



**DECISION**

**IN THE MATTER OF an Application dated  
June 21, 2002 by New Brunswick Power  
Corporation in connection with an Open  
Access Transmission Tariff**

**March 13, 2003**

New Brunswick

Board of Commissioners of Public Utilities

## TABLE OF CONTENTS

INTRODUCTION .....	1
Background.....	1
Hearing Participants .....	4
PERFORMANCE BASED REGULATION .....	6
TRANSMISSION REVENUE REQUIREMENT .....	8
Rate Base.....	8
Capital Structure .....	9
Finance Charges .....	10
Existing Long-term Debt .....	11
New Debt.....	14
Interest on short-term debt .....	16
Allowance for funds used during construction (AFUDC) .....	16
Total Finance Charges .....	16
Return On Equity .....	17
Operating, Maintenance & Administration (OM&A) Expenses .....	19
Test Year .....	20
Allocation of Corporate Services Group Expenses .....	21
Conclusion – OM&A Expenses .....	22
Payment In Lieu Of Taxes .....	23
Amortization .....	24
Conclusions - Transmission Revenue Requirement.....	25
VOLUME OF SALES .....	27
COST OF SERVICE .....	28
ANCILLARY SERVICES .....	29
Introduction .....	29
Capacity-based Services.....	31
Energy Imbalance.....	35
TARIFF ISSUES .....	37
Allocation of Existing Interconnection Capacity .....	37
Reciprocity .....	41
System Losses.....	42
Product And Service Agreement (Agreement) .....	44
Dispute Resolution.....	44
Inadvertent Energy.....	45

Re-dispatch Costs .....	46
System Expansion .....	47
Standards of Conduct.....	48
Tariff Word Changes .....	48
OTHER ISSUES .....	49
Benchmarking.....	49
Quality of Service .....	49
Municipal Electric Utilities Concerns .....	50
REPORTING REQUIREMENTS.....	52
SUMMARY OF CONCLUSIONS .....	53

## **INTRODUCTION**

### **Background**

The Government of New Brunswick (Government) issued its Energy Policy White Paper (White Paper) on the restructuring of the electricity industry in January 2001. Following this, a market design committee (Committee) was established to make recommendations on how best to implement the policies outlined in the White Paper. The Committee was comprised of representatives from the three municipal utilities, NB Power, large customers, environmental groups, Government, and Board staff. The final report of the Committee was released in May 2002.

One recommendation was that all potential users of the transmission system in New Brunswick have open and equal non-discriminatory access that was, at a minimum, compatible with the requirements of the US Federal Energy Regulatory Commission (FERC). Doing so would ensure that New Brunswick Power Corporation (NB Power) would have unrestricted access to the US electricity markets.

The Committee also recommended that the Board of Commissioners of Public Utilities (Board) be given the authority to approve the Open Access Transmission Tariff (tariff). On June 14, 2002 the Government passed the legislation giving the Board this authority.

NB Power, on June 21, 2002, applied to the Board for approval of its proposed tariff. The written evidence in support of the application was submitted on July 25, 2002 and a procedural conference took place August 12, 2002.

At that time, Saint John Energy presented a letter outlining its concerns regarding the application. They were concerned that the legislation necessary to restructure the electricity market, and to reorganize NB Power into a number of separate corporate entities, had not been passed by the legislature. Saint John Energy, supported by a number of other intervenors, indicated that the public hearing should occur in stages to allow sufficient time to understand the effects of these changes. The Board accepted the letter as a motion.

The conference was adjourned until August 20, 2002 to allow time to evaluate the motion. Upon reconvening, Saint John Energy withdrew the motion and the Board then ruled that the hearing would proceed as outlined in Table 1.

**TABLE 1**

Schedule For NB Power Transmission Tariff Proceeding

Event	Date
NB Power Evidence Filed with Board	July 25, 2002
Procedural Conference	August 12 and August 20
1 <sup>st</sup> Set of Questions to NB Power	August 21
NB Power Responses to 1 <sup>st</sup> Set of Questions	September 11
2 <sup>nd</sup> Set of Questions to NB Power	September 19
NB Power Responses to 2 <sup>nd</sup> Set of Questions	September 30
Motions Day	October 10
Intervenor Evidence Filed with Board	October 23
All Parties Submit Questions to Intervenor	October 30
Procedural Conference	November 8
Intervenor Responses to Questions by All Parties	November 13
Hearing Begins	November 18

In support of its application, NB Power submitted over 650 pages of written evidence. A total of 626 written questions resulting in over 750 pages of answers were exchanged between intervenors and the

applicant during the fall of 2002. The hearing began November 18, 2002. Throughout the hearing approximately 700 additional pages of evidence were filed. The hearing took 21 days in the months of November 2002 to February 2003. The written record of the public hearing exceeded 2500 pages.

