in its future load forecasts.

Classification of Belledune Scrubber

In the generic hearing on cost allocation and rate design (CARD), NB Power proposed to classify generation fixed costs 40% as demand-related and 60% as energy-related. In its decision, the Board accepted this proposal pending further study and report by NB Power.

The 1993-94 cost of service study filed by NB Power classified generation in this manner with one exception: the flue gas desulphurization equipment (the scrubber) at Belledune 2 was classified 100% as energy-related. LPU submitted that the approved 40/60 split should be applied to this equipment and asked the Board to order NB Power to prepare a revised cost of service study.

Mr. Bhutani defended the 100% energy classification on the grounds that the scrubber is in fact energy-related. He stated that the 40/60 split resulted from analysis of the system by the Peaker Credit Method. He also stated that, at the time of the analysis, the scrubber did not form part of the system. If the same analysis were repeated in 1993-94, he claimed that the scrubber would be classified as 100% energy.

The Board accepts Mr. Bhutani's contention that scrubbers are energy-related and that the Peaker Credit Method would so classify them. However, the Board cannot accept his assumption that the approved 40/60 split was based solely on the Peaker Credit Method, or that it was intended to apply solely to the plant in service at the time of the original analysis.

His position would require that combustion turbine plants be classified as 100% demand. The filed cost of service study shows that the Ste. Rose plant was split 40/60.

The Board concludes that NB power's classification of generating plant costs in the 1993-94 cost of service study is inconsistent and results in an undue bias. The Board directs NB Power to revise its 1993-94 cost of service study in accordance with the approved 40/60 split as soon as possible.

The Board will welcome proposals which can be shown to enhance the accuracy of cost of service results, either as part of NB Power's pending review and report on methodology or at any other time. However, it will expect NB Power to apply the methods as approved by the Board from time to time and to do so in a consistent manner.

Changes in Rate Design

The proposed rates contain several design changes which result in different impacts on different customers within the same class. These impacts were quantified in Exhibit 1. The design changes in each rate and the reasonableness of the resulting impacts are reviewed hereunder.

Residential Rate

In the proposed rate, the service charge and energy rates are 5% higher and, in addition, the size of the first energy block has been increased from 800 KWh per month to 900 KWh.

Mr. Bhutani testified that the block size had been increased for two reasons. First, it was consistent with the evidence of Mr. VanderVeen in the CARD hearing that it was normal utility practice to keep the block size near the average monthly use. For NB Power's residential customers, average use is about 1,350 KWh per month. Secondly, it provided a means of applying a differential rate increase while avoiding excessive impacts on some residential customers.

Mr. Bhutani agreed that the block size required to effect recovery of the balance of customer cost would be shorter than 800 Kwh. He explained that the rate differential between the first energy block and the balance of use was mainly attributable to historic evolution.

The Board has some reservations about the wisdom of rate changes made on the basis of alleged normal utility practice. It

believes that changes should respond to perceived needs of NB Power's system and should be consistent with improvement of intraclass equity. The second reason advanced by Mr. Bhutani falls in this category.

The Board observes that the differential impacts due to the larger block size are relatively small, considers them to be warranted under the circumstances, and approves the rate as proposed.

General Service I Rate

The proposed rate structure has been developed by applying different percentage increases to the various rate elements: service charge 5%, demand charge 2.5%, first energy block 1%, and balance of KWh 2.5%. The new rates result in an average increase of 2% with no customer more than 1% above or below this.

The Board considers these changes to be constructive and approves the rate as proposed.

General Service II Rate

The main change in the proposed rate is the introduction of a demand charge, applicable to all demands in excess of 20 KW. This moves the rate design closer to that of the General Service I rate and is a step toward eventual merging of the two rates.

Other changes included a 5% increase in the service charge, a 1% increase in the first block rate and a 4.4% increase in the other energy block rates. The changes represent an average 5% increase.

The bill comparison for this rate indicates a wide range of impacts. Customers with demands of 20 KW or less would receive increases between 1% and 4%. Large customers with load factors of 30% or more would receive increases of between 6 and 8%. However, certain large customers with low load factors could experience increases ranging up to 13% or more.

While the Board appreciates the need to make adjustments of the type proposed by NB Power, it considers that no customer should experience an increase in excess of approximately 8%. The Board therefore does not approve the rate as presently filed and directs NB Power to modify the rate so that the increase experienced by any customer in this class will not exceed more than approximately 8%.

The Board considers that the required modifications can be effected without any significant impairment of rate yield.

The Board, therefore, directs NB Power to file, on or before June 30, 1993, a revised General Service II rate for Board approval. When approved, the Board will order NB Power to make adjustments in the billing of those customers affected by the change, retroactive to October 1, 1992.

Small Industrial Rate

The proposed rate incorporates a 4% increase in all rates and charges and eliminates the billing demand ratchet clause resulting in an effective increase of 2%.

The Board approves the proposed rate.

Other Rates

The proposed Large Industrial and Street Lighting rates contain a 5% increase, applied equally to all rate elements. Water Heater rates were increased 8% in response to a Board order and no change was made in the rates for unmetered service in order to realign rate yield and cost.

