

THE NEW BRUNSWICK BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF a Generic Hearing concerning the Depreciation Policies of The New Brunswick Electric Power Commission

DECISION

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 a Generic Hearing concerning the Depreciation Policies of the New Brunswick Electric Power Commission

Board:

Mr. David C. Nicholson - Chairman

Mr. B. Fernand Nadeau - Vice-Chairman

Mr. J.E. Stevens - Commissioner

Mrs. Claudette Stymiest - Commissioner Mr. Raymond Gorman - Commissioner

Mr. Douglas Sanders - Secretary

Ms. Lorraine Légère - Assistant Secretary Mr. M. Douglas Goss - Senior Advisor

Mr. Harry G. Colwell - Solicitor

NB Power:

Mr. Thomas B. Drummie, Q.C., and

Mr. Robert M. Jette, Solicitors

The Large Power

Users Group:

Mr. E. Neil McKelvey, Q.C., and

Mr. James F. LeMesurier, Solicitors

Observer:

Public

Intervenor:

Mr. Ivan Robichaud

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INTRODUCTION

By application dated April 20, 1990, The New Brunswick Electric Power Commission (NB Power) requested that the New Brunswick Board of Commissioners of Public Utilities (the Board) approve a minor change to one of its rates. In a Memorandum filed on the same date, NB Power indicated that the primary purpose of the application was to vest jurisdiction in the Board. This enabled the Board to hold hearings to review the basic background principles (generic issues) that impact on the level of rates for services performed by NB Power within the Province.

A pre-hearing conference was held on June 13 and 14, 1990, to consider which generic issues should be reviewed and in which order public hearings should be conducted. Proposals were received by the Board as to the issues that were relevant and opinions were expressed as to the order in which they should be examined. The Board concluded that the appropriate generic issues and the order in which they would be examined was as follows:

- 1. Accounting and Financial Policies
- 2. Depreciation Policies
- 3. Capacity Planning
- 4. Cost Allocation
- 5. Rate Design
- 6. Customer Service Policies.

The public hearing with respect to Accounting and Financial policies commenced on October 15, and concluded on October 24, 1990. The Board's decision with respect to accounting and financial policies has been issued separately.

The hearing on the depreciation policies and practices of NB Power was held at the offices of the Board commencing on November 13, 1990, and continuing through November 14 and 15.

There was active participation by an intervenor referred to as the Large Power Users Group (LPU) which consisted of the following companies:

Denison-Potacan Potash Company
Fraser Inc.
Irving Oil Limited
Miramichi Pulp & Paper Inc.
NBIP Forest Products Inc.
Rothesay Paper Limited
St. Anne-Nackawic Pulp Company Ltd.
Stone Consolidated Inc.

The witnesses who participated in the hearing were as follows:

NB Power:

Mr. J. M. Hawkins - Comptroller of NB Power

Mr. K. Boocock, C.A. - Partner, Deloitte & Touche, Toronto Mr. J.A.F. Cook, C.A. - Partner, Deloitte & Touche, Fredericton

LPU:

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

Mr. Ivan Robichaud, a public intervenor appointed by the Attorney General of New Brunswick, attended as an observer.

No other registered intervenors took part in the proceedings.

BACKGROUND

Many assets last longer than one year and can provide useful service for many years. It is not appropriate to recover the cost of such assets entirely in the first year. The cost of such assets should be recovered over the period of time during which they are expected to provide useful service.

Depreciation is the means by which the cost of an asset is recovered over its useful life (service life). Depreciation charges are made each year to operating expense and the amounts so charged are calculated to recover the cost of the asset by the time it is retired from service. The cost to be recovered is the original cost plus cost of removal less salvage. The annual depreciation charges are credited to an account called accumulated depreciation (depreciation reserve).

Occasionally, adjustments are required to reflect the fact that certain assets are removed from service sooner than expected. Adjustments are also necessary whenever the estimated useful life of an asset is either increased or decreased.

