

# 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**

**December 6, 1991** 

## THE NEW BRUNSWICK BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

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

- Commissioner

Claudette Stymiest Paul E. LeBlanc CommissionerCommissioner

Ivan McLean

- Commissioner

Thomas McBrearty

- Commissioner

NB Power:

Thomas B. Drummie, Q.C., Karen M. Colpitts and

L. Paul Zed, Solicitors

The Large Power

Users Group:

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

The Power Commission of the City of Saint John:

David G. Barry, 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

Self-Represented

Kenneth Sollows

Intervenor:

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- 1. Revenue Requirement
- 2. Interconnection Sales and Export 1990/91
- 3. Interconnection Sales and Export 1991/92
- 4. Export Sales Stabilization Account
- 5. Calculation of Net Income

#### SUMMARY OF CONCLUSIONS

#### GENERAL

The Board believes that it has a duty to set rates which are just and reasonable. (Page 11)

The Board believes that if, in its opinion, any of the projected costs are not reasonable then it should not provide for the recovery of them in the rates of NB Power. (Page 11)

When considering the reasonableness of the projected costs and projected revenues of a future rate period, the Board believes it must have regard to the increased emphasis on sound business practices highlighted in the 1991 amendments. (Page 13)

#### 1990/91 FISCAL YEAR

The Board accepts the cost of oil for 1990/91 as presented by NB Power. (Page 19)

The Board directs NB Power, in future rate applications, to provide further detail and separate "variable expenses" into items which are subject to its control and those which are not.

(Page 20)

The Board does not consider that it would be appropriate to modify the amount of the generation equalization adjustment simply due to the fact that it is large in comparison to recent years. (Page 20)

The Board directs NB Power to file by March 31, 1992, a report on its operations describing the adjustments made to the use of coal and oil due to differences from budget in hydro and nuclear production. This report should also provide a discussion as to whether any changes are necessary to the method of calculation of the monthly adjustments. (Page 21)

The Board makes no adjustments to the results for 1990/91. (Page 22)

The increases in rates that took effect on January 16, 1991, were necessary and appropriate and the Board approves them for the 1990/91 year, on a final basis. (Page 22)

#### 1991/92 FISCAL YEAR

The Board will accept NB Power's forecast of in-province revenue for 1991/92. (Page 23)

The Board will adjust NB Power's "July projection" of

the amount for purchases by reducing it by \$1.4 million. (Page 25)

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)

No evidence was presented disputing the oil price forecast and the Board accepts it. (Page 33)

The Board requests NB Power to more carefully identify the various components of the cost of nuclear fuel in future rate proceedings. (Page 34)

It is the opinion of the Board that NB Power should prepare an annual corporate maintenance budget, comprising all known and foreseeable maintenance. In addition, evidence relating to abnormal maintenance should be developed and a realistic specific provision included. The Board orders that this information be provided at the time of the next general rate application. (Pages 34-35)

NB Power has not provided sufficient supporting evidence

to justify the inclusion of the "Contingency Fund/Account" as a proper expense. The Board disallows the amount of \$5.0 million, for regulatory purposes. (Page 36)

In order to best assess the appropriateness of deferring demand side management expenditures the Board directs NB Power to address this issue at the time of its next general rate application. (Page 37)

The Board considers that the retroactive increase of \$16.0 million in the fuel channel removal account, described in the decision on NB Power's accounting and financial policies, is still appropriate for the reasons given therein. The result of this is a reduction of \$3.2 million in NB Power's depreciation expense for 1991/92. (Pages 37)

The Board requests that, for future rate proceedings, NB Power clearly separate each component of its interest expense and provide the rationale for the specific cost estimates. NB Power should, for all new issues, indicate the proportion of interest expense that is to be capitalized. (Page 38)

The Board considers that the guarantee fee is a cost to NB Power. (Page 38)

The total return to the Province is the sum of the guarantee fee and the net income. (Page 39)

The forecast for the total adjustment to the generation equalization account for 1991/92 should be lower than the "July projection" by \$316,000 and the Board has made this adjustment.

(Page 40)

The Board has calculated that the use of the two year amortization period for the export sales stabilization account requires an adjustment of \$2.1 million. (Page 41)

It is difficult, if not impossible, to determine precisely the proper level of net income solely by reference to the two ratios of interest coverage and debt-to-equity. (Page 43)

The Board prefers to use a method which would provide more precision in setting the net income while still permitting interest coverage and debt-to-equity ratios which are reasonable and appropriate for a Crown corporation. (Pages 43-44)

The Board must decide the proper level of net income in this case to determine the overall revenue requirement. It considers that the use of its preferred approach is the most appropriate way to determine net income for 1991/92. This results in a net income, for regulatory purposes, of \$24.2 million. (Page 45)

The in-province revenue requirement as calculated by the Board is \$702.4 million which is \$16.6 million less than that contained in the "July projections" of NB Power. (Page 45)

The Board therefore orders NB Power to reduce its rates for all in-province services by 2.3% effective January 20, 1992. (Page 45)

The Board further orders NB Power to rebate the overcollection by refunding to its in-province customers an amount equal to 2.3% of each customer's charges, for service received from April 1, 1991, to January 19, 1992. This rebate is to occur by way of a credit on the customer's next bill wherever possible. Where this is not possible, NB Power will develop an alternative procedure which must be approved by the Board. (Page 46)

#### INTRODUCTION

#### 1) Background

The New Brunswick Electric Power Commission (NB Power) applied, on November 9, 1990, 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</u>
Act (the Act).

The application requested average increases as follows:

- 6.9% effective January 1, 1991
- 2.6% effective April 1, 1991
- 2.6% effective October 1, 1991

NB Power also requested, pursuant to Section 41 of the Act, approval on an interim basis of the changes requested in its general application. An affidavit was filed in support of this request. NB Power answered Board information requests in early December.

A pre-hearing conference dealing with procedural matters relating to the full rate hearing and a one day public hearing on

the interim request were held on December 18-20, 1990.

The Board's decision on the interim request was dated January 10, 1991. That decision approved, on an interim basis, the requested increases in the rates of NB Power as contained in Schedule A of the application. This resulted in an average increase of 6.9% effective January 16, 1991.

The interim approval was based on the Board's opinion that NB Power had demonstrated a prima facie need and that special circumstances, as defined by the Board, existed. The Board did not approve the requested interim increases of 2.6% on April 1, 1991, and 2.6% on October 1, 1991.

The Board was of the opinion that NB Power demonstrated a prima facie need for rate change for the fiscal year 1991/92. However, the Board was not satisfied that special circumstances existed. The Board considered that the significant increases in both variable and fixed expenses anticipated by NB Power were neither recent circumstances in relation to the 1991/92 fiscal year nor items beyond the control of NB Power. In addition, the Board found that there was sufficient time to permit the normal full public review of the rate application as it pertained to the 1991/92 fiscal year.

This finding was based on a thorough and exhaustive review of the minimum amount of evidence necessary to permit a full public review and the ability of NB Power to provide the same in a timely fashion. This review was done during the pre-hearing conference held December 18 and 19, 1990.

The Board's decision on the interim request stated that the public hearing on the rate application would begin on July 17, 1991, and directed NB Power to present its pre-filed evidence on or before March 5, 1991. NB Power, in this evidence, requested that the 6.9% interim rate increase be maintained as of January 16, 1991, and that no additional increases in rates be granted until a further application.