The Board has reviewed the other rate changes and approves them as submitted.

Adjustment of Revenue to Cost Ratios

Cost of service studies filed by NB Power in the CARD hearing showed an imbalance between revenue and cost of service for several rate classes. In its decision of April 15, 1992 the Board stated that it would "expect NB Power, at the time of its next general rate application, to propose changes which will narrow the existing range of revenue to cost ratios." The Board also instructed NB Power to develop a long-range plan to move all class revenue to cost ratios within a target range of 95% to 105%.

The rates now presented for approval provide lower-than-average increases for the two classes with the highest ratios and higher-than-average increases for the residential class and water heaters. The increases and revenue/cost ratios for all rate classes are shown in the following table.

	Average Rate	Revenue/Cost Ratio				
Rate Class	Increase (%)	1992/93 Study	1993/94 Study			
Residential	6	87.0	87.5			
General Service	⊋ I 2	131.0	127.0			
General Service	∍II 5	112.2	115.7			
Small Industria	al 2(a)	117.1	117.0			
Large Industria		103.5	102.5			
Street Lights 8	k					
unmetered	4.5(b)	109.3	114.0			
Water Heater	8	97.3	104.5			
Wholesale	5	113.2	113.4			

- (a) Effective increase resulting from a 4% rate increase and removal of a billing demand ratchet clause.
- (b) Effective increase resulting from a 5% rate increase for street lighting and a 0% increase for unmetered.

In argument, LPU submitted that NB Power does not have a plan for adjustment of class ratios and should be required to develop one which would "get down to the 95, 105 within a reasonable time and not wait for 5 rate cases." (Transcript page 1037). LPU also submitted that NB Power should develop and include in its plan more flexible guidelines for rate shock.

The Wholesale Customers' position was that, in future, all classes should be adjusted in every rate application to move their ratios closer to the target range.

The Public Intervenor submitted that the rate adjustment proposed by NB Power is an "appropriate initiative under the Board's direction on this matter" (Transcript, page 1074).

The first question to be considered is whether NB Power's proposed rate adjustments do or do not constitute an appropriate response to the Board's previous directions.

On cross-examination, Mr. Bhutani said:

The magnitude of increase does influence the adjustment you can make in one rate case---I think the current application with the distribution of rate increases reflects NB Power's perspective of what is a reasonable level of rate shock or what is an acceptable level---of differences in rate increases between customer classes." (Transcript pages 251-252).

The Board accepts Mr. Bhutani's view that the size of the overall increase affects the scope for differential adjustment. For the residential class, the proposed increase would be 6%. In addition, many residential customers would be impacted by the proposed 8% increase in water heater rates. The overall increase for the residential class would therefore be greater than 6%.

The reasonableness of a differential rate increase cannot in the Board's opinion be judged on the sole basis of percentages. What might be reasonable in a period of economic buoyancy and rising levels of personal income might well be unreasonable during a recession with widespread unemployment and static or declining income. Moreover, the impact of differential increases on subsidized classes must be balanced against the urgency of reducing the extra burden carried by subsidizing classes.

Having considered all such aspects, the Board finds that the differential rate adjustments proposed by NB Power are reasonable under the circumstances and constitute an appropriate response to the Board's stated requirements for narrowing the range of revenue/cost ratios.

The Board notes that NB Power has undertaken to file a number of reports on rate design in the near future. The Board expects that these reports will provide information on NB Power's plans for future rate adjustments.

Point Lepreau Capacity Factor

LPU submitted that a thorough review of the expected annual capacity factor of the Point Lepreau Generating Station should be undertaken at once and that, pending completion of the said review, the capacity factor should be adjusted.

Mr. McKelvey stated:

"And my submission is this, that until that thorough review has been completed, the capacity factor should be 89.2 percent instead of 85.

Now, I arrive at that by (LPU) 2 (a), the fuel channel removal percentage -- that is the downtime in 1998 to 2000, is 4.84 percent. I am reading from (LPU) 1.

The forced outages -- I really don't take any exception to this, is 1.83 percent. The planned maintenance average to date, from 1983 to 1992, has been 4.81. So all of these percentages added together come to 10.77. In other words, considering forced outage, planned maintenance, fuel channel replacement, there will be downtime to the extent of 10.77 percent for the life of the plant. And the 10.77, if you deduct it from 100 percent, you get 89.2." (Transcript pages 1025-26).

The Board is unable to determine the basis for the 10.77 % downtime as the three figures quoted add to 11.48%.

The Board notes that Mr. McKelvey accepted NB Power's projections for fuel channel removal and forced outage and only objected to the projection for planned maintenance.

In rebuttal, Mr. Drummie suggested it would be folly to set a capacity factor for an aging plant on the basis of the fact that it worked pretty well in the first ten years of its operation. He said that the life of the plant had been extended a bit, the capacity factor had been revised a bit, and suggested that revision

would be ongoing but argued that to adopt a capacity factor of 89% now would be to assume that an older plant would require no more maintenance than a new plant.