Testimony given by the parties addressed the methodological choices made by NB Power and its estimates of the service lives of its assets. In addition, certain other issues

were discussed at the hearing. For both convenience and clarity, the Board will discuss the issues and present its conclusions under the following headings:

- Method
- Procedure
- Technique
- Service Lives, Other Than Point Lepreau
- Service Life Point Lepreau Generating Station
- Common Costs
 - Return of Assets to Service
 - Administrative Routine

METHOD

A depreciation method controls the rate of capital recovery. A decision is made to recover the cost of the asset in equal annual amounts or to recover the cost more quickly or more slowly. Methods in common use include the following:

- (1) <u>straight line</u>; under which capital is recovered in equal amounts over asset life,
- (2) sinking fund; under which equal annual charges somewhat smaller than those provided by straight line depreciation are segregated in a fund. The annual charges are calculated so that the total in the fund including accrued interest will equal asset cost at the retirement date,
- (3) <u>escalating charge</u>; under which the annual charge increases year by year in some defined way, and
- (4) diminishing balance; under which each annual charge is a fixed percentage of the remaining undepreciated portion of original asset cost. This is the method mandated by Revenue Canada for tax purposes.

NB Power Testimony

NB Power testified that it uses the straight line method for all depreciable assets with the exception of the Point Lepreau Generating Station. In the case of Point Lepreau, the escalating charge method is used; the year-to year increase being 3 percent (Transcript Page 1210).

The straight line method was recommended for assets, other than the nuclear plant, in NB Power's 1987 depreciation study (Exhibit NBP 1, Appendix 7.9) in order to meet corporate depreciation policy objectives. These objectives were defined at page 2 of the study as follows:

- (a) systematically and rationally allocate the cost of its assets over their estimated useful lives;
- (b) match service costs with the benefits provided to customers;
- (c) result in equitable treatment of generations of customers; and
- (d) recover the capital invested in depreciable assets over a reasonable period of time.

The study was prepared by NB Power's depreciation committee. The committee consists of five members: Mr. Hawkins, one of the witnesses for NB Power; Mr. Victor Clarke, manager of thermal operations with 29 years' experience in operation and maintenance of thermal generating stations; Mr. Earl Arnold, senior design engineer for distribution, who had had 24 years' experience in transmission line engineering; Mr. Earl Mogilevsky, senior distribution engineer with 29 years of experience in design, operation and maintenance of NB Power's distribution system; and Mr. Doug Hayward, senior director of resource development, who has 32 years' experience in hydro plant operation and in system planning (Transcript pages 1214-1216).

Mr. Hawkins stated that straight line depreciation is the most common method used by Canadian utilities (Transcript page 1212). He testified that the escalating charge method had been adopted for Point Lepreau to minimize rate shock when the nuclear generating station came into service (Transcript page 1242), and to produce an equitable sharing of cost between current and future customers (Transcript page 1248).

LPU Testimony

In his prefiled testimony, Mr. Tidby noted that NB Power

is using two depreciation methods:

"The escalating charge method for the nuclear plant is understandable. However, it is unclear why this method does not make sense for the other items of plant, which have similar life expectancies....

I am concerned that the adoption of different methods of depreciation for different groups of assets is not made on the basis of objective criteria." (Exhibit LPU 14, pages 2-3)

No recommendation on this point was included either in Mr. Tidby's testimony or in the LPU summary of proposals. The questions posed are nevertheless relevant and require consideration by the Board.

Board Conclusions

NB Power's submission showed that straight line depreciation is the method of choice for most utilities. It was recommended for use by NB Power as being the best way to meet its stated policy objectives. Furthermore, the recommendation was made by the NB Power depreciation committee, consisting of individuals knowledgeable in depreciation matters.

The Board notes that the Point Lepreau Generating Station was, at its in-service date, the dominant asset in NB Power's system, constituting over \$1.4 billion of its total value of plant in service. Prior to the in-service date, interest on this

investment was capitalized but following the in-service date, both interest and depreciation became chargeable to operations. Adoption of escalating charge depreciation resulted in a smaller depreciation charge in the early years of plant life thus reducing the extent of necessary rate increases.