On May 31, 1991, the <u>Electric Power Act</u> (the Power Act) was amended changing the name of The New Brunswick Electric Power Commission to the New Brunswick Power Corporation.

The public hearing to review NB Power's application and supporting evidence commenced on July 17, 1991, and concluded on August 13, 1991.

One intervenor was referred to as the Large Power Users

#### Group (LPU) and 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.
Potacan Mining Company St. Anne-Nackawic Pulp Company Ltd.
Stone Consolidated Incorporated

The witnesses who testified at the hearing were:

#### NB Power:

Mr. G. L. Titus - President and Chief Executive Officer

Mr. C.F. Baird - Senior Vice-President

Mr. D. Savoie - Vice-President, Operations

Mr. W. Connell - Vice-President, Corporate Services

Mr. W. Esligar - Manager of Fuels

Mr. W. Patterson - Vice-President, Corporate Planning

and External Marketing

Mr. M. Hawkins - Comptroller

Mr. A. Cormier - President, NB Coal

Mr. S. MacPherson - Director of Information Systems

Mr. K.B. Little - Vice-President, Finance

#### LPU:

Mr. H.R. Tidby, C.A. - Managing Partner, Coopers & Lybrand Saint John

This is the first general rate change application by NB Power since the amendments of 1989 to the Act were proclaimed. An interpretation of the amendments is required to clarify the jurisdiction of the Board and its discretion in the regulation of the rates of NB Power. Counsel for both NB Power and the LPU submitted written briefs at the conclusion of the hearing dealing with this question.

The important relevant amendments are:

- S.36 Nothing in this Act shall be construed so as to authorize the Board to regulate the affairs of The New Brunswick Electric Power Commission, to recommend or to approve its borrowings, its construction, maintenance or re-construction of new or existing facilities, or its contracts for the sale to or the purchase from interconnected electrical utilities outside the Province.
- S.38(3) The Board at the conclusion of the hearing shall
  - (a) confirm, alter, reduce or modify the charges, rates or tolls charged by The New Brunswick Electric Power Commission, and
  - (b) set the time at which any change in the charges, rates or tolls is to take effect except that a change in the charges, rates or tolls may not take effect until the expiration of thirty days after the filing of the order or decision of the Board with the President of the Executive Council under section 45.
- S.42(1) 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.

- S.42(2) The Board, when considering the appropriate reserve, depreciation and surplus accounts that are required to be maintained under paragraph 20(d) of the <u>Flectric Power Act</u>, shall have due regard for the interest coverage and debt-to-equity ratios that are appropriate for a Crown corporation that has as its objective the provision for the continuous supply of energy adequate for the needs and future development of the Province and the promotion of economy and efficiency in the generation, distribution, supply, sale and use of power.
- 5.43 The Board may, when considering an application made 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, take into account
  - (a) accounting and financial policies of The New Brunswick Electric Power Commission,
  - (b) proposed allocation of costs among in-province customer classes,
  - (c) rate design matters,
  - (d) customer service policies and charges, and
  - (e) energy efficiency programs instituted or planned by The New Brunswick Electric Power Commission.

1989, c.59., s.8

The broad powers of general supervision, Board initiated investigations, and prohibition contained in Sections 5 and 6 of the Act were explicitly excluded from application to the regulation of NB Power by the amendments. The Board may invoke these sections

in regulating other public utilities.

Section 36 of the Act imposes restrictions on the Board's jurisdiction in the regulation of NB Power. In general, the Board does not have the authority to "regulate the affairs" of NB Power. The Shorter Oxford English Dictionary, third edition, defines "regulate" to mean "To control, govern, or direct by rule or regulations; to subject to guidance or restrictions." It further defines "affair" as "what one has to do, or has to do with; business."

Section 36 then continues to enumerate five specific areas of activity which the Board may not recommend or approve. These areas of activity would have been subject to the Board's scrutiny had the "general supervision" powers of Section 5(1) been applicable to NB Power.

Thus, the Act may not be interpreted to mean that the Board can control or govern all the business of NB Power.

Section 38(3) sets out clearly that the Board has, upon application, the discretion to set the rates to be charged by NB Power for its services.

Section 42 sets out what the Board must have regard to

when acting upon the discretion delegated to it in Section 38.

Section 43 is permissive, not mandatory, and states that when the Board operates its discretion it may take into account five specifically enumerated policies or matters.

In <u>Principles of Administrative Law</u>, Jones & de Villars, Carswell, 1985, (at page 118) it was stated:

"The doctrine of Parliamentary Sovereignty permits legislation to delegate very broad discretionary powers, which Professor Julius Grey has described as follows:

Discretion may best be defined as the power to make a decision that cannot be determined to be right or wrong in any objective way. A university that interviews prospective students has the power to admit some applicants and reject some; an executive may choose a secretary out of a field of applicants; the sovereign may pardon some convicts and not others. While one could disagree with any of these decisions, there is no body or person entitled, as a general rule, to correct them and declare them wrong. Lord Diplock put it well in a recent case when he said:

'The very concept of administrative discretion involves a right to choose between more than one possible course of action upon which there is room for reasonable people to hold differing opinions as to which is to be preferred.'

It would not be incorrect to say that discretion involves the creation of rights and privileges, as opposed to the determination of who holds those rights and privileges.

Nevertheless, unlimited discretion cannot exist."

The discretion to set the rates of NB Power was removed

from the Commission of NB Power and vested in the Board by virtue of the amendments. This discretion is "fettered" by Sections 36, 42 and 43 of the Act.

The question remains, once given the discretion and bearing in mind the bounds or "fettering" imposed by the statute, - how free is the Board to operate its discretion? The decisions of the courts are of assistance with respect to this question. However, it must be kept in mind that they were written when the court was asked to intervene to set aside the use of a discretionary power.

The remarks of Lord Greene M.R., in <u>Associated Provincial</u>

<u>Picture Houses, Ltd. v Wednesbury Corporation</u>, [1948] 1 K.B. 223

are of interest:

"When an executive discretion is entrusted by Parliament to a local authority, what purports to be an exercise of that discretion can only be challenged in the courts in a very limited class of case. It must always be remembered that the court is not a court of appeal. The law recognizes certain principles on which the discretion must be exercised, but within the four corners of those principles the discretion is an absolute one and cannot be questioned in any court of law.

What, then, are those principles? They are perfectly well understood. The exercise of such a discretion must be a real exercise of the discretion. If, in the statute conferring the discretion, there is to be found, expressly or by implication, matters to which the authority exercising the discretion ought to have regard, then, in exercising the discretion, they must have regard to those matters. Conversely, if the nature of the subject-matter and the general interpretation of the Act make it clear that certain matters would not be germane to

the matter in question, they must disregard those matters. Expressions have been used in cases where the powers of local authorities came to be considered relating to the sort of thing that may give rise to interference by the court. Bad faith, dishonesty - those, of course, stand by themselves - unreasonableness, attention given to extraneous circumstances, disregard of public policy, and things like that have all been referred to as being matters which are relevant for consideration."

A shorter statement of these principles was delivered by Abbott J. in <u>Boulis v Minister of Manpower and Immigration</u>, [1974] s.c.R. 875:

"In my opinion, however, such an appeal can succeed only if it be shown that the Board (a) has refused to exercise its jurisdiction or (b) failed to exercise the discretion given under s. 15 in accordance with well established legal principles. As to those principles, Lord Macmillan, speaking for the Judicial Committee, said in D. R. Fraser & Co. Ltd. v. M.N.R., [1948] 4 D.L.R. 776 at pp. 783-4, [1949] A.C. 24, [1948] 2 W.W.R. 1119:

'The criteria by which the exercise of a statutory discretion must be judged have been defined in many authoritative cases, and it is well settled that if the discretion has been exercised bona fide, uninfluenced by irrelevant considerations and not arbitrarily or illegally, no Court is entitled to interfere even if the Court, had the discretion been theirs, might have exercised it otherwise.'"