The Board notes that, in NB Power's most recent review of Point Lepreau depreciation, the lives of certain components were extended under the expectation that replacement or life-extending repairs would be carried out as part of planned maintenance. Such repairs and replacements would, in the Board's opinion, inevitably result in more extended annual maintenance periods.

NB Power's current estimate of 85% is 4.2% lower than the figure proposed by LPU. It is based on approximately twice as much planned maintenance time in later years than in earlier years of plant life. While the allowance may be slightly conservative, it does not appear to the Board to be unreasonable.

The Board will expect NB Power to conduct periodic reviews and to update its estimates in the future as in the past.

There are three factors which must be considered in calculating the capacity factor. NB Power is conducting a study on the time that will be required for retubing. The Board notes that any variation from the current estimate could have a significant impact on the lifetime capacity factor.

Export Sales Stabilization Account

LPU expressed a concern that the specific adjustments to the Export Sales Stabilization Account were not correct. The Board has carefully reviewed the calculations done by NB Power for this account. The Board considers that the calculations are appropriate and comply with the Board's directive in the Accounting and Financial Policies Decision.

Generation Equalization Account

NB Power has maintained this account for many years. The rationale for the account was provided by NB Power in the evidence filed for the generic hearing on accounting and financial policies. The rationale was:

"Hydro and nuclear units have common cost characteristics in that capitalrelated charges are very high and fuelling costs are very low. When the energy output from these generating sources falls, most costs continue and the utility must also replace the energy from thermal generating plants which have high fuel costs.

These cost characteristics of hydro and nuclear units mean that costs between periods can experience large fluctuations due to certain factors, which are largely beyond the control of the utility, relating to water flow conditions or nuclear unit performance. NB Power believes that customers in any given time period should receive the benefit of average performance from these high quality generating assets, as a matter of intergenerational equity. The utility further believes that stabilization of costs is essential to avoid the rate volatility which would be required to actually track generation costs period-by-period.

To treat customers in each time period equally, and stabilize rates, NB Power determines its revenue requirements each year on the assumption that average water flows and average nuclear unit performance will be realized. This is done even if there is reason to believe performance in either case will be above or below average levels.

In order to equalize the fluctuations in generating costs caused by actual variations from average water flow conditions or nuclear operating performance, NB Power charges or credits income with an amount calculated to adjust such costs to the average cost. The adjustment is based upon the energy variance from the average in each month multiplied by the actual average energy cost of thermal generation during that month. The offsetting debit or credit is included in the generation equalization account." (Accounting Policy Evidence pages 5-6 and 5-7).

Prior to 1992-93, the adjustment for nuclear was straightforward as shown in Table 1. The adjustment was based solely on the performance of the plant and not affected in any way by economy export sales.

Table 2, makes it clear that NB Power has changed its method of calculating adjustments to the account. Now, the existence of nuclear economy export sales would, in some cases, affect the quantity of energy to be used in calculating the adjustment. Mr. Little commented:

"The new rules, as simply stated as I can make them, I guess, would be that if there is above average or below average production from the nuclear unit, for example, we look first to determine whether or not the above or below average could be used within the province.

If in fact we find in any given month that the surplus energy or the energy deficiency could have been used within the province, then there is an adjustment.

If we find that the energy could not all be used within the province, then the portion that could not be used is not adjusted." (Transcript page 845).

"And the evidence of whether it could be used within the province is derived by looking at the amount of nuclear that had to be exported." (Transcript page 847).

The rationale for this proposed approach was that there had been a reduction in firm sales from the Point Lepreau generating station. This meant that considerably more nuclear energy was available for in-province use. However, at times, not all of the energy is needed by in-province customers. In those cases, the excess energy is sold in the economy export market and the quantity of energy for purposes of calculating the adjustment to the account is to be changed to reflect nuclear economy sales.

However, the determination proposed by NB Power is based on monthly averages and not on hour by hour data. Mr. Little provided the following comments in discussion of Table 2:

- "A. The philosophy that we use here, and I am going to describe it as best I can, is that if the exports -- or the amount of energy that can't be used within the province, that is, the portion that's exported in column four, is greater than the above average performance of the unit for the month, then we believe that on average the additional energy really didn't displace any in-province oil, and therefore it doesn't have that fuel displacement value and should not be charged to current customers and put into the account.
- Q. Well what you have just said, is that a determination that is made hour by hour by the fellow that sits in Marysville and--
- A. No.
- Q. No?
- A. No. The system operations in terms of what units are running and the exports that are made every hour, are made hour by hour by the fellow sitting in Marysville. The nuclear equalization adjustment is a monthly calculation.
- Q. And it is done on the average -
- A. We don't know hour by hour, no.
- Q. No. And so therefore on a monthly basis 24 hours a day times 30, out of those hours you don't know if there was one hour or if there was 10 hours or if it was 100 hours at which time in fact that nuclear was replacing oil generated in-province energy, for which there should be an adjustment into the fund at the end of the month?
- A. I think the answer is hour by hour we don't know." (Transcript pages 834-5).

The application of the new rules can have a significant effect. For example, if the rules, as approved by the Board, were used for 1992-93 the months of April, June, August, September and October would all require transfers to the fund. The total for these months for nuclear production would be approximately \$1.8 million as opposed to zero as shown in Exhibit 16. This would reduce projected net income by the same amount.