The Board recognizes that, during the service life of Point Lepreau, interest charges will drop as capital is recovered and debt is repaid. Depreciation charges (under the method selected) will increase thereby making the combined depreciation and interest amount more uniform over the life of the station.

The Board, therefore, accepts the reasons advanced by NB Power as fully justifying the decision to apply escalating charge depreciation in the case of the Point Lepreau Generating Station.

No other NB Power plant additions coming into service in a single year have approached the cost of Point Lepreau. In the case of Mactaquac and Coleson Cove, only a part of the total plant was brought into service in a single year (Transcript pages 1285 & 1286). Plant in service also includes the cost of several hydro and thermal generating stations, many transmission lines, an extensive distribution system and various categories of general plant. Bringing any one of these assets into service would not, in the Board's opinion, have involved any significant problems of rate shock.

The Board further recognizes that, in the case of a number of assets of reasonably commensurate size and different inservice dates, there are not likely to be significant problems of intergenerational inequity. Even if capital-related charges for such assets are higher in the early years of plant life, the proportion of newer and older assets will be much the same for each generation of customers, and overall costs will be equitably shared.

In the light of these considerations, the Board concludes that the use of escalating charge depreciation for Point Lepreau is based on rational and objective criteria. However, there is no similar reason to apply escalating charge depreciation to any other existing NB Power assets.

At the same time, the Board recognizes that load growth and inflation will result in new assets assuming a growing importance among NB Power's capital charges. The Board, therefore, considers that it may be appropriate for it to review the proposed depreciation method prior to the in-service date of any major new generating station.

For existing assets of NB Power other than the Point Lepreau Generating Station, the Board concludes that straight line depreciation is the appropriate method.

PROCEDURE

Depreciation procedures determine whether, for the purpose of calculating the related depreciation charges, assets will be treated individually or as part of a group. This is a two-step process. First, a decision is made either to treat assets individually or to group them.

- (1) <u>Unit procedure</u> treats each asset as a separate entity. It is usually applied only to major assets such as generating stations.
- (2) Group procedure involves the assembly of assets of similar type and life expectancy into homogeneous groups. Each group is then treated as a single entity.

If a grouping approach is adopted for certain assets then two options exist.

- (1) <u>Under average life procedure</u>, each constituent asset in a group is assumed to have a life equal to the average life of the group.
- (2) <u>Under equal life procedure</u>, the lives of assets

within a group are assumed to differ in accordance with an appropriate survival curve. The depreciation charge is then calculated to recover the cost of each constituent asset by the end of its own service life. The charge calculated in this way is initially somewhat higher than that obtained under average life procedure.

NB Power Testimony

NB Power separates its assets into individual items or groups of items that are similar in nature. Depreciation charges are calculated separately for each item or group.

For generation assets, a group would involve only items at any one particular generating station. For transmission assets, a group would involve items related to a particular line. All distribution assets of a similar nature that were put into service in the same year would be one group. For example, all 25 KVA transformers installed in one fiscal year would be one group.

NB Power uses the average life procedure in all cases where it has grouped items together as a retirement unit.

Mr. Hawkins testified that NB Power's procedures, now

computerized, provide good statistical data and permit accurate accounting for depreciation assets. (Transcript pages 1260-61).

LPU Testimony

The LPU took no exception with the way NB Power has segregated its assets for the purposes of calculating depreciation.

Board Conclusions

The Board considers NB Power's choice of depreciation procedures to be appropriate.

TECHNIQUE

A depreciation technique controls the manner in which adjustments are made to recognize a change in the estimated useful life of an asset or to recognize the fact that an asset has been retired sooner than expected. Commonly used techniques are:

- (1) remaining life; adjustments are amortized to expense over the estimated remaining lives of the assets,
- (2) <u>lump sum</u>; adjustments are reflected in income in the year in which they are made, and
- (3) <u>arbitrary amortization</u>; adjustments are amortized to expense over an arbitrary number of years.