The restrictions in the use or nonuse of discretionary power as explained in the <u>Boulis</u> decision were summarized by J.H. Grey in his article <u>"Discretion in Administrative Law"</u>, (1979) 17 Osgoode Hall L.J. 107 (at page 114) - that the delegate has:

"A duty to act:

- (a) in good faith,
- (b) uninfluenced by irrelevant considerations or motives,
- (c) reasonably, and
- (d) within the statutory bounds of the discretion."

Stated another way, if the delegate complies with the above list of duties in the exercise of the discretion the courts will not interfere. Thus, provided that the Board complies with the four rules set out above, it has complete discretion in setting NB Power's rates, subject to the provisions of appeal to Cabinet.

The Board believes that it has a duty to set rates which are just and reasonable. In order to do this, it must, at a minimum, review all of the projected revenues and the projected costs of a future rate period of NB Power. In so doing, the Board believes that if, in its opinion, any of these projected costs are not reasonable then it should not provide for the recovery of them in the rates of NB Power. This was the position of counsel for NB Power:

"The Board, of course, has a duty to disallow reasonably; unreasonable, excessive or improper expenses, but necessary, fair and legitimate expenses connected with the business and which constitute fair charges on income should be included in operating cost." (Transcript page 2596)

In the briefs filed by both NB Power and the LPU, argument was presented as to the appropriateness of the Board referring to the Power Act. None of the statutory bounds of discretion set forth in Sections 36, 42 or 43 preclude the Board from referring to the Power Act when reviewing the projected costs and revenues of a future rate period. The Board is of the opinion that reference to the Power Act during its review is appropriate and reasonable.

The Board believes it will be important to refer to Sections 2 and 20 of the Power Act and most importantly to Sections 3(7) and 6.3 passed during the 1991 sitting of the Legislative Assembly.

- "S.2 The intent, purpose and object of this Act is to provide for the continuous supply of energy adequate for the needs and future development of the Province and to promote economy and efficiency in the generation, distribution, supply, sale, and use of power. 1961-62, c.41, s.2.
- S.20 The charges, rates and tolls to be charged by the Commission shall be such as will enable it, in addition to paying all operating charges and expenses, overhead interest and amortization charges,
  - (a) to provide for the renewal, reconstruction, expansion, alteration and repair of the works constructed and operated by the Commission,
  - (b) to meet interest upon working capital and for the operations of the Commission under this Act and to meet obligations, charges, salaries and expenses arising in the course of such operation,

- (c) to meet any unforeseen expenditures or costs caused by the destruction or injury of any of the works of the Commission or otherwise incurred or payable by the Commission, and
- (d) to maintain such reserve, depreciation and surplus accounts as are maintained by a properly managed corporation.

1961-62, c.41, s.21.

- S.3(7) The board of directors shall administer the affairs of the Corporation on a commercial basis and all decisions and actions of the board of directors are to be based, subject to public policy as determined from time to time by the Lieutenant-Governor in Council, on sound business practice. 1991, c. 67, s.2.
  - S.6.3 The Corporation, may, subject to the approval of the Lieutenant-Governor in Council, make by-laws.

1991, c.67, s.6.

The 1991 amendments give greater emphasis to NB Power being run on a commercial basis. The decisions of it's board of directors are to be taken based upon sound business practice, subject to public policy as determined by the Lieutenant-Governor in Council. When considering the reasonableness of the projected costs and projected revenues of a future rate period, the Board believes it must have regard to this increased emphasis on sound business practices.

In conclusion, the Board believes that it has not only the right but an obligation to conduct a full reasonable inquiry into the business affairs of NB Power during the process leading

and including the public rate application hearing. This gives it the facts upon which to exercise its discretion.

This decision deals with the following topics.

#### A. 1990/91 Fiscal Year:

- 1) Cost of Oil
- 2) Variable Expenses
- 3) Generation Equalization Adjustment
- 4) Overall Results

#### B. 1991/92 Fiscal Year:

- 1) In-Province Revenue
- 2) Export Revenues
- 3) Purchases
- 4) Fuel
- 5) Variable Expenses
- 6) Fuel Channel Removal
- 7) Interest Expenses
- 8) Guarantee Fee
- 9) Generation Equalization Adjustment
- 10) Export Sales Stabilization Adjustment
- 11) Net Income
- 12) Overall Results

#### 2) Preparation for the Hearing

The Board is compelled to comment on the preparation of NB Power for the hearing. This was NB Power's first general rate application. However, it has been subject to rate regulation for over a year and a half. Despite this, it is the opinion of the Board that NB Power failed to properly prepare for this process and as a result a great deal of time was wasted.

The pre-filed evidence was poorly organized, and included information on the same topics in several different locations. Under scrutiny, errors and inconsistencies were discovered, which served to slow down the process. Further, several exhibits filed during the hearing contained errors. This required new exhibits to be filed, further delaying the process.

The Board considers that the witnesses were generally poorly prepared to deal with questions related to the evidence prepared under their names. The witnesses required frequent conferences with staff members and showed little familiarity with their evidence or that generated by the interrogatory process.

The Board suggests that in future hearings, the prefiled evidence should be reviewed by one or more staff members to ensure that it is presented in a consistent and error-free manner. The Board expects that witnesses will be familiar with their evidence and any related interrogatories. The Board does not intend to preclude consultation between witnesses and supporting staff. However, the Board expects that the necessary supporting documentation will be readily available in the hearing room.

#### 3) Revisions to the Evidence

NB Power's original budget for 1991/92 was contained in the affidavit filed with the application. This budget was prepared during September of 1990.

NB Power's pre-filed evidence, prepared in January and February of 1991, contained several revisions to the budget. These revisions were due primarily to significantly lower oil prices, an increase in the capacity factor for the Point Lepreau nuclear generating station and a decision to reduce variable expenses by \$16.0 million. These revisions were eventually approved as the official budget in May, 1991.

The May version of the budget contained the same forecasts for export sales and interest expenses as the original budget of September, 1990. There were several attempts by the Board and the intervenors to receive more current information on these two items. Finally, NB Power filed revised forecasts on July

22, the fourth day of the hearing. The revised forecasts were referred to as the "July projections" and contained several major changes. The export sales forecast was reduced to \$156.2 million from \$320.9 million, a drop of more than fifty percent. As a result, fuel costs were decreased by \$125.2 million. Financial expenses were also reduced substantially, in this case by \$25.1 million.

These significant changes required a two-day recess of the hearing to provide intervenors with time to properly review them. The Board believes that NB Power must have been aware of these changes some considerable time prior to the start of the hearing and that it should have filed the information as soon as it became available. Furthermore, if the corporation decides to revisit its official budget prior to the beginning of the fiscal year, it should review all of its major revenue, expense and adjustment accounts.

NB Power stated that the "July projections" were the most accurate available to it. The Board agrees with NB Power and will accept these figures except where otherwise indicated in the body of this decision.

The Board has prepared Appendix 1 which shows the "July projections" and also the Board's findings with respect to each item.