The discussion above indicates that the proposed adjustments are not based on hour by hour data and that the proposed changes can have a significant impact on the financial

results. The Board considers that the proposed methodology is a fundamental change to the philosophy underlying the Generation Equalization Account and not simply a refinement. The Board considers that the original rationale of basing adjustment on the actual performance remains valid and that the evidence presented does not justify any change from this principle. The Board, therefore, directs NB Power to continue to calculate the adjustments to the Generation Equalization Account in the manner approved by the Board in its Accounting and Financial Policies decision.

TABLE 1

1991/92 MONTHLY NUCLEAR ADJUSTMENT FOR GENERATION EQUALIZATION

Month	Expect NB Share MWH	Actual NB Share MWH	Surplus MWH	Therm Cost \$/MWH	Nuc Cost \$/MWH	Equal- ization \$/MWH	Adjustment \$	Year to Date Adjustment
April 91	146275	184818	38543	23.43	2.74	20.69	797,560	797,560
May	266755	305830	39075	20.51	3.03	17.48	682,974	1,480,534
June	258150	295739	37589	17.48	3.01	14.47	544,058	2,024,592
July	266755	305090	38335	17.74	3.25	14.49	555,500	2,580,092
August	266755	304769	38014	20.78	3.24	17.54	666,810	3,246,903
September	258150	295352	37202	21.08	3.23	17.85	664,231	3,911,134
October	266755	305489	38734	20.99	3.03	17.96	695,758	4,606,892
November	325376	373327	47951	21.52	3.01	18.51	887,759	5,494,652
December	336222	381640	45418	21.75	3.03	18.72	850,037	6,344,689
January 92	336222	383576	47354	21.10	2.80	18.30	866,670	7,211,358
February	314530	359069	44538	18.86	2.77	16.09	716,706	7,928,064
March	336222	358977	22755	17.57	2.77	14.80	336,749	8,264,813

1992 09 30

TABLE 2

1992/93 MONTHLY NUCLEAR ADJUSTMENT FOR GENERATION EQUALIZATION

	At 85%	At 2%			Surplus/	Deficit					
	Availability Expected	ICBF Act/Proj	Surplus/ Act/P		Energy/ Act/P		HPO	Nuc	Equal -	Adjust-	Year to Date
Month	NB Share MWH	In Prov	In Prov	Export MWH	In Prov	-	Cost \$/MWH	Cost \$/MWH	ization \$/MWH	ment \$	Adjustment \$
*Apr 92	138000	76061	-61939	76051	0	14112	15.83	3.65	12.18	0	0
*May	186000	50765	- 135235	25180	-110055	0	18.89	3.65	15.24	-1677738	-16777 3 8
*June	348000	292087	-55913	78723	0	22810	19.34	3.65	15.69	0	-1677738
*July	359000	195756	-163244	160533	-2711	0	21.04	3.64	17.40	-47173	-1724911
*Aug	356000	279420	-76580	101814	0	25234	22.95	3.64	19.31	0	-1724911
*Sept	348000	347061	-939	21239	0	20300	23.01	3.64	19.37	0	-1724911
*Oct	359000	356471	-2529	22441	0	19912	23.29	3.60	19.69	0	-1724911
*Nov	348000	367541	-19541	462	19541	462	25.19	3.60	21.59	421879	-1303032
*Dec	359400	353671	-5729	85	-5644	0	28.13	3.60	24.53	-138457	-1441489
**Jan 93	359400	376919	17519	0	17519	0	25.01	3.60	21.41	375069	-1066420
**Feb	324800	340488	15688	0	15688	0	23.02	3.49	19.53	306414	-760006
**Mar	359400	376919	17519	0	17519	0	22.90	3.46	19.44	340632	-419374

^{*} Actual: April-Dec ** Projection: Jan-March

Disposal of PCB Equipment and Waste

In its 1991-92 Annual Report at page seventeen, with regard to the elimination of high level PCB equipment and waste, NB Power indicated:

"Our goal is to be in a position to proceed with the elimination of the utility's total remaining inventory of high level PCB equipment and waste (now stored at secure NB Power sites) when Environment Canada establishes a mobile PCB incinerator in the Atlantic region within the next few years."

In Exhibit 1, NB Power indicated a projected cost of \$2.0 million in 1993-94 for "PCB Equipment and Waste Disposal".

In cross-examination by Board counsel, Mr. Little indicated that the contaminated oil and waste arose as a result of operations of the years prior to 1992-93, but that no expense had yet been recognized.

- "Q. But again, what I am getting at, if you are going to wait to do that, it is going to be future customers that are going to be paying the costs for - costs attributable to former customers.
- A. I hadn't looked at it that way. But it would be future customers that would incur the cost of actually disposing of those PCB's. That's correct." (Transcript page 868)

The Board is concerned that known costs which should have been provided for in previous years are being carried forward to be recovered from future customers. Generally accepted accounting principles require that liabilities be recognized when an item has an appropriate basis of measurement and a reasonable estimate can be made of the amount involved. The Board accordingly directs NB Power to make an estimate of the cost necessary to dispose of the PCB waste in storage at March 31, 1993 and record a provision therefore.