By mid-December, the Board was aware that the legislation for the restructuring of the market and of NB Power would be tabled in the legislature by the end of January. The Board considered that the public interest would be better served if parties were able to review the proposed legislation before the close of the public hearing. Therefore, the Board adjourned the hearing on January 7, 2003 until February 10, 2003.

Prior to the adjournment, the Board ordered NB Power to provide the actual costs of providing certain ancillary services. NB Power filed this information January 31, 2003.

The restructuring legislation, Bill 30, was introduced January 31, 2003. The Board reconvened the hearing on February 10, 2003 and final argument was heard during the week of February 17, 2003.

Bill 30 identifies NB Power Transmission Corporation as the transmission system owner. An independent company referred to as the System Operator (SO) will operate the system. The SO, after April 1, 2003, will be responsible for filing applications for changes to the tariff.

The current application was filed under the assumption that the Transmission Corporation and the SO were one company. In this

decision, the name Transco refers to both the Transmission Corporation and the System Operator.

## **Hearing Participants**

NB Power presented evidence through five panels:

### Panel A – Overview and Policy Framework

Wayne Snowdon

Bill Marshall

### Panel B – Capital Structure and Rate of Return

Sharon MacFarlane

Dr. Roger Morin

### Panel C – Revenue Requirements and Tariff Design

Sharon MacFarlane

David Lavigne

Bill Marshall

George Porter

### Panel D – Service Delivery and Operations Issues

Wayne Snowdon

Brian Scott

### Panel for Embedded Cost for Ancillary Services and Legislation

Darrel Bishop

George Porter

Sharon MacFarlane

Wayne Snowdon

Formal intervenors were:

Bayside Power L.P.

Canadian Manufacturers & Exporters, New Brunswick Division (CME)

City of Summerside

Emera Energy Inc. (Emera)

Énergie Edmundston

Rodney J. Gillis, QC

J.D. Irving Limited (JDI)

Maine Public Service Company

Northern Maine Independent System Administrator

Nova Scotia Power Inc. (NS Power)

Perth-Andover Electric Light Commission

Province of New Brunswick

Province of Nova Scotia, Department of Energy

Saint John Energy

WPS Energy Services Inc.

Informal intervenors were:

HQ Energy Marketing Inc.

Irving Oil Limited

KnAP Energy Services Inc.

Renewable Energy Services Ltd.

TransÉnergie

Union of New Brunswick Indians

Ralph Wood

Intervenor evidence was filed by NS Power, Emera and JDI. Witnesses for NS Power were Melvin Whalen and Tim Leopold. Witnesses for



Emera were James Connors, QC and Mark Sidebottom. The NS Power panel presented evidence on November 27, 2002 and the Emera panel appeared on December 9, 2002. The JDI witness panel, comprised of Dr. Adonis Yatchew, Dr. Robert Earle and Mark Mosher, testified January 6 and 7, 2003. CME and JDI were represented by the same counsel and will be referred to as JDI in this decision.

The informal intervenors who provided letters of comment for the record and who appeared before the Board on February 10, 2003 were:

Ralph Wood  
Renewable Energy Services Ltd.

The Board has carefully considered the evidence presented to it in making the decisions that follow.

## **PERFORMANCE BASED REGULATION**

Performance Based Regulation (PBR) is a method of regulation that may lead to greater efficiencies, while allowing greater flexibility for the company to manage its business and lower its regulatory costs, as compared to a more traditional form of regulation.

NB Power recommended a PBR plan that would allow automatic increases in rates. The amount of the annual automatic increase would be determined by use of a formula that takes into consideration the rate of inflation and improvements in productivity. The rate increases would not be determined by the actual costs of Transco.

The plan was intended to provide NB Power with an incentive to reduce costs and thereby increase the return on its investment. The PBR plan proposed that Transco and its customers would share the effects of any changes in the return on investment, within a defined range. Any return on investment above a certain level would be refunded to customers. If the return fell below a given level Transco could apply for an increase in rates. Transco would also be able to apply for a rate increase to recover any increase in costs that were beyond their control, such as tax increases.