#### 1990/91 FISCAL YEAR

#### 1) Cost of Oil

A major factor in NB Power's request for an average interim increase of 6.9%, was the significant rise in the price of oil that occurred during the summer of 1990 and its effect on NB Power's cost of operations for the second half of the 1990/91 fiscal year. Oil prices continued to rise in the fall of 1990 but then declined rapidly in the first quarter of 1991. This led to considerable discussion at the hearing as to the real effect of the changes in oil prices on NB Power's operations during 1990/91.

Mr. Little testified that, despite the sharp drop in the market price, the cost of the fuel oil used by NB Power in the second half of 1990/91 was very close to forecast. He explained that this was due to the fact that the cost of oil burned in a given month is determined by its inventory value on a first-in, first-out basis. The inventory value is the landed cost at the time the oil is purchased and not the market price at the time it is used. NB Power has considerable storage capacity for oil and its policy is to maximize the amount in inventory prior to the winter heating season. Thus, the oil burned during the winter of 1990/91 was purchased several months earlier. Mr. Little presented the actual costs of the oil burned for the last six months of

1990/91 and compared these costs to the forecast. (Transcript pages 1508-9) Except for March, the actual figures were close to those projected.

Mr. Tidby agreed that the cost of oil burned during the last half of 1990/91 was quite close to what was projected at the time of the application. (Transcript page 2501).

The Board accepts the cost of oil for 1990/91 as presented by NB Power.

#### 2) <u>Variable Expenses</u>

Mr. Little's affidavit projected variable expenses for 1990/91 in the amount of \$263.5 million, which represented an increase of \$8.6 million over the budget of \$254.9 million. This increase was expected to occur despite a company-wide review of its spending ordered by NB Power's president.

The variable expenses for 1990/91 were \$266.3 million; \$2.8 million over the projection and \$11.4 million over the budget. Clearly, this increase was a major factor in determining net income for 1990/91.

The Board is concerned with the apparent lack of control

over variable expenses. It is the understanding of the Board that "variable expenses" includes items that are not controllable by NB Power. In an effort to better understand "variable expenses" the Board directs NB Power, in future rate applications, to provide further detail and separate "variable expenses" into items which are subject to its control and those which are not.

#### 3) Generation Equalization Adjustment

The LPU submitted that the Board should reduce the amount of this adjustment for 1990/91 at least to the extent of the interim increase. The rationale was the fact that the amount of the adjustment was ten times more than it had been during the past two fiscal years.

The generation equalization account and adjustments to it were discussed during the hearing on NB Power's accounting and financial policies. The Board does not consider that it would be appropriate to modify the amount of any adjustment simply due to the fact that it is large in comparison to recent years.

The LPU raised a further concern with the account because the calculation of monthly adjustments uses the average cost of thermal production. Thus, the calculation may not properly reflect actual mixes of production saved. If oil generation is displaced due to better than average hydro or nuclear production, then the adjustment should be based on the cost of oil. If the average cost of oil and coal production is used, in that case, the LPU maintained that the adjustment is incorrectly calculated.

It was the understanding of the Board that the consumption of both oil and coal was affected by the actual hydro and nuclear production. However, discussion at the hearing indicated that NB Power may have limited flexibility in its use of coal. The Board, therefore, directs NB Power to file by March 31, 1992, a report on its operations describing the adjustments made to the use of coal and oil due to differences from budget in hydro and nuclear production. This report should also provide a discussion as to whether any changes are necessary to the method of calculation of the monthly adjustments.

#### 4) Overall Results

NB Power's non-consolidated net income of \$7.1 million for 1990/91 was considerably below the \$25.0 million originally budgeted. It was also lower than the \$9.2 million projected on the basis of an increase in rates becoming effective on January 1, 1991.

The actual level of net income is due primarily to

significant increases in the cost of oil and the level of variable expenses. Both these items were identified by the Board in its interim decision. Based on the evidence before it, the Board makes no adjustments to the results for 1990/91. Without the interim increase in rates approved by the Board for 1990/91, NB Power would have incurred a loss on its operations.

The net income of NB Power for 1990/91 was not excessive. The increases in rates that took effect on January 16, 1991, were necessary and appropriate and the Board approves them for the 1990/91 year, on a final basis.

#### 1991/92 FISCAL YEAR

#### 1) <u>In-Province Revenue</u>

NB Power's "July projections" show a total in-province revenue of \$719 million for 1991/92. This is an increase of \$58.8 million (8.9%) over the actual for 1990/91 of \$660.2 million.

The total system requirement for energy for 1991/92 was shown to be 13,819 GWH. (Exhibit 106) This is an increase of 9.5% over the actual system requirement experienced in 1990/91.

These projections clearly indicate that a significant

increase in demand within the province is expected to occur in 1991/92. Any shortfall in demand from the amount forecast will reduce revenues. This will have a negative effect on net income as the fixed costs associated with generating capacity will remain. However, there was no exception taken with these projections during the hearing and the Board will therefore accept NB Power's forecast of in-province revenue for 1991/92.

#### 2) Export Revenues

The annual report of NB Power for the year ended March 31, 1990, disclosed that export sales totalled \$311.6 million on sales of 7,191 GWH of energy. (Exhibit 23)

The Board has prepared Appendix 2 which compares the budgeted export sales for 1990/91 with the actual results for that year. It has also prepared Appendix 3 which compares the original budget for 1991/92 with the "July projection" for that period, and also compares the "July projection" for 1991/92 with the actual results for 1990/91.

Appendix 2 shows 1990/91 actual sales of \$248.8 million compared to a budget of \$341.0 million. In spite of this, the forecast of 1991/92 sales was \$320.9 million. This forecast remained unchanged in the revised budget prepared in February.

However, the "July projections" show that the forecast had been reduced by \$164.7 million (51%). As well, the associated benefits were reduced by \$11.8 million (37%). The effect of this will be discussed under the heading of "Export Sales Stabilization Adjustment".

In its decision on the accounting and financial policies of NB Power, dated May 22, 1991, the Board expressed its concern with the extent of the variances between forecast and actual performance regarding export sales benefits. It ordered NB Power to provide a detailed description of the procedures used for forecasting the annual economy export sales, an analysis of variances since 1986 and a description of their causes. Furthermore, NB Power was ordered to formulate recommendations to improve the forecasting of earnings from export economy sales, to be filed prior to the next general rate application.

The revisions to the 1991/92 forecast emphasize the Board's previously stated concern. The Board recommends that management treat this matter with urgency.

#### 3) Purchases

The majority of NB Power's purchases for 1991/92 will be from Hydro-Quebec on the basis of an existing contract. This

contract specifies that the cost per megawatt hour is determined by a formula. Fluctuations in the price of coal cause variations in the cost per MW hour.

Mr. Patterson indicated that NB Power expects the price of coal to be lower than originally projected. He agreed that the best estimate of the purchase power cost for the balance of the year is approximately \$1.39 million less than shown in the "July projections". (Transcript page 2121) The Board will therefore adjust NB Power's "July projection" of the amount for purchases by reducing it by \$1.4 million.