Operations, Maintenance & Administration Expenses

NB Power's Operations, Maintenance & Administration Expenses (OM&A) is the area in which the Corporation can exercise the most control over expenses. Included in this category are expenses for labour, travel, vehicles, materials, hired services and other. The total amount spent on OM&A was \$267.2 million in 1991-92 and was budgeted to be \$278 million in 1992-93. These are large sums and small percentage changes in the amount spent on OM&A can have a significant effect on net income.

The size of the OM&A, together with the degree of control which NB Power can exercise, make it the most likely expense category Indeed, NB Power identified a \$15.2 for cost containment efforts. million cost cutting program for controllable OM&A for 1992-93. Evidence presented at the hearing indicated that of the target of \$15.2 million, NB Power expects to achieve approximately \$13.1 million of cost reductions from the official budget. The \$13.1 million does not include savings of \$5.8 million which is the estimated benefit from the early retirement program implemented in 1991-92. Nor does it include approximately \$1.5 million savings due to staff reductions in 1992-93. These three cost reductions total \$20.4 million. Despite these cuts, the December projection for 1992-93 OM&A is \$264.0 million.

The actual OM&A amount for 1991-92 was \$267.2 million. However, for proper overall comparison with 1992-93, two adjustments are necessary. The first is to remove \$8.0 million which was a one-time cost due to an early retirement program in 1991-92. The second

is to remove \$5.8 million which equals the salaries of the people who took early retirement. The adjusted 1991-92 OM&A is \$253.4 million. Therefore, the 1992-93 projection represents an overall increase of more than \$10 million in OM&A from the previous year, on a comparable basis.

The Board does not consider that an increase of \$10 million, approximately 4%, in OM&A, year over year, represents effective control of costs.

Attempts to identify specific reasons for this growth in OM&A were complicated by the fact that NB Power had undergone a corporate reorganization. The component groups for several divisions had been altered and this made it difficult to analyze changes in the OM&A for those particular divisions.

A further difficulty arose when attempts were made to review the item "Hired Services", which, at \$50.9 million, is the second largest item in the OM&A category. Interrogatory NBP (PUB) 21 requested an identification and description of the costs contained in "Hired Services". A list of items with corresponding amounts was provided. However, one item called "Other Services -General" totalled \$22.7 million and no description was given. During the hearing Mr. Reid commented on this item as follows:

"There is the AECB fees that have been in there - - -

There is equipment rental, I guess you call it, or service rental for things like supersuckers and loaders and whatever that are required in order to maintain our plants, and there is a number of miscellaneous items in there." (Transcript page 937).

He also stated that "Other Services - General" should possibly be broken down and agreed that, the next time this information is produced, it will be in much more detail.

The Board agrees that such a breakdown is necessary. The availability of appropriate details on NB Power's OM&A will greatly facilitate the review of this very important area.

Early Retirement Costs

The 1991-92 Annual Report, at page twelve, stated the results of an early retirement program offered during that year. A hundred positions were eliminated as a result of that program with an estimated annual saving of \$6.0 million in salaries. The cost of the program was approximately \$8.0 million. This amount was provided for and expensed in the financial statements for the year ended March 31, 1992.

The Corporation is continuing to review the size of its staff and in Exhibit 1, Mr. Little stated:

"The Corporation has now decided to implement an early retirement program to assist in obtaining the targeted position reductions. The projections contained in this application do not make provision for the costs of this program.

The Corporation is planning to defer the costs of this early retirement program and to amortize them over a three to five year period. Such deferral would match the costs of the program to the subsequent wage savings to be realized from the reduction of positions. Although generally accepted accounting principles require immediate recognition of such costs, the Corporation expects that the Board will find this approach and the resultant amortization of costs in future periods to be appropriate in a regulatory environment."

In response to Interrogatory NBP (PUB) 6, the Corporation indicated that the cost of the early retirement program for the year ended March 31, 1993 was estimated to be approximately \$4.0 million.

As pointed out by NB Power above, generally accepted accounting principles require immediate recognition of such costs. The Corporation complied with these principles in 1991-92. The Board is of the opinion that similar costs in 1992-93 should be treated by NB Power in a consistent manner. Accordingly, the Board confirms its

oral decision of February 22, 1993 and directs NB Power to record the estimated costs of early retirement of the year ending March 31, 1993 as an expense for the year.

1992-93 Overall Results

NB Power's projected net income for 1992-93 was \$11.4 million. The effect of Board directions with respect to the 1992-93 year is to reduce projected net income.

The adjusted net income for 1992-93 will not exceed the amount that would be required to satisfy the Board's return on equity test, the interest coverage test or the debt to equity ratio test. Several intervenors argued that the interest coverage ratio for 1992-93 should be 1.0, that is zero net income. The Board notes that a 1.0 interest coverage ratio was not meant as a target but rather as a minimum level which would only be considered under certain circumstances.