NB Power proposed that the PBR plan operate for three years, after which a comprehensive review would occur. The first year of the plan would be the "test year", the year in which the initial rates would be established.

The Board believes that proper establishment of the initial rates is critical to the success of any PBR plan. Both NB Power and JDI agreed that this was essential. The initial rates must be based upon reliable estimates of costs and sales.

The transmission business unit has been operating for some time but has done so in close association with other NB Power business units. This is the first time that rates will be established specifically for transmission and ancillary services. This would be of less concern if the Board had had a more recent history of regulatory oversight of NB Power as an integrated utility. NB Power's last rate hearing before this Board occurred 10 years ago in 1993. This causes the Board concern over the reliability of the estimates of costs and sales for Transco.

The Board is of the opinion that the rates established in this decision and their underlying assumptions should be tested for a period of time in order to assess their appropriateness and to allow for any necessary adjustments. The Board believes that this should occur before any PBR plan is implemented.

The Board considers that the PBR proposal of NB Power is not appropriate at this time. The Board therefore has not used a PBR plan to establish rates in this decision.

## **TRANSMISSION REVENUE REQUIREMENT**

### **Rate Base**

The rate base is the value of assets used to operate the business. NB Power established an average rate base for 2003/2004, using forecast values for net fixed assets, deferred charges and a working capital allowance. The original calculation was amended and the details are given in Table 2.

**TABLE 2**

Transco Statement of Average Rate Base for 2003/2004

Item	Amount (millions of \$)
Gross Fixed Assets	631.6
Less: Accumulated Amortization	(320.0)
Net Fixed Assets	311.6
Plus: Working Capital	4.7
Plus: Deferred Charges	11.4
Average Rate Base	327.7

NB Power has maintained historical records of the net book value of assets employed in the transmission business unit. These were used

as the basis for its forecasts of both the cost and the associated depreciation of fixed assets. When Transco is incorporated on April 1, 2003, the fixed assets of the business unit will be transferred to it at their net book value at that date.

The working capital allowance of \$4.7 million was calculated through a formula that uses a fixed percentage of operating expenses. This formula is acceptable to the Board.

The principal component of deferred charges of \$11.4 million represents Transco's estimated share of NB Power's deferred pension benefit. The allocation was based on the estimated number of employees of the business unit as a ratio of the total employees of NB Power. The Board finds this is an acceptable method of allocating these charges.

The Board is satisfied that an amount of \$327.7 million is a reasonable estimate of the average rate base for 2003/2004.

### **Capital Structure**

NB Power proposed a deemed capital structure of 65% debt and 35% equity. Ms. MacFarlane indicated that the deemed ratio would become the actual capital structure of Transco upon its incorporation.

One reason given by Dr. Morin for establishing the debt to equity ratio at the recommended level is to enable the company to achieve an "investment grade rating" from the bond rating agencies. This rating is important for Transco, as it will impact the cost of future borrowing for the company. In general, a higher equity component reduces a

lender's risk and makes the investment more attractive and thereby lowers the interest rate.

Dr. Morin indicated that an effective investment grade rating would be single A or better, because many Canadian financial institutions are precluded from investing in bonds rated less than A. In support of his recommendations, Dr. Morin included, in evidence, comparative statistics on Canadian and U. S. electric utilities and gas distribution companies. The average equity ratio of all the companies included in his study was 38.4%. He stated that he carefully considered the business risk of Transco in arriving at his recommended debt to equity ratio.

Dr. Yatchew proposed an equity component of 30% and a debt component of 70%. He based this on his assessment that there is very little risk in the transmission business.

Transco will be a separate legal company required to raise financing in the capital markets and requires an appropriate debt to equity ratio. The Board considers that the minimum percentage for equity should be 35% and therefore approves a capital structure of 65% debt and 35% equity. This results in an average amount of equity for 2003/2004 of \$114.7 million.

### **Finance Charges**

Finance charges are expenses associated with the debt of Transco. They relate to its share of existing long-term debt, to new long-term debt issued on its behalf and to short-term debt. The expenses are reduced by what is referred to as an allowance for funds used during

construction to arrive at the total finance charges for the year. Each item is discussed below.

### **Existing Long-term Debt**

The average amount of existing long-term debt for 2003/2004 was shown by NB Power to be just over \$2 billion. This amount will be allocated to several new companies. Transco's share of the existing long-term debt of NB Power was calculated by multiplying the average amount for 2003/2004 by Transco's *pro-rata* share as shown in Table 3.