#### 4) Fuel

#### i) Coal

NB Power's primary source of coal is from N.B. Coal Limited (NBCL). A considerable amount of time was spent during the hearing discussing NBCL. It was incorporated by provincial charter in 1969, and has mined in the Grand Lake area near the villages of Minto and Chipman since that date. In 1990, it was estimated that NBCL's reserves of coal were approximately 11.2 million tons or 20 years of mining at the current level. (Exhibit 29)

In 1979, NBCL entered into a Coal Supply Agreement with

NB Power. The Board understands that since then virtually all the production from mining operations has been sold to NB Power. Under the terms of this agreement, NB Power annually provides NBCL with an estimate of its coal requirements month by month for the following two years ending on March 31. In turn, NBCL submits to NB Power a mining plan for the following year. This includes its estimated costs, broken down into defined cost categories described as "Committed Capital Costs, Ready-to-Service Costs and Variable Costs". NBCL determines the cost per ton of coal to be sold to NB Power by dividing its total estimated costs by the estimated coal requirements. The coal supply agreement provides that the actual cost per ton can be adjusted if NB Power decides to order more or less coal than its estimated coal requirements. This effectively allows NBCL to recover all of its costs of operation, regardless of the actual level of production.

The agreement originally stated that NB Power was the guarantor of the payments due under a lease purchase agreement to acquire dragline equipment. As a result, NB Power decided to purchase 90% of the outstanding common shares of NBCL in 1986. This was indicated by Mr. Titus under cross-examination by Mr. McKelvey. (Transcript page 643)

The remaining outstanding common shares were purchased by NB Power on July 5, 1990 (Exhibit 35) and NBCL thus became a

wholly-owned subsidiary. NB Power continues to guarantee lease obligations of NBCL, which at March 31, 1991, amounted to approximately \$36.0 million, including interest, and are repayable in annual installments to the year 1999. (Exhibit 30)

NBCL's annual report for the year ended March 31, 1990, discloses that in May, 1990, it issued a purchase order for the supply of additional dragline equipment to be erected by January, 1992, at an estimated cost of \$19.0 million. NB Power purchases 100% of the coal production of NBCL, some 550,000 to 600,000 tons per year. This is consumed at the Dalhousie and Grand Lake generating stations. NBCL mines approximately 450,000 tons per year and subcontracts the remainder from a local contractor. (Exhibit 29)

It is clear to the Board that NBCL does not operate on an arms length basis to NB Power. NB Power provided an organization chart dated April 22, 1991, which indicates that the President of NBCL, Mr. Andy Cormier, reports directly to the Vice-President of Operations of NB Power, Mr. Dennis Savoie. All members of the board of directors of NB Coal except Mr. Cormier, are employees of NB Power. The Board concludes that, although NBCL is a separate corporate entity it is operated as a division of NB Power.

Exhibit 48 illustrates the calculation of the average price of coal which for the year ended March 31, 1990, amounted to \$62.98 per ton and for 1991 \$65.55 per ton. NB Power indicated that the delivered price paid for NBCL coal at the Dalhousie generating plant, on a calendar year basis, was \$81.12 for 1990 and is estimated to be \$78.77 for 1991. This indicates that for the two years the cost of transportation is in the range of \$13 to \$18 per ton. This price per ton compares with an estimated cost of imported coal delivered to Dalhousie of \$55 per ton according to Mr. Connell (Transcript page 977). This shows that the use of NB coal is more expensive than the use of imported coal.

When reviewing the continued use of NB coal the evidence discloses other factors which must be considered. Amongst these, according to Mr. Titus, was the security of the fuel supply. Evidence was presented that indicated that adequate facilities for off-loading imported coal will not exist prior to completion of Belledune. Once Belledune is operational, however, security of supply will no longer be a significant consideration. Mr. Baird agreed that it would be possible to rail coal to Dalhousie from other North American sources, but stated that the cost of transportation would be prohibitively high.

NBCL is obligated to make its lease payments whether or not it produces any coal. The fact that NB Power guarantees these

payments is a further consideration.

There is no comprehensive analysis of all the relevant factors on the record.

It appears that NB Power intends to use NB coal on a long-term basis. Mr. Baird testified as follows:

Well, as Mr. Titus testifed yesterday, with the advent of scrubbers at Belledune, it created a different scenario than we would have had there initially. The scrubber, basically, changed the range of coals that we could successfully burn at that facility and still maintain our environmental criteria on that unit. In so doing, it opened up a number of other other possibilities. Concurrent, or nearly concurrent with that, there was a decision made to proceed with the conversion of the Dalhousie facility to orimulsion to take advantage of that fuel....

When we looked at what we would do with New Brunswick coal and how we would accommodate that need, we reviewed the issue of it and the potential for blending it with an offshore coal at the Belledune facility and found that we could blend approximately 400,000 tonnes of that per year with 900,000 tonnes roughly of imported coal." (Transcript page 839)

During the hearing a number of intervenors suggested that the real purpose of continuing the operations of NBCL was to achieve socio-economic objectives. Mr. Gillis, counsel for McCain Foods Limited, stated in summation:

"The decision to purchase NB Coal output at higher prices than imports should require a provincial government subsidy, not

higher rates, since the customers of NB Power don't benefit.... If politicians generally want to support a social activity such as NB Coal, they should do it directly and not indirectly imposing that burden upon a small class of individuals, being the power customers" (Transcript page 2635)

Mr. LeMesurier, counsel for LPU, concluded:

"Therefore our submission that NB Power's decision to continue and in fact expand the use of NB Coal to proceed with its own coal-mining ventures cannot be justified on the basis of economics or sound business judgment. Now if the decision is based on socio-political grounds, then the cost of subsidizing an uneconomic coal industry should not fall on industries who happen to rely upon electricity as an important factor input to their production but should be borne by all of the taxpayers of the province, including those industries who don't rely so heavily on electric power....

So we therefore submit that in approving rates for NB Power, the Board should give close scrutiny and should not approve any projected expenditures which are not directed toward producing power in the most efficient and economical manner possible, consistent with Sections 2 and 3(7) of the <u>Electric Power Act</u>." (Transcript page 2736 and 2737)

Mr. Barry, counsel for the Power Commission of the City of Saint John, stated:

<sup>&</sup>quot; A candid answer by NB Power recognizing that there are ...socio-economic reasons for their acquisition and purchase of coal from NB Coal ... would have saved an enormous amount of time in this hearing...The Board...should not sanction indirect taxation through a public utility." (Transcript page 2777)

#### Mr. Kenny, Public Intervenor, argued:

"The economics associated with the utilization of coal, NB Coal, were not well addressed in this hearing. It is evident from the testimony provided by NB Power witnesses that there has been no comprehensive analysis of the benefit and costs, both operating and capital, of the use of coal from NB Coal with coal from other sources. Without such analysis, it is difficult to give any credence to statements about price competitiveness of NB Coal's product...

The public intervenor is well aware there may be socioeconomic arguments offered in defence of the continued utilization of NB Coal's product by NB Power. These arguments do have weight in a political context. They have no weight in a regulatory environment, however, and the utility should be required to defend its continued use of coal from NB Coal by providing economic analysis of factors involved in such a This analysis should encompass a detailed decision. evaluation of all alternate coal sources and the capital investments undertaken or avoided by using these sources and should be conducted on a life-cycle basis over the life of generating plants currently in place or proposed to burn this Failure to provide this analysis will only ensure continuing debate and doubts about the appropriateness of the strategy employed by the utility and current reasonableness of the costs it seeks to recover from ratepayers." (Transcript page 2792-3)

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.

#### ii) Kent County Coal Development

The annual report of NB Power for the year ended March 31, 1990, includes the following information on page 9:

"In Kent County, a 4 year \$6 million exploration and development program is being undertaken to determine the coal reserves in the area and to evaluate the environmental, technical and economic feasibility for commercial development." (Exhibit 23)

The total actual expenditure on Kent County Coal Development for 1990/91, and the budgeted total expenditure for 1991/92 were not clearly disclosed in evidence. The Board notes that items of expenditure are included under various expense captions.