For 1992-93, NB Power could have targeted a significantly larger net income. The Board notes that NB Power implemented the increase of October 1, 1992 on its own initiative and that it had full authority to set the amount and timing of such increase. NB Power chose not to implement or apply for any further increases. The timing of the increase has meant that the public hearing could not be held until February, 1993 and that the 1992-93 year has ended before this decision can be written. The Board therefore considers that the increases that took effect on October 1, 1992 will not result in excessive earnings for NB Power during 1992-93.

1993-94

Outlook for 1993-94

NB Power's 1993-94 fiscal year began on April 1. Considerable information was provided during the hearing on 1993-94 including some preliminary analysis of the possible effects of certain non-traditional accounting approaches. However, NB Power was not prepared to discuss the 1993-94 year with sufficient precision to permit a calculation of the appropriate revenue requirement. In response to Interrogatory NBP (PUB) 9, NB Power made the following statement:

"As noted in the application a further rate increase seems probable for the 1993-94 fiscal year. However, budgets for that year will have to be finalized before the rate increase level is decided. Approval of budgets for 1993-94 is currently expected to occur in February or March."

In response to Interrogatory NBP (PUB) 10, the Corporation commented:

"No alternative accounting approaches for Belledune have been decided for 1993-94. There are three types of alternative approaches under consideration at this time,...Detailed discussion of any alternative accounting approaches which may be proposed for 1993-94 and beyond would be planned for subsequent rate hearings...."

NB Power also stated in reply to Interrogatory NBP (PUB) 54:

"Official Budgets for 1992-93 are enclosed. Approval of budgets for 1993-94 is currently expected to occur in February or March. If the budgets form the basis of an application to increase rates during 1993-94, they would be filed with the Board at the time of such an application."

From these comments, it is obvious that NB Power's intention was that a full discussion of the 1993-94 year be conducted in a separate proceeding at a later date.

The Board believes that the public would have been better served if the 1993-94 year had been thoroughly reviewed at this public hearing. Such a review would have identified the revenue requirement for 1993-94 and permitted the establishment of appropriate rates. Reviewing the 1992-93 and 1993-94 years together in one hearing would have reduced the overall cost to the public. As well, the setting of rates for 1993-94 in this decision would have been of assistance to the customers of NB Power in planning their operations for 1993-94. Both of these benefits would have been achieved while still retaining flexibility for further adjustment to the rates during 1993-94, if necessary.

The Board must stress that, in a regulatory environment, whether or not an "official budget" has been struck, is not a critical matter. The Board believes that it is possible to provide sufficiently detailed projections for the "future rate period" whether or not an "official budget" has been approved. When reviewing the projected costs and revenues of the "future rate period", the regulator recognizes that they are just that - projections. The closer the utility gets to the future rate period, the more accurate the projections will become. It is this Board's view that section 42(1) of the Act requires that a review be based on accurate projections and planning. Further, it is reasonable to expect NB Power to be able to provide the required detail on costs and revenues as well as preferred accounting options designed to deal with major new generating additions, to a public hearing held less than two months before the start of the 1993-94 year.

The Board is concerned that the lack of relevant information for 1993-94 means that either no plans existed or that plans did exist but NB Power did not wish to discuss them publicly.

The Board's view is that the Act requires consideration of detailed information in advance and this should have been provided for this hearing. Section 42(1) of the Act states:

"The Board shall, when considering an application by The New Brunswick Electric Power Commission in respect of the charges, rates and tolls to be charged or being charged by the New Brunswick Electric Power Commission, base its order or decision respecting the charges, rates and tolls to be charged or being charged by the New Brunswick Electric Power Commission on all of the projected revenues and all of the projected costs of a future rate period and in so doing shall provide for the full recovery of all of The New Brunswick Electric Power Commission's costs, as set under Section 20 of the Electric Power Act. (emphasis added)

A key term in this section is "future rate period". The Board believes that, when the Legislature used this term, it referred specifically to a rate period and not a "year" for a good reason. If an application occurred well into one fiscal year, as in the present case, then the "future rate period" should include that fiscal year together with the next ensuing year. In any case, a "future rate period" should include, as a minimum, a sufficient period of time so as to minimize the number of public hearings and associated costs.

It is the Board's view that, when NB Power was subjected to rate regulation, the Legislature wanted a forward looking and open regulatory regime. This would normally permit discussion of significant developments and their potential impact on rates well in advance of their occurrence. Both the Board and the public

would have an opportunity to properly examine the projected costs and revenues of a "future rate period" and consider all options and select the most appropriate ones.

In spite of the provisions of section 42(1) and the obvious advantages to the public and the utility, NB Power chose not to have 1993-94 reviewed as part of the future rate period in this hearing. Nor has it requested a change in rates which would recover its costs of the future rate period including the 1993-94 year.

NB Power's evidence was that, under traditional accounting approaches, the effect of bringing Belledune into production would be an additional revenue requirement in 1993-94 of \$91.4 million. An increase in rates of over 12% would be required to produce an additional \$91.4 million. The costs associated with operating the Belledune plant must be recorded and reported beginning with the month of July, 1993. It would now be extremely difficult, if not impossible, to hold a public hearing to discuss the accounting alternatives to deal with these additional costs before July. Therefore, decisions will be made by NB Power, in private and on a tentative basis, as to the accounting methods to be used. Public scrutiny of the appropriateness of NB Power's chosen methods must occur after their introduction.