**TABLE 3**

Amount of Existing Long-Term Debt for Transmission Company for  
2003/2004

Item	Amount
NB Power Total Average Debt	\$2,006.7 million
Transco Share	6.89%
Transco Average Debt	\$138.3 million

JDI argued that the average amount of existing long-term debt should be adjusted to remove avoided borrowings. These are funds acquired through charges to customers for future decommissioning events associated with the Point Lepreau nuclear plant. NB Power has used these funds to invest in assets in all business units. It stated that doing so has eliminated the need to incur additional debt.

It is the responsibility of the nuclear generation company to pay for decommissioning but it is the responsibility of Transco to repay the funds that have been invested in its business. The evidence is clear

that Transco is being charged its *pro-rata* share of these funds and the Board considers this to be appropriate.

JDI also raised a concern about the treatment of sinking funds in the calculation of average existing long-term debt. NB Power responded that its calculation properly adjusted for both the earnings on sinking funds and for the principal amount. The Board has reviewed these calculations and finds them appropriate. The Board therefore will accept the amount of \$138.3 million as the average amount of existing long-term debt for Transco for 2003/2004.

NB Power proposed that the cost of existing long-term debt be based on the coupon interest rate, issue costs, foreign exchange costs and a credit spread. NB Power's original estimate of the total cost to Transco of \$14.8 million was reduced, during the hearing, to \$14.7 million due to an adjustment in foreign exchange costs.

JDI submitted that, for various reasons, the amortization of principal related foreign exchange losses should not be included in the interest rate calculation for existing long-term debt. NB Power responded that this is a requirement of generally accepted accounting principles. NB Power agreed that the ultimate amount is not known with certainty but that it is still appropriate to include an annual amount so as to spread this cost over the life of the associated debt. The Board considers that the approach used by NB Power is appropriate.

NB Power proposed that the rates to be charged to customers should also include an amount of .91% for the credit spread. The .91% is the estimate of the additional amount of interest that NB Power would have paid if their debt had not been guaranteed by the Government.

NB Power stated that its obligation with respect to existing long-term debt is to pay a Government guarantee fee of .6489%. NB Power proposed that Transco would keep the difference between the requested .91% spread (charged to customers) and the .6489% fee (paid to the Government). NB Power's view was that such an arrangement would ensure that third party users (customers outside New Brunswick) pay their full share of the costs of using the system and do not benefit from lower provincial borrowing rates which are effectively subsidized by taxpayers.

JDI argued that the additional amount above the guarantee fee is not appropriate and should not be included in the cost of existing debt. The Board considers that the rates charged to customers should be based on the actual costs associated with existing long-term debt and not what Transco might have been required to pay had the existing long-term debt been issued without a provincial guarantee. The Board therefore reduces, for regulatory purposes, the cost of existing long-term debt by \$0.4 million. This amount is the difference between charging customers a credit spread of .91% as proposed by NB Power and charging customers a Government guarantee fee of .6489%, which will be the actual cost to Transco for 2003/2004.

The Board therefore approves a total cost for existing long-term debt for 2003/2004 of \$14.3 million. Table 4 summarizes the calculation of the cost of existing long-term debt.



**TABLE 4**Cost of Existing Long-Term Debt to Transco

Item	Amount (millions of \$)
Long-term Debt (per pre-filed evidence)	14.8
Less: Foreign Exchange Adjustment	(0.1)
Less: Credit Spread Adjustment	(0.4)
Board Approved Cost	14.3

**New Debt**

The total amount of debt of NB Power as at April 1, 2003 will be considerably higher than the \$2 billion of existing long-term debt because debt issued during the 2002/2003 year is not considered to be existing debt; rather, it is referred to as new debt. The total amount of existing long-term debt at April 1, 2002 was \$2.9 billion. During the 2002/2003 year, approximately \$790 million of this debt is to be retired and some of it refinanced. Cash from operations will be insufficient to pay for these retirements. Therefore, NB Power must issue a significant amount of new debt in 2002/2003. The new debt raised in 2002/2003 is being allocated as if the new companies existed during 2002/2003. The total amount of new debt to be issued for refinancing is not on the record but Transco's share is \$50.9 million.