NB Power Testimony

NB Power regularly reviews the useful lives of its assets. Whenever a decision is made to either increase or decrease the estimated useful life of an asset, NB Power uses the remaining life technique to make the adjustment. This approach recovers the undepreciated cost evenly over the number of years of useful life that remain based on the new estimate.

With respect to the premature retirement of an asset, NB Power uses the lump sum technique. Whenever an asset is retired from service an adjustment to income is made to reflect the net gain or loss. Salvage value, if any, is offset against removal costs plus any remaining undepreciated cost to determine the net gain or loss.

Prior to 1972, NB Power had used the remaining life technique for premature retirements of distribution assets. However, this had led to a significant understatement of the depreciation reserve. For this reason, NB Power changed to the lump sum technique for early retirements of distribution assets.

LPU Testimony

The LPU did not object to NB Power's use of the remaining life technique for adjustments to the estimated useful lives of its assets. The LPU did, however, object to NB Power's use of the lump sum technique when assets are retired from service sooner than expected.

LPU stated that the recognition of the gain or loss in operations on the retirement of assets is not traditional for regulated industries. The LPU preference is for a technique that would achieve intergenerational equity by ensuring that large gains

and losses on the retirement of plant will not influence the setting of power rates in the year in which they occur. (Exhibit LPU 14, page 3)

Board Conclusions

The Board considers that the use of the remaining life technique for adjustments to the estimated useful lives of NB Power's assets is appropriate. This technique amortizes the adjustment to expense in a gradual and orderly manner.

With respect to the retirement of an asset sooner than expected, the Board notes that two different situations could arise. One situation is where an individual asset has been removed from service earlier than planned but other similar assets remain in service. The second situation is where all the assets of a particular type are removed from service prematurely. In the second situation, it is not possible to use the remaining life technique. In the first situation, it is possible to use the remaining life technique but this may well lead to an understatement of the depreciation reserve as has occurred to NB Power previously.

However, the Board has some concerns with the use of the lump sum technique. If the technique were applied indiscriminately

this could lead to unnecessary increases in rates. With respect to this concern, the Board notes the following statement on asset disposals and retirements made by NB Power in its prefiled evidence:

"If the gain or loss on disposal is significant, NB Power will consider deferring and amortizing the gain or loss over a period of time normally not exceeding five years." (Exhibit NBP 1, Appendix 7.9, page 18)

The Board directs NB Power, during 1991, to file with it a report which describes the guidelines NB Power uses in determining when a gain or loss is significant and the period of time over which any amortization would occur.

A second concern of the Board is whether use of the lump sum technique in any way hinders the establishment of appropriate useful lives. This concern is raised by an examination of lump sum charges to income caused by the premature retirement of distribution assets.

Table 8 of Exhibit NBP 14, reproduced on the following page, shows that in recent years net book value charged to operations has been almost 20% of the depreciation expense on distribution assets. Charges to operating expense including both depreciation and write-offs have amounted to almost 120% of the annual depreciation amount based on the current estimated useful

life. The Board concludes that on average, capital is being recovered in about 83% of service life.

DISTRIBUTION ASSETS

DEPRECIATION EXPENSE AND NET BOOK VALUE (FROM RETIRED ASSETS)

CHARGED TO OPERATIONS

(IN 000's)

		NET BOOK	
<u>YEAR</u>	<u>DEPRECIATION</u>	VALUE	TOTAL
73/74	\$ 3,142.4	\$ 883.6	\$ 4,026.0
74/75	3,450.1	1,164.4	4,614.5
75/76	3,941.8	1,510.9	5,452.7
76/77	4,577.3	1,782.8	6,360.1
77/78	5,415.6	1,812.9	7,228.5
78/79	5,957.5	1,466.5	7,424.0
79/80	6,541.0	1,504.2	8,045.7
80/81	7,029.1	1,173.6	8,202.7
81/82	7,689.0	1,895.0	9,584.0
82/83	8,337.4	1,818.6	10,156.0
83/84	9,600.0	1,494.0	11,094.0
84/85	9,864.1	1,734.8	11,598.9
85/86	10,756.1	3,508.9	14,265.0
86/87	11,717.7	2,226.3	13,944.0
87/88	12,916.6	2,372.5	15,289.1
88/89	13,971.1	2,685.4	16,656.5
89/90	13,114.7	2,987.2	16,101.9

NB Power's stated policy objective is to allocate the cost of its assets systematically and rationally over their estimated useful lives. In the Board's opinion, this objective is consistent with regulatory principles. However, NB Power's technique results in recovery of capital in less than the estimated life because the write-offs result in the immediate recovery of any undepreciated amount. No assets are depreciated beyond the

estimated life.