In Interrogatory NBP (PUB) 10, NB Power had indicated that certain accounting alternatives were being considered for 1993-94.

As a result, the Board's Motions Day decision put the parties on

notice that it would review the evidence on the non-traditional accounting approaches and provide guidance to NB Power as to what the Board considers might be appropriate for rate-setting purposes.

Certain alternatives were reviewed at the hearing. The Board considered that it would be useful to NB Power to have its comments on those alternatives as quickly as possible. The Board provided its comments at the close of the hearing and indicated that the same issues would be addressed in the written decision. One of these, the matter of early retirement costs, was discussed earlier in this decision and the others, which relate to alternative accounting approaches, are discussed below.

The Board has carefully reviewed the evidence that is on the record regarding the 1993-94 year and notes that Exhibit 6 estimates a loss of over \$52 million for the 1993-94 year. The Board considers that the continuation of the increases of October 1, 1992 will not, under any of the projections presented during the hearing, result in excessive earnings for NB Power in 1993-94. The Board, therefore, approves the increases implemented by NB Power on October 1, 1992 (with the one exception discussed above) on a final basis.

Deferral of Common Costs for Belledune

The Belledune site is large enough to accommodate four separate units of which one is currently under construction. In recognition of the possibility that additional units may be built in the future, certain components are being sized to handle two units while others will be capable of servicing four units. The costs of these components which can serve more than a single unit are referred to as common costs. The precise amount of common costs is not clear from the record but it will be significant, likely in excess of \$100 million.

In its generic decision on the Depreciation Policies of NB Power, the Board stated that the common costs associated with the Belledune plant should be shared equitably by the individual units.

If there is a reasonable chance that another unit or units will be built at Belledune, the Board considers that it would be appropriate to defer the recovery of the relevant portion of the common costs until such time as the additional unit or units are built. However, if at some point, NB Power decides that no additional units will be built at Belledune, then the deferred common costs would be recovered over the remaining life of the one unit.

Escalating Charge Depreciation for Belledune

The escalating charge method of depreciation is a method by which the annual depreciation expense increases each year. In the early years of an asset's life, the annual depreciation expense is less than would be the case if straight line depreciation were used. Therefore, the escalating charge method reduces the revenue required from customers in the initial years of an asset. For a major asset addition, use of escalating charge depreciation can help to minimize any necessary increase in rates associated with bringing the asset into service. The Belledune plant will be a major addition to NB Power's assets. The \$965 million cost is approximately 35 percent of NB Power's projected net fixed assets in service at March 31, 1993. In addition, NB Power is projecting surplus capacity for several years which will put pressure on the rates charged to customers.

The escalating charge method of depreciation is an accepted accounting approach and is being used for the Point Lepreau plant. The Board considers that it would be appropriate to give serious consideration to the use of the escalating charge method of depreciation for the Belledune generating station. This would allow the annual depreciation expense to increase as demand for electricity increases and also reduce the pressure on customer rates over the early years of the Belledune plant.

Deferral of Costs - Rate Smoothing

NB Power stated that it is considering a proposal to defer certain costs for a few years and to recover those costs in future years. The primary rationale was that, in the absence of such an approach, the addition of the Belledune generating station would require a significant increase in rates.

The Board considers that the traditional and preferred approach is to have the customers pay all of the costs of a given year necessary to produce electricity. That is referred to as the user pay concept. Another desirable regulatory objective is to have rate stability, that is, to avoid sharp increases in rates. These two objectives may conflict.

A further consideration is the requirement to comply with the Act in any matters before the Board. Section 42 of the Act requires that the rates of NB Power recover all of its costs of a future rate period.

If, after all reasonable efforts have been made to maximize revenues and to minimize costs, a sharp rate increase would still be necessary, the Board would be prepared to consider a rate smoothing proposal as long as the following conditions were met.

- The proposal must provide:
- (1) The rationale for adopting a non-traditional accounting approach;
- (2) Specific identification of the costs to be deferred;
- (3) The amount of these costs;
- (4) The period of time of deferral;
- (5) A specific plan for recovery showing amounts per year and the period in which they would be recovered; and
- (6) The effect, positive or negative, on revenue requirements including percentages for each year of the plan.

OTHER

Informal Intervenors

The Board set aside the afternoon of the 12th of February for Informal Intervenors to make presentations to the Board. The following members of the general public addressed the Board:

<u>Presenter</u>	Representing
Julie Dingwell	People Against Lepreau 2 Campaign
Brian McNamara	New Brunswick Home Builders Association
Donald Bradford	Connors Bros., Limited
Lloyd Purdy	New Brunswick Committee for Fair Electric Rates for Aquaculture

John Wetmore

J. Bennett Macaulay

Julie Dingwell presented a number of examples where she and the organization she represents believe that NB Power was improperly spending money and requested the Board not grant the increase because of these improper expenditures. The matters which Ms. Dingwell raised were the subject of a number of questions of NB Power witnesses during the concluding days of the hearing.