New debt includes the debt issued in 2002/2003 on behalf of Transco. It also includes debt to be issued by Transco in 2003/2004. The amount of new debt is based on the ongoing cash requirements associated with operating the business. The Board has reviewed the evidence concerning new debt and accepts the amount of \$75 million estimated by NB Power as the average amount of new debt for 2003/2004.

The cost estimate of 6.14% for new long-term debt for Transco was based on an average of the estimated costs for 10 year and 30 year long-term Canada bonds. A credit spread was added to this amount to reflect the fact that the interest rate charged to Transco would be higher than that charged to the Government of Canada. NB Power recommended a credit spread of 1.34% based on its analysis of credit spreads paid by other utility companies and the assumption that Transco would have an "A" bond rating. This produces a rate of 7.48% as the cost of new long-term debt for Transco for 2003/2004.

JDI recommended an all-in maximum rate of 6.57% for new debt in 2003/2004 based on NB Power's estimate of avoided borrowing costs. NB Power responded that it did not suggest that this rate was the cost of new debt and does not believe it to be so.

The Board considers that the cost of new debt should be based on an estimate of what Transco will be required to actually pay for new debt in 2003/2004. The evidence indicates that this cost will be 7.48%, as discussed above. There was no evidence provided in support of a different rate. The estimate was based on an analysis of forecasts available on a particular day. Forecasts of the cost of long-term debt do vary over time and the predicted cost for 2003/2004 would be higher or lower depending on the forecast used. However, forecasts of many other important expense items are subject to similar variances. The Board considers that it would be inappropriate to attempt to constantly update the various forecasts. The Board considers that 7.48% is a reasonable estimate of the cost of new long-term debt for 2003/2004.

JDI raised an issue with the calculation of the total interest expense for new debt in 2003/2004. JDI claimed that the amount of new debt issued in 2002/2003 at a cost of 7.32% was incorrectly charged at 7.48%. The Board has reviewed this calculation and agrees with JDI. The effect of this is that the expense is overstated by \$100,000. The Board therefore reduces the allowed amount of interest on new debt to \$5.5 million from \$5.6 million.

### **Interest on short-term debt**

Transco uses interim or short-term financing to provide itself with flexibility that reduces the overall interest costs. NB Power used a forecast of 5.06% for short-term interest rates for 2003/2004 and no party took issue with this rate. The Board accepts NB Power's estimate of \$0.5 million for interest on short-term debt.

### **Allowance for funds used during construction (AFUDC)**

AFUDC recognizes that assets under construction do not provide useful service. The finance charges associated with such construction are not charged to current customers. They are capitalized and added to the value of the assets and in this way are recovered from future customers in those years when the assets are providing useful service. The Board accepts NB Power's estimate of \$1.4 million for AFUDC.

### **Total Finance Charges**

The Board approves total finance charges of \$18.9 million for 2003/2004 which is \$0.5 million less than the amount requested by NB Power. Table 5 summarizes the calculation of the finance charges.

**TABLE 5**

Total Finance Charges for Transco for 2003/2004

Item	Amount (millions of \$)
Cost of Existing Long-term Debt	14.3
Cost of New Long-term Debt	5.5
Cost of Short-term Debt	0.5
Less: AFUDC	(1.4)
Total	18.9

**Return On Equity**

The Board must approve a just and reasonable rate of return on the equity component of Transco's capital structure. Both Dr. Morin and Dr. Yatchew presented evidence on the appropriate rate of return for Transco. They both used the Capital Asset Pricing Model as the basis for calculation of their recommended rate of return. The calculation, using this method, is based upon three factors:

- risk-free rate of return
- market risk premium
- beta rating

The risk-free rate can be defined as the return an investor expects to earn on an investment that has little or no risk. Dr. Morin based his estimate on a forecast of long-term Canada bond yields of approximately 6%. Dr. Yatchew agreed with the use of long-term Canada bonds but used a forecast of 5.7%, which reflected more recent information.

The market risk premium represents the additional return over the risk-free premium expected by investors for assuming risk. Dr. Morin estimated the market risk premium to be 6.7% based on the average market risk premiums from six different studies. Dr. Yatchew stated that a reasonable estimate of the equity premium is in the range of 4%-6%.

The beta rating for a publicly traded company measures its risk relative to the risk of the entire market portfolio. The market has a beta of 1.0. Companies less risky than the market average have a beta less than 1.0 whereas those more risky, have a beta greater than 1.0.