The Board directs NB Power, in 1991, to consider and report to it on possible modifications to eliminate or minimize the tendency towards accelerated capital recovery.

The Board will reserve final judgement on the appropriateness of NB Power's use of the lump sum technique for premature retirements of assets until it has had a chance to review the reports which NB Power has been directed to file with it.

SERVICE LIVES - OTHER THAN POINT LEPREAU

NB Power Testimony

NB Power's testimony may be generally summarized as follows: its estimates of service life are developed by its depreciation committee, composed of persons with extensive relevant knowledge and experience; assistance from consultants is obtained, when deemed necessary; all factors affecting service lives are considered; estimates are reviewed at five-year intervals, and the service lives resulting from this process are therefore appropriate.

LPU Testimony

In his testimony, Mr. Tidby stated that engineering judgment is not a recognized basis for the estimation of service lives: "It's based on judgment of individuals who presumably have some experience of the situation. But as a method in and of itself, it's not generally recognized as being one." (Transcript page 1621). He recommended historic analysis as the best basis for estimating service lives (Transcript page 1621); conjectured that the necessary information could be obtained in the case of NB Power (Transcript page 1620); conceded that the results of analysis should be subject to modification by other factors (Transcript page

1628); pointed out that in the case of NB Power's depreciation study, no analysis or rationale was given for alterations to engineering estimates of service lives (Transcript pages 1631-1632); suggested that some constraints applied were arbitrary (Transcript page 1635) and stated that under-estimates of service life did not conform to NB Power's stated objectives (Transcript page 1637).

The LPU proposal, based on recommendations 2 and 3 of Mr. Tidby's prefiled testimony, is that:

"That, as a requirement of rate increases, the Board require NB Power to provide a detailed study of service lives and dispersion for all assets based on an historical analysis, with a detailed justification for any deviation from the results of that analysis." (Exhibit LPU 18, page 1).

Board Conclusions

The Board notes Mr. Tidby's comment that in the case of a large number of utilities in Canada "there isn't the kind of vintaged information on retirements" (Transcript page 1619) that one might find where historical analysis is commonly used. The Board understands the phrase "vintaged information on retirements" to mean that the age of each asset at its retirement is known. It is clear from Mr. Hawkins' testimony that such information is not available for most of NB Power's retirements.

Where vintaged information is lacking but plant quantities installed and retired by year are available, it is the Board's understanding that simulation methods can be used to obtain estimates of average life and dispersion. The dependability of such estimates hinges on the length of record and quality of data and, in addition, requires a large enough sample to be statistically significant.

The Board, therefore, anticipates that analysis of historical data will not be universally applicable to NB Power's plant. The number of dams, turbines, power plant structures and transmission lines retired is, for example, likely to be insufficient for analytical purposes. In the case of other plant assets, limitations may arise due to shortness of time span or unreliability of records.

Nevertheless, it appears logical and sensible to make use of whatever means may be available to estimate service lives. The Board, therefore, concludes that it is appropriate for NB Power to utilize statistical analysis of historical data to the greatest extent reasonably possible.

There was general agreement that the service lives of assets are affected by considerations other than durability; that such things as obsolescence, economic efficiency, and acts of

public authority are also mortality factors, and that service lives based on historic data or engineering estimates may therefore require modification. Mr. Tidby's concern about the adjustments made by NB Power was that they appeared arbitrary, and if there had been a rational basis for the changes, these were not disclosed in NB Power's depreciation study.