It appears from the pre-filed evidence that expenditure in 1990/91 amounted to approximately \$1,055,000. An interrogatory response indicated a budget of \$884,000 giving a variance of \$171,000. However, a further interrogatory reported a variance of \$917,000. The Board concludes that the actual expenditure for 1990/91 was in the range of \$1,800,000 to \$2,000,000, although additional expenditure could be included under other expense captions. Certain expenditures on Kent County Coal Development in 1991/92 will be capitalized, presumably to be subsequently amortized against future benefits.

NB Power is clearly exploring for additional supplies of New Brunswick coal. However, in the previous section of this decision it was noted that NBCL has considerable reserves of coal and that there appears to be no lack of coal available offshore. The Board is concerned that NB Power is disbursing funds on coal exploration in New Brunswick in the absence of a comprehensive cost analysis showing that expanded use of NB coal would be desirable.

If NB Power decides to proceed with commercial mining operations in Kent County, the Board will require the same justification as indicated previously for coal purchased from NBCL.

#### iii) Oil

The significant decline in the price of oil was reflected in NB Power's pre-filed evidence. The forecast contained therein was on average US \$4.45/bbl lower than the September budget which was presented at the December hearing. No evidence was presented disputing this price forecast and the Board accepts it.

#### iv) Nuclear

The cost of nuclear fuel was the subject of considerable discussion. The actual cost per unit for the first three months of 1991/92 was lower than budget. NB Power revised its estimate

of this cost for the remaining nine months. However, the revised cost appeared to be higher than the actual for the first quarter. During the hearing reference was made to errors in the calculation of production volumes and the associated costs at Point Lepreau. These errors related to export sales and the use of energy at the plant itself. The record is not clear on this matter but the Board will accept NB Power's position that the revisions reflect the best estimate of the cost of nuclear fuel for 1991/92. The Board requests NB Power to more carefully identify the various components of the cost of nuclear fuel in future rate proceedings.

#### 5) <u>Variable Expenses</u>

#### i) Maintenance and the Contingency Fund

During the hearing, evidence was presented on the development of operating budgets, including costs related to maintenance. However, NB Power did not provide any details of its anticipated maintenance expenses for the year ending March 31, 1992.

The corporation's evidence was that maintenance budgets exist at various cost centre levels, such as a generating station, but no corporate maintenance budget is produced. The Board views maintenance expenses as a major cost of operations. Therefore, it

is the opinion of the Board that NB Power should prepare an annual corporate maintenance budget, comprising all known and foreseeable maintenance. In addition, evidence relating to abnormal maintenance should be developed and a realistic specific provision included. The Board orders that this information be provided at the time of the next general rate application.

A maintenance-related item was the "Contingency Fund/Account" of \$5.0 million in the budget of the Corporate Division. It was allocated to two expense categories, namely "Materials" and "Hired Services", in equal amounts. NB Power stated that the account was to cover unforeseen abnormal events.

The Board has a number of concerns with respect to this account. Mr. Titus indicated that no such account had existed in previous budgets. As well, NB Power indicated that there are no specific criteria by which a determination can be made as to whether or not a given event should be covered by the account. The rationale for choosing the amount of \$5.0 million is unclear. This was discussed by Mr. Titus:

Because you would agree with me that on the evidence filed and in the discussions we've held, particularly this material, it does make it rather difficult to find a rationale for the \$5,000,000 figure.

Yes, it does." (Transcript page 793-4)

The only example of an abnormal event identified by NB Power was ice storms.

NB Power has not provided sufficient supporting evidence to justify the inclusion of the "Contingency Fund/Account" as a proper expense. The Board, therefore, disallows the amount of \$5.0 million, for regulatory purposes.

A further matter concerning maintenance requires comment.

Mr. Baird stated that \$6.0 million of the budgeted cuts in variable expenses had been applied to maintenance.

of the 16 coming from the maintenance area, there is an increased increment of risk on the units not running exactly the time you want them to...that it was felt that the level of maintenance could be reduced slightly in order to effect a saving but there is an increased component of risk associated with a failure of one of those insulators or switches or lines under upset conditions. And I think that's the point that Mr. Titus tried to make very clear to everybody, that the 16,000,000, and in particular this 6,000,000 of it, did not come without some increase in risk to service levels that were previously looked at." (Transcript page 1446-47)

Under examination by the Board Chairman, Mr. Baird stated that approximately \$4.9 million of the \$6.0 million would come from not carrying out previously scheduled maintenance. Mr. Baird was unable to quantify the risk of forced outages resulting from such decisions other than that it was very, very small.

The Board is concerned that no proper risk assessment appears to have been carried out in conjunction with the proposed reductions in maintenance. The Board would encourage NB Power to review these decisions to ensure that system reliability is maintained within the standards of the industry.

#### ii) Demand Side Management

NB Power deferred to future years \$0.5 million of expenditures related to demand side management programs instead of expensing them in 1990/91. The continuation of these programs will result in additional deferred expenditures in 1991/92. The Board is aware of the difficulty in quantifying and verifying the actual long term benefits associated with such programs. In order to best assess the appropriateness of deferring such expenditures the Board directs NB Power to address this issue at the time of its next general rate application.

#### 6) Fuel Channel Removal

The Board considers that the retroactive increase of \$16.0 million in the fuel channel removal account, described in the decision on NB Power's accounting and financial policies, is still appropriate for the reasons given therein. The result of this is a reduction of \$3.2 million in NB Power's depreciation expense for 1991/92.

#### 7) <u>Interest Expenses</u>

NB Power's "July projection" of interest expenses, net of capitalized interest, was \$28.4 million lower than in both its original and revised budgets. This was due primarily to lower foreign exchange costs and interest rates.

Considerable time was spent during the hearing discussing the various components of interest expense and in clarifying certain tables contained in its evidence. The Board requests that, for future rate proceedings, NB Power clearly separate each component of its interest expense and provide the rationale for the specific cost estimates. NB Power should, for all new issues, indicate the proportion of interest expense that is to be capitalized.

#### 8) Guarantee Fee

The Board considers that the guarantee fee is a cost to NB Power. NB Power is obliged by legislation to pay the guarantee fee and consequently this is a cost properly recoverable from the customers of NB Power.

The Province receives the guarantee fee as a cash payment. The Province has available to it the net income earned

each year by NB Power. Therefore, the total return to the Province is the sum of the guarantee fee and the net income.

#### 9) Generation Equalization Adjustment

There are two participation contracts for Point Lepreau, which expired at the end of October, 1991. Mr. Little stated that he would anticipate that the equalization for this additional production capability would be on the same basis as the other inprovince production. In other words, the gross amount of additional production would not be considered as an overage from budget. The Board concurs that this is the appropriate treatment.

There was some confusion over the adjustments made to the generation equalization account as a result of hydro production. NB Power assumes, for budgetary purposes, that the water flow each month will be the same as the average flow in that month over the past thirty years. If water flow exceeds the average an increase is made in the generation equalization account. The amount of the increase is determined by taking the amount of energy that is produced by the extra water flow and multiplying it by the average cost of thermal production for the month. If water flow is below average a reduction is made in the generation equalization account. The results for the quarter ended June 30, 1991, showed that water flow was below average whereas there was an increase in the

account. This apparent contradiction was resolved when Exhibit 111 was filed showing the actual monthly water flows and the associated adjustments which reflected the actual cost of thermal production. Changes in the average cost of thermal production from one month to another affected the overall result for the quarter.