Dr. Morin used a beta of 0.67 while Dr. Yatchew used a beta in the range of 0.35 to 0.50. As a result of their assumptions and calculations, the two witnesses recommended different rates of return on equity. Dr. Morin recommended a return on equity of 11.0% and Dr. Yatchew recommended a rate of return of 8.25%.

The Board has carefully considered the evidence of Drs. Morin and Yatchew and also the discussion on the business risk of Transco. NB Power witnesses expressed confidence in the accuracy of their estimated sales volume for 2003/2004. The Board considers that this confidence is an indication of lower business risk.

The Board will set the rate of return on equity for 2003/2004 at 9.5%. This results in a revenue requirement of \$10.9 million for net income. Rates for 2003/2004 will be set so that Transco will earn a profit of \$10.9 million, if its results are equal to its forecast.

As discussed earlier in this decision, the Board has not approved the PBR approach as proposed by NB Power. The Board however, does believe that it is important to provide an incentive for management to operate Transco as efficiently as possible. To encourage such behaviour, the Board will allow Transco to earn a return on equity up to 10.5%. This means Transco can earn a net income up to \$12.0 million in 2003/2004 without being required to lower its rates. The Board will monitor Transco's quality of service, as discussed later in this decision, to ensure that any increase in net income does not occur as a result of reducing the quality of service.

The Board considers that this approach requires similar treatment on the downside. The Board does not expect Transco to file a request for a rate increase in 2003/2004 unless the rate of return on equity is forecast to fall below 8.5%. This means that Transco's forecast of net income would need to fall below \$9.7 million. The exception would be cost increases that are beyond the control of management and which would reduce the return on equity below 9.5%.

### **Operating, Maintenance & Administration (OM&A) Expenses**

OM&A expenses are necessary for Transco to conduct business. A major component of the expense is for salaries with the remainder for materials, property taxes, the operation of the high voltage connection with Quebec, payments to an affiliated company for services and other items. OM&A expenses are reduced by the sale of services to affiliated companies and by the capitalization of certain expenses. Table 6 identifies the items related to OM&A expenses.

**TABLE 6**Operations, Maintenance & Administration Expenses 2003/2004

Expense	Amount (millions of \$)
Labour & Benefits	23.8
Hired Services	3.0
Materials	2.2
Vehicles	1.8
Utility & Property Taxes	6.8
Other	3.7
High Voltage Connection	1.8
Payments to Affiliates	5.9
Sub-Total	49.0
Less: Revenues from Affiliates	(4.4)
Less: Expenses Capitalized	(7.0)
OM&A Expenses	37.6

**Test Year**

The rates to be charged customers are based on the expenses of a fiscal year which is referred to as the test year. NB Power proposed that a future test year be used, being their fiscal year 2003/2004.

JDI recommended that the test year be based on the adjusted historical expenses of the transmission business unit. JDI further proposed the use of a deferral account to record expenses that could not be recovered in a given year. Any shortfall could be recovered in future years if the expenses were found to be reasonable. The Board does not consider that use of a deferral account would be appropriate.

The Board considers that the objective is to establish the best estimate of the costs that will be incurred in 2003/2004. Those costs should then be recovered from the customers taking service in that year so as to provide for inter-generational equity.

The Board considers it appropriate in determining the reasonableness of an expense forecast to examine both the historical information available and the projected increases. Transco has been operating as a separate business unit for a number of years. Details of the costs for past operations were submitted, as were forecasts of costs for the period 2003-2006. This information was subjected to a detailed review.

The Board is of the view that the forecasts for 2003/2004 have been properly tested and provide the best information on which to set rates. The Board will therefore use 2003/2004 as the test year for establishing rates in this decision.

### **Allocation of Corporate Services Group Expenses**

The expenses of the Corporate Services Group, which provides services such as legal, regulatory, finance and information systems, are to be allocated to the various new companies on the basis of a study performed by Deloitte & Touche. The Board considers the methodology used by Deloitte & Touche to be reasonable. However, the Board notes that Deloitte & Touche did not conduct any test of reasonableness on the actual level of expenses for the Corporate Services Group.

The Board believes that the sharing of services between affiliated companies may well provide financial benefits to customers of Transco. However, the Board is of the view that any such sharing should only occur on the basis:

- that Transco is charged rates that are reasonable;



- that there is proper protection of all confidential customer information that has been acquired by Transco; and
- that affiliated companies do not receive preferential access to regulated services of Transco.