The Board concludes that a full written explanation of the reason for and extent of each adjustment or limitation of service life will be necessary in future depreciation studies.

Mr. Tidby's testimony raised the possibility that the service lives now used by NB Power are too short. The Board takes cognizance of Mr. Hawkins' testimony that fully depreciated assets still in service constitute only 1.6% of plant in service. Bearing in mind the dispersion implied by write-offs shown in Exhibit NBP 14, Table 8, the Board concludes that the service lives now in use are not under-estimated and may in fact be over-estimated.

The Board notes that NB Power's next depreciation study is scheduled for completion in 1992. Pending completion and review of that study, the Board is of the view that NB Power's present depreciation rates are acceptable for rate-making purposes.

SERVICE LIFE - POINT LEPREAU GENERATING STATION

NB Power Testimony

A 630 MW CANDU nuclear generating station was constructed at Point Lepreau and entered service in 1983. The station has had an outstanding operating record, ranking among the top ten reactors in the world.

Mr. Hawkins discussed the concept of facility, composite and component lives at the hearing (Transcript, pages 1230-1236). A facility life is the maximum life associated with a particular It represents the maximum useful life for a particular asset. facility and no component associated with that facility can have a useful life greater than the facility life. However, some components of the facility have shorter useful lives than the facility life. For example, the Point Lepreau generating station has a facility life of 31 years while certain components of the station have useful lives of 10, 15 or 20 years. Each component of the Point Lepreau generating station is depreciated on the basis The sum of all of these individual of its own useful life. depreciation charges represents the total annual depreciation for Point Lepreau. The composite life of Point Lepreau is calculated by dividing the original cost of Point Lepreau by the total annual depreciation charge. The composite life for Point Lepreau is 30

years.

Mr. Hawkins testified that this estimate is still considered appropriate at this time. However, a review of useful lives of the components is planned for completion in 1992.

LPU Testimony

Mr. Tidby's testimony was generally to the effect that the assigned service life is too short; that Ontario Hydro uses a life of 40 years; that because of its extensive experience with nuclear plants, its estimate of service life is the best available guide; and that increase of Point Lepreau service life would result in significant cost of service reductions.

Based on Mr. Tidby's testimony, LPU recommended as follows:

- "1. That, as a requirement of rate increases, the Board direct NB Power to provide a detailed depreciation study of the Point Lepreau plant based on:
 - (a) the plant's operating experience and physical condition, and
 - (b) comparisons with Ontario's CANDU plants with a full explanation of all factors considered.
- 2. Pending completion of such a study, the Board should only allow depreciation based on Ontario's practice for its CANDU plants.

3. That the allowance of depreciation based on Ontario's practice should be applied in determining NB Power's recent application for interim rate increases."

(Exhibit LPU 18, page 2)

Board Conclusions

The Board notes that the useful lives assigned to the various components of the Point Lepreau Generating Station exert a considerable influence on NB Power's cost of service. For example, there would be a significant reduction in depreciation expense plus further expense reductions due to amortization of the surplus in the depreciation reserve and decreased costs for decommissioning and spent fuel disposal associated with any significant increase in the useful life of Point Lepreau.

There is no disagreement as to the appropriateness of and need for a depreciation study on Point Lepreau. The Board notes that, under NB Power's policy of a five-year review, such a study is long overdue. The Board considers that the depreciation study for Point Lepreau should receive the highest priority and that the completed study be filed with the Board no later than the end of 1992. The issue is whether the existing estimates of useful lives should be retained for rate purposes pending the results of such a study.

The LPU proposal appears to pre-judge the result of the intended study. The Board lacks a sufficient basis for making such a judgement and, therefore, concludes that the present estimates of useful lives for the components of the Point Lepreau Generating Station will be acceptable for rate purposes pending completion of the depreciation study.

The Board will expect NB Power to address in the study the plant's operating experience and physical condition and to make comparisons with Ontario Hydro's plants but it declines to direct NB Power to base its study on these factors, as proposed by LPU.