Mr. McNamara gave the Board a lengthy explanation of the R2000 Home Construction Program on behalf of the New Brunswick Home Builders Association. He spoke in favour of continued support of this program by NB Power. The Board notes that this program forms

part of NB Power's DSM program which is presently being studied and expects that this will be reported upon at the time of the next general rate application.

Mr. Bradford put before the Board his company's position that NB Power should, as is the case in the private sector, hold the line on rates during this recessionary period.

Mr. Jack Wetmore made a presentation to the Board concerning economies that he believes could be realized in NB Power's operations. This Board appreciates the effort that Mr. Wetmore made and the obvious good sense of some of his suggestions but it is beyond its statutory authority to comment on them.

Mr. Lloyd Purdy claimed that the classification of various aquaculture activities for rate purposes has not been concluded in a fashion allowing clear, concise, and even handed application of the rules. At the conclusion of the hearing, with the assistance of the Public Intervenor, a meeting was arranged between Mr. Purdy and Mr. Gilliss of NB Power.

The Board directs Mr. Gilliss to report the results of that meeting and will be asking Mr. Purdy for confirmation of these results. The Board further directs that, at the time of the next general rate application, the Corporation report fully on the rate classification of the aquaculture industry and have a witness give testimony on this subject.

Mr. Macaulay's presentation to the Board dealt with the diversion of the headwaters of the Saint John River in the State of Maine. This may be in contravention of International Treaties and may

deprive NB Power of some benefits from hydro-electric generation. NB Power has undertaken to investigate this matter. The Board directs that they report on the progress of this investigation at the time of the next general rate application.

The Board also reviewed written comments from the Western Valley Recreation Association Inc. and the Town of Grand Falls. Both these parties expressed concern over the introduction of a demand charge for the General Service II category. They recommended that existing customers of General Service II category be "grandfathered" so that the demand charge would not apply to them.

The Board does not consider this approach to be equitable or in the best interests of NB Power's customers. The Board will continue to give careful consideration to the impact of rate increases on customers served under the General Service II rate.

The Board thanks those people who took the time and effort to address the Board with their concerns.

Minimum Filing Requirements

The Board considers that the provision by NB Power of pertinent information prior to the start of the actual public hearing greatly facilitates the regulatory process. It allows the Board and other interested parties to reduce the number of questions that must be asked at the hearing and thereby minimizes both the time required for and the cost of the public hearing. The public benefits in two ways - the cost of the process is reduced and the review of NB Power's activities is concentrated on the important issues.

Recognizing the importance of such benefits, the Board, prior to the first application by NB Power, made considerable efforts to research the type of information that should be provided by the utility in advance of a public hearing. The result of this work was shared with NB Power and other interested parties prior to the prehearing conference in the first rate application.

At that conference, there was considerable discussion over what information NB Power could and should provide. As a result, the Board developed a list of information items that NB Power would be required to file in advance of a public hearing. The list was referred to as the Minimum Filing Requirements (MFR). The Board stressed that this was meant as a starting point only and that the MFR would evolve as appropriate.

Discussions during the public hearing on NB Power's rate application held in the summer of 1991 suggested several possible improvements to the MFR. The Board made efforts to meet with NB Power to discuss a list of suggested improvements but was unable to do so.

NB Power responded in writing to the suggestions for changes. These comments were reflected in the MFR filed for the current hearing.

The discussions at this hearing clearly demonstrate that further improvements are necessary and possible. Mr. Little offered to meet with the Board to discuss such improvements. At this time, discussions are underway.

Comments on Process

This Board has always attempted to ensure that the regulatory process be as cost effective and efficient as possible. In its decision on the Accounting and Financial Policies of NB Power, a number of legislative changes were recommended. The changes would facilitate the information gathering process and allow public hearings to proceed more efficiently and with less expense. The Board still believes these changes would be beneficial to the process and result in further cost savings.

The Board is aware that concerns have been expressed over the cost of the regulatory process. Both NB Power and the Board recognized that the start-up phase of rate regulation would require considerable effort and expense. To permit the necessary exchange of information both agreed in early 1990 that a series of hearings to review the basic background principles (generic issues) would be useful and ultimately save the public money. The generic hearings are now completed and the Board considers that many of the principles discussed will not need to be reviewed again for many years. The costs of those hearings, which account for over one-half of the total costs of regulation to date, are therefore effectively one-time start-up costs.

The information exchange made possible by the generic hearings has clearly been beneficial. The first rate hearing, which occurred early in the generic hearing process, took 16 days while the second and most recent hearing required only 9 days. NB Power has provided details of its direct daily expenses which, together with the

Board's comparable costs, total approximately \$310,000 for the 16 days of the first rate hearing. The comparable cost for the most recent hearing is approximately \$166,000 for nine days. The Board considers that future rate hearings will require even fewer days and, therefore, less direct expense.

Dated at the City of Saint John, N.B. this 23 day of 1993. David C. Nicholson Chairman B. Fernand Nadeau Vice-Chairman J. E. Stevens Commissioner Claudette Stymiest Commissioner Paul E. LeBlanc Commissioner Ivan McLean Commissioner

Frank Kane Commissioner