JDI recommended, and the Board agrees, that Transco be required to disclose details of all transactions with related companies. The Board therefore will require that an Affiliate Relationships Code be established. This code will set out the standards and conditions required for the transactions between Transco and its affiliated companies. It will also establish the record keeping and reporting requirements of Transco with respect to such transactions. It will provide direction on matters such as a transfer pricing policy, payment of inter-company debt and protection of information and data.

Transco staff and Board staff are directed to discuss the details of the Affiliate Relationships Code, and NB Power is directed to submit a draft code for consideration by the Board by June 30, 2003.

### **Conclusion – OM&A Expenses**

JDI recommended that the OM&A amount be reduced to \$34.7 million but provided no evidence as to any specific items that should be adjusted or eliminated. The Board considers the amount proposed by NB Power to be reasonable and therefore accepts the estimate of \$37.6 million for OM&A expenses for 2003/2004.

As noted elsewhere in this decision, 2003/2004 will be the first year that Transco will be operating as a separate legal entity. It also will be the first year that the electricity market in New Brunswick will be subject to at least a limited form of competition. These factors add

uncertainty and increase the possibility that results may be significantly different from the forecast. The Board therefore will require monthly reports from Transco providing details on its actual financial results, the forecast amounts and an explanation of any significant variances. The reports are to be filed within 15 days of the previous month end.

### **Payment In Lieu Of Taxes**

NB Power included a payment in lieu of taxes as an expense to be recovered through the rates to be charged to customers. As stated in Bill 30, the proposed restructuring legislation, the New Brunswick Power Transmission Corporation will be required to make a payment in lieu of taxes to the New Brunswick Electric Finance Corporation (Debtco) in 2003/2004. The amount of the payment is equal to the federal and provincial taxes that the transmission corporation would have been liable to pay if it were not exempt from those taxes.

The Board recognizes that if Bill 30 becomes law, Transco will have the legal obligation to make this payment. The legitimate expenses of Transco are part of the overall costs of operating the transmission grid in New Brunswick. The Board therefore will allow the recovery of the payment through the rates to be charged to customers.

The amount of this payment is, however, dependent upon the amount allowed for the return on equity. The Board has reduced the allowed return on equity and therefore the payment in lieu of taxes must also be reduced. The Board has calculated an amount of \$8.5 million as the payment in lieu of taxes, which is a reduction of \$1.3 million from the amount proposed by NB Power. The calculation of this amount is presented in Table 7.

**TABLE 7**Verification of the Payment in Lieu of Taxes

Item	Amount (millions of \$)
Required Net Income	10.9
Add Back Payment in Lieu of Taxes	<u>8.5</u>
Amount Required Before Payment in Lieu of Taxes	19.4
Multiply by: Income Tax Rate (per NB Power)	<u>36.6%</u>
Income Taxes	7.1
Add: Capital Taxes (per NB Power)	<u>1.4</u>
Total Payment in Lieu of Taxes	8.5

**Amortization**

Amortization provides for the recovery of the cost of capital assets. Each year, a portion of the original cost is charged as an expense to operations. The amount charged each year allows for the full recovery of the original cost over the useful lives of the assets. No evidence was presented that any capital assets were unnecessary or that their original cost was inappropriate. JDI expressed concern over the lack of detailed information on the amortization rates used by NB Power. JDI requested that NB Power be directed to file additional information and that the amortization amount be held in a deferral account until such information had been reviewed.

The Board does not consider the use of a deferral account to be appropriate or necessary. The Board considers the amount proposed by NB Power to be reasonable and therefore accepts the \$18.4 million as the amortization expense for 2003/2004.

## Conclusions - Transmission Revenue Requirement

The Board approves a transmission revenue requirement of \$94.3 million which is \$4.1 million less than the original amount requested by NB Power, a reduction of 4.2%. The calculation of the transmission revenue requirement is shown in Table 8.

The Board notes that this is not the total revenue requirement of Transco. It is only the revenue associated with services to be provided by Transco itself. The revenue requirement for ancillary services is discussed later in this decision.

**TABLE 8**

Board Calculation of Transmission Revenue Requirement

Item	Amount (millions of \$)
Amortization (as filed)	18.4
Operating, Maintenance & Administration Expenses (as filed)	37.6
Finance Charges (per Table 5)	18.9
Payment in Lieu of Taxes (per Table 7)	8.5
Return on Equity (net income)	<u>10.9</u>
Transmission Revenue Requirement	94.3

NB Power revised the transmission revenue requirement from \$98.4 million down to \$97.9 million during the hearing. However the rates contained in the proposed tariff are based on the \$98.4 million amount. Therefore, NB Power is directed to reduce the rates for all services, except ancillary services, by 4.2% and to file the new rates with the Board for its review.