NB Power's testimony showed that the life of a generating station can be extended through repairs and replacements and that the economic efficiency of the station is an important consideration in justifying the necessary expenditures. The Board, therefore, recognizes that factors other than the physical life of the plant assets may have a distinct bearing on the conclusions reached.

A significant component of the Point Lepreau Generating Station are the fuel channels and there was considerable discussion concerning when they will need to be removed and replaced. Both the timing of the removal and replacement and the amount of time required to do so are important because they affect the cost associated with this event. NB Power is presently reviewing techniques being used by Ontario Hydro to extend the lives of their fuel channels to see if these techniques can be adopted for use in New Brunswick. Mr. Hawkins discussed the adjustments that would be necessary should it be possible to successfully adopt the Ontario Hydro procedures (Transcript pages 1571-1572). The Board directs NB Power to file with the Board, upon completion of the review, all relevant information including its conclusions and recommendations with respect to fuel channel removal and replacement. This may be filed in confidence pursuant to section 7.1 of the Public Utilities Act should NB Power wish to do so.

COMMON COSTS

The Board notes, from Exhibit NBP 16, that common costs relating to the Lepreau site comprise a relatively small part of the over \$1.4 billion total cost of the station at the in-service date but that the dollar value is substantial. It is further noted from the testimony of Mr. Hawkins that the site provides common facilities for two reactors. However, the total amount of common costs is being charged against the one existing reactor. However, Mr. Hawkins also gave evidence that with respect to the Coleson Cove generating station the common costs were recorded separately. These costs were not allocated entirely to the first unit. Sixty percent of the common costs were allocated to the first unit and the remaining forty percent were charged to the second unit. Board understands that the Belledune generating station, currently under construction, will also have common facilities that in future will be shared by 2 or more units. The Board expects that the cost of these common facilities will be shared equitably by the individual units. The Board, therefore, directs NB Power to file with the Board its plan for the recovery of the common costs that will be associated with Belledune.

RETURN OF ASSETS TO SERVICE

On occasion, NB Power removes assets from service, refurbishes them and returns them to service. Mr. Hawkins testified that such assets are written off when withdrawn from service; that they are treated as new assets after refurbishment and assigned a capital cost equal to the average capital cost of new items of the same kind. He portrayed the accounting treatment as encouraging the reclamation of faulty equipment where it is economic to do so (Transcript pages 1538-1557). Mr. Hawkins prepared a table, as an example, based on reclamation of a transformer to illustrate the accounting treatment. An additional column was later added to this table and the modified table was entered as Exhibit PUB 7.

The Board is concerned that the capital cost attributed to the refurbished unit is not in general its historic cost. This is contrary to the usual basis of capitalization of utility assets. Moreover, if reclamation is economic, the historic cost of the refurbished unit must be equal or less than the cost of a new unit. Thus, NB Power's treatment results in a deemed credit to expense at the time of refurbishment and a charge on users thereafter. In the opinion of the Board, only actual costs should be capitalized and recovered through depreciation and it is not appropriate to treat deemed costs in this manner.

The Board recognizes the desirability of reclaiming used assets to the full extent that economic efficiency can thereby be enhanced. The Board also accepts that some incentives may be necessary in order to ensure that no opportunities are overlooked. However, incentives that do not affect capital costs are in the Board's opinion preferable and likely to be available.

The Board will, therefore, require NB Power to record and capitalize only the actual costs relating to asset reclamation.

ADMINISTRATIVE ROUTINE

The Board envisages that efficiency in both the regulatory process and NB Power's administrative tasks will best be served by having at all times an approved set of depreciation rates for use in cost of service studies to support rate applications. In order to ensure this, the Board directs NB Power to file with it details on the depreciation rates presently in use. Furthermore, NB Power is to file with the Board details on any changes in depreciation rates including the rationale for the change.

DATED at the City of Saint John, N.B. this 16th day of July, 1991.

David C. Nicholson Chairman

B. Fernand Nadeau
Vies-Chairman

J. E. Stevens Commissioner

Claudette Stymiest Commissioner

Raymond Gorman Commissioner