Exhibit 111 used an updated thirty year average water flow. The use of this new average produced a forecast of a \$63,000 reduction in the account for the full year rather than the \$253,000 increase contained in the "July projections".

This means that the forecast for the total adjustment to the generation equalization account for 1991/92 should be lower than the "July projection" by \$316,000 and the Board has made this adjustment.

#### 10) Export Sales Stabilization Adjustment

In its decision on accounting and financial policies the Board ordered NB Power, for regulatory purposes, to amortize deferrals of excess or deficient earnings arising in 1991 and later years, over a period of two years, rather than three. The Board is of the opinion that this approach is still appropriate. In its projections for 1991/92, NB Power has computed the amortization of the deficiency for 1990/91 over a three year period. (Exhibit 84)

The Board has calculated that the use of the two year amortization period requires an adjustment of \$2.1 million as follows:

	Per Board	Per NB Power
Amortization of excess or (deficiency) for year ended March 31,		

(\$000,s)

1989 \$15,979/3	\$5,326	5,326
1990 \$22,737/3	7,579	7,579
1991 \$(12,603/2)	(6,302)	
\$(12,603/3)		(4,201)
	\$ <u>6,603</u>	<u>8,704</u>

Appendix 4 summarizes the movement in the Export Sales Stabilization Account for the year ended March 31, 1991. It projects the movement for the year ending March 31, 1992, based upon the projected benefits included in the "July projections". projected deficiency for 1991/92, combined with the amortization of the accumulated credit at March 31, 1991, will result in a debit balance in the account of \$10.5 million. deficiency must be recovered in future years and, based upon the projections for 1991/92, would result in a charge against income of \$4.6 million in the year ending March 31, 1993.

#### 11) Net Income

NB Power, in its pre-filed evidence, forecast a net income of \$21.0 million for 1991/92. This amount was based on a continuation of the 6.9% interim rate increase but did not include the two additional 2.6% rate increases which were originally requested. NB Power stated that this level of net income and the resulting interest coverage and debt-to-equity ratios should be considered reasonable by the lending and rating agencies under the prevailing economic circumstances.

NB Power's "July projections" forecast a net income of \$33.0 million. It was based on the same assumptions about rate increases but included revisions to certain revenue and expense accounts. NB Power stated that this also was a reasonable level of net income. It would result in an interest coverage ratio approximately half way between the minimum and maximum targets considered by the Board to be appropriate.

The Board is of the view that the interest coverage and debt-to-equity ratios are important considerations and should be maintained at appropriate levels. However, the Board does not consider it appropriate to rely solely on these ratios for the purpose of determining net income. This hearing clearly demonstrates that the use of these ratios alone creates

considerable difficulty in determining the proper level of net income. This is primarily because they provide only a broad indication of financial health. A higher interest coverage and a larger percentage of equity indicate a stronger financial position than do a lower interest coverage and smaller percentage of equity.

However, it is difficult, if not impossible, to determine precisely the proper level of net income solely by reference to these two ratios.

NB Power was prepared, in its pre-filed evidence, to accept as reasonable a net income of \$21.0 million. It's "July projections" produced a net income of \$33.0 million. NB Power stated that it should be permitted to earn this considerably higher level of net income. The justification for this was that the interest coverage and debt-to-equity ratios would still be within the acceptable range.

Given the wide range of values for net income that would produce acceptable ratios the Board is concerned that reliance solely on the ratios would permit NB Power to effectively determine its own level of net income.

The Board prefers to use a method which would provide more precision in setting the net income while still permitting

interest coverage and debt-to-equity ratios which are reasonable and appropriate for a Crown corporation.

The Board, for the reasons contained in its decision on accounting and financial policies, stated a preference for the use of a return on equity approach in determining the appropriate level of net income. It is the opinion of the Board that the use of such an approach will always, on a realistic basis, permit NB Power to achieve appropriate interest coverage and debt-to-equity ratios. The use of this method has not been thoroughly discussed at a public hearing involving NB Power. The possibility of the Board applying a rate of return on equity approach in this particular case was certainly recognized during the hearing. Certain intervenors recommended use of this method.

The corporation stated that use of this approach would limit its ability to increase its equity ratio because of planned capital expenditures. The Board agrees that the equity ratio will decline when major capital projects are completed and brought into service. However, this is a natural consequence of a capital intensive business and not a reason to discard a rate of return on equity approach. NB Power raised other concerns with the method and maintained that it should be thoroughly disussed in a later hearing.

A public hearing is planned to permit a thorough discussion of the Board's preferred approach. However, the Board must decide the proper level of net income in this case to determine the overall revenue requirement. It considers that the use of its preferred approach is the most appropriate way to determine net income for 1991/92. This results in a net income, for regulatory purposes, of \$24.2 million. Appendix 5 provides details of this calculation.

#### 12) Overall Results

Appendix 1 shows the in-province revenue requirement as calculated by the Board to be \$702.4 million which is \$16.6 million less than that contained in the "July projections" of NB Power. The revenues to be received by NB Power from its in-province customers during 1991/92 must therefore be reduced by \$16.6 million, which is 2.3% of the revenue in the "July projections".

The Board therefore orders NB Power to reduce its rates for all in-province services by 2.3% effective January 20, 1992.

NB Power will file a revised schedule of rates. NB Power will also indicate where any variations to the 2.3% reduction have occurred due to rounding.

The Board further orders NB Power to rebate the overcollection by refunding to its in-province customers an amount equal to 2.3% of each customer's charges, for service received from April 1, 1991, to January 19, 1992. This rebate is to occur by way of a credit on the customer's next bill wherever possible. Where this is not possible, NB Power will develop an alternative procedure which must be approved by the Board.

Dated at the City of Saint John, N.B. this 6 day of December, 1991.

David C. Nicholson Chairman

B. Fernand Nadeau
Vice-Chairman

J. E. Stevens Commissioner

Claudette Stymiest Commissioner

> Paul E. LeBlanc Commissioner

> > Ivan McLean Commissioner

Thomas McBrearty Commissioner

# APPENDIX 1

### **REVENUE REQUIREMENT**

# 1991-92 (UNCONSOLIDATED)

	NBP JULY PROJECTIO	BOAR NS FINDIN	
	NDI JULI TROJECTIO	ADJUSTMENT	FINAL
		(FOR REGULATORY PURPOSES)	
PURCHASES	125.9	(1.4) (page 25)	124.5
FUEL	150.9		150.9
VARIABLE EXPENSES	262.3	(5.0) (page 36)	257.3
INTEREST EXPENSES	204.6		204.6
DEPRECIATION	<u>116.7</u>	(3.2) (page 37)	<u>113.5</u>
TOTAL	860.4	(9.6)	850.8
GENERATION EQUALIZATE ADJUSTMENT	ION 2.3	(0.3) (page 40)	2.0
EXPORT STABILIZATION ADJUSTMENT	(20.5)	2.1 (page 41)	(18.4)
NET INCOME	_33.0	(8.8) (page 45)	24.2
TOTAL	875.2	(16.6)	858.6
EXPORT REVENUE	<u>156.2</u>		<u>156.2</u>
IN-PROVINCE REVENUE	<u>719.0</u>	<u>(16.6)</u>	<u>702.4</u>

REFERENCE (Exhibit 95)

#### NB POWER INTERCONNECTION SALES AND EXPORT - 1990/91

#### APPENDIX 2

	1:	990/91 Budge	ot	1	990/91 Actua	ıl	Actual Over(Under) Budget			
	Gwh	\$x1000	Benefit	Gwh	\$x1000	Benefit	Gwh	\$x1000	Benefit	
Firm Sales										
Contracted firm energy transactions Maritime Electric	154	8,441	4,123	148	9,540	3,767	(6)	1,099	(356)	
Maine Public Service	3	1,707	983		1,233	49	(3)	(474)	(934)	
East Maine Co-op	5	1,390	486	15	1,688	943	10	298	457	
Participation transactions Point Lepreau	1,618	111,789	0	1,984	110,667	0	366	(1,122)	0	
MECL (Dalhousie #2)	46	11,083	9,876	15	404	0	(31)	(10,679)	(9,876)	
Hydro Quebec	0			0	0	0	0	0	0	
Total Firm sales	1,826	134,410	15,468	2,162	123,532	4,759	336	(10,878)	(10,709)	
Economy Sales										
N. S. P. C.	291	9;387	860	509	15,805	3,799	218	6,418	2,939	
Maritime Electric	449	15,850	2,497	415	15,312	3,871	(34)	(541)	1,374	
Hydro Quebec	3,657	119,657	17,102	1,150	36,334	10,957	(2,507)	(83,323)	(6,145)	
Maine Public Service	138	4,819	1,158	179	7,825	3,321	41	3,006	2,163	
East Maine Co-op	٥	0	٥	10	336	135	10	330	135	
M. E. P. Co	315	9,786	1,064	321	11,442	3,563	6	1,656	2,499	
Central Maine	1,117	38,343	10,324	888	31,624	6,296	(229)	(6,719)	(4,028)	
Bangor Hydro	223	8,343	2,043	171	6,193	1,389	(52)	(2,150)	(654)	
Total Economy Sales	6,190	206,188	35,048	3,643	124,871	33,331	(2,547)	(81,317)	(1,717)	
Other Revenue	0	378	378	0	390	202	0	12	(176)	
Total	8,016	340,976	50,894	5,805	248,793	38,292	(2,211)	(92,183)	(12,602)	
		Column A			Column B			Column C		

References

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Exhibit 82

Column B minus Column A

#### NB POWER INTERCONNECTION SALES AND EXPORT - 1991/92

APPENDIX 3

	1991/92 Budget		1991/92 Budget 1991/92 Projection			1991/92 Projection vs. 1990/91 Actual			1991/92 Projection vs. 1991/92 Budget			
	Gwh	\$x1000	Benefit	Gwh	\$x1000	Benefit	Gwh	\$x1000	Benefit	Gwh	\$x1000	Benefit
Firm Sales Contracted firm energy transactions Maritime Electric	174	10,031	4,388	176	10,000	7,100	28	460	3,333	2	(31)	2,712
Maine Public Service		1,125	1,125		1,200	0	٥	(33)	(49)	0	75	(1,125)
East Maine Co-op	5	1,182	501	9	2,100	1,500	(6)	412	557	4	918	999
Participation transactions Point Lepreau	1,601	109,200	0	1,435	83,500	0	(549)	(27,167)	o	(166)	(25,700)	0
MECL (Dalhousie #2)	13	2,580	2,166	0	0	0	(15)	(404)	0	(13)	(2,580)	(2,166)
Hydro Quebec	212	30,800	1,651	35	16,000	100	35	16,000	100	(177)	(14,800)	(1,551)
Total Firm sales	2,005	154,918	9,831	1,655	112,800	8,700	(507)	(10,732)	3,941	(350)	(42,118)	(1,131)
Economy Sales N. S. P. C.	370	14,034	1,815	188	4,900	1,500	(201)	(10.005)	(0.000)	4400		
Maritime Electric	446	18,408	4.073	413	10,200		(321)	(10,905)	(2,299)	(182)	(9,134)	(315)
			,		•	2,600	(2)	(5,112)	(1,271)	(33)	(8,208)	(1,473)
Hydro Quebec	2,161	79,614	9,381	221	4,500	1,400	(929)	(31,834)	(9,557)	(1,940)	(75,114)	(7,981)
Maine Public Service	126	5,206	1,265	175	5,700	2,200	(4)	(2,125)	(1,121)	49	494	935
East Maine Co-op	0	0	0	4	100	0	(6)	(236)	(135)	4	100	0
M. E. P. Co	10	361	53	177	4,500	1,500	(144)	(6,942)	(2,063)	167	4,139	1,447
Central Maine	1,120	39,976	4,457	449	10,000	1,400	(439)	(21,624)	(4,896)	(671)	(29,976)	(3,057)
Bangor Hydro	224	7,979	891	135	3,000	600	(36)	(3,193)	(789)	(89)	(4,979)	(291)
Total Economy Sales	4,457	165,578	21,935	1,762	42,900	11,200	(1,881)	(81,971)	(22,131)	(2,695)	(122,678)	(10,735)
Other Revenue	0	405	405	0	500	500	0	110	298	0	95	95
Total	6,462	320,901	32,171	3,417	156,200	20,400	(2,388)	(92,593)	(17,892)	(3,045)	(164,701)	(11,771)
		Column D	<del></del>		Column E			Column F			Column G	

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Exhibit 83

Column E minus Column B (Appendix 2)

Column E minus Column D

#### **EXPORT SALES STABILIZATION ACCOUNT**

#### MARCH 31, 1990 TO MARCH 31, 1992 (\$000s)

	A	CCOUNT DETA	AIL		ANNUAL EX	CESS OR (DEFIC	IENCY)	
	(DEBIT)	CREDIT	BALANCE	1988	1989	1990	1991	1992
BALANCE AT MARCH 31, 1990			36,370	2,981	10,652	22,737		
1991 ACTIVITY:								
AMORTIZATION OF PRIOR YEARS' EXCESS	(15,886)			(2,981) * 1	(5,326) * 1	(7,579) * 1		
DEFICIENCY OF THE YEAR	(12,603)		(28,489)				(12,603)	
BALANCE AT MARCH 31, 1991			7,881	0	5,326	15,158	(12,603)	
1992 ACTIVITY:								
AMORTIZATION OF PRIOR YEARS' EXCESS	(6,604)				(5,326) * 1	(7,579) * 1	6,302 * 2	
DEFICIENCY OF THE YEAR	(11,771)		(18,375)	-				(11,771)
BALANCE AT MARCH 31, 1992			(10,494)	=	0	7,579	(6,302)	(11,771)
1993 ACTIVITY:								
AMORTIZATION OF PRIOR YEARS' EXCESS		4,608 	========			(7,579) * 1	6,302 * 2	5,886 * 2
						0	0	(5,885)

<sup>\*1 =</sup> THREE YEAR AMORTIZATION PERIOD

<sup>\*2 =</sup> TWO YEAR AMORTIZATION PERIOD

# APPENDIX 5

# CALCULATION OF NET INCOME FOR 1991/92 (FOR REGULATORY PURPOSES)

\$398.0	-	Equity at Mar. 31, 1991
<u>\$ 16.0</u>	-	Adjustment for fuel channel removal
\$382.0		
<u>x0.095</u>	-	embedded cost of debt
\$ 36.3		
<u>\$ 1.7</u>	-	return provided on average amount of earnings (36.3 ÷ 2) 0.095
\$ 38.0		
<u>\$ 13.8</u>		Guarantee fee
<u>\$ 24.2</u>		NET INCOME