The Board has prepared Table 9 as verification of the transmission revenue requirement approved above.

**TABLE 9**

Verification of Transmission Revenue Requirement for 2003/2004

Item	Amount (millions of \$)
Transmission Revenue	94.3
Less: Operations, Maintenance & Administration (as filed)	(37.6)
Less: Amortization (as filed)	(18.4)
Less: Finance Charges (per Table 5)	(18.9)
Income Before Payment in Lieu of Taxes	19.4
Less: Payment in Lieu of Taxes (per Table 7)	(8.5)
Net Income	10.9

The Board has established the transmission revenue requirement for 2003/2004. The Board notes that this task was made considerably more difficult for two reasons.

*The first was the lack of a formal business plan for Transco. Such a document would have brought together the appropriate financial information and associated plans. This would have been preferable to having the information spread throughout many different parts of the evidence.*

*The second reason was the timing associated with the Government's plans to restructure the electricity industry. The need to proceed to a decision in advance of the date scheduled for market opening meant that the hearing was held without any knowledge of the specific changes that would occur in legislation. This made it difficult to properly analyze many aspects of the application.*

The Board notes that there was concern expressed over the amount of information provided by NB Power in support of various accounting policies that it follows. The Board considers that there was considerable detail on the record. Parties also had ample opportunity to request further information and to submit evidence of their own.

The Board is of the view that the policies in place are appropriate for 2003/2004 and will accept them for the purposes of this decision. The Board directs Transco to file with the Board for its review any proposed changes to the existing accounting policies that would have a significant financial impact.

The Board considers that the review of future rate applications would be greatly assisted by the identification of the information that should, as a minimum, be filed by Transco. The Board is of the view that both the various categories of information and the specific details required should be identified. This would save time and money for all participants and assist the Board in making its decision. The Board directs its staff to hold discussions with Transco staff and other interested parties for the purpose of defining the minimum filing requirements for use by Transco in future rate applications.

## **VOLUME OF SALES**

The forecast of sales volumes for 2003/2004 was based on a review of the services provided by the transmission unit in recent years and also of the most recent NB Power load forecast. NB Power has assumed that there will not be any major differences in 2003/2004 from the recent historical figures.

The Government intends to restructure the electricity market in New Brunswick as at April 1, 2003. NB Power stated that this change would have no impact on the volume of sales within the province because the volume of transmission use would not change whether the energy was supplied by NB Power or by a competitor.

However, with respect to the point-to-point sales forecast, all sales are based on external loads. There is sensitivity in this forecast to developments in external markets. NB Power stated that volumes may well be lower but it does not expect any major deviations from its sales forecasts.

No intervenor took issue with the volume of sales forecast by NB Power for 2003/2004. The Board accepts NB Power's forecast of sales volumes as filed.

## **COST OF SERVICE**

An important component of rate design is establishing the costs of providing the services offered. NB Power followed a five-step process for its cost of service study. The steps included:

1. identification of the services offered;
2. identification of the functions of the transmission system;
3. allocation of revenue requirements to the functions;
4. identification of system usage across the services; and,
5. allocation of the functional costs to the transmission services.

NB Power based its study on the revenue requirement of \$98.4 million. Through functional allocation it subtracted those costs which are directly attributable to the specific users which incur them. The balance of the revenue requirement was then divided between network service and point-to-point service based on usage of the system.

The allocation of costs enabled NB Power to design the rates for each class of service offered. The rates are established so as to recover all of the appropriate costs. No intervenor took issue with the cost allocation methodology. The Board accepts the process as followed by NB Power.

## **ANCILLARY SERVICES**

### **Introduction**

NB Power identified three major groups of services: network integration transmission service, point-to-point transmission service and ancillary services.

Network integration transmission service allows customers to use their resources to serve their own requirements. It provides firm transmission service and has an initial term of five years. Point-to-point transmission service is for the transmission and receipt of capacity and energy between designated points. It is available on a firm or non-firm basis and the term can be for as little as one day. The revenue requirement for these transmission services has been discussed above.



Ancillary services are necessary to keep the electricity system operating reliably. Transco must make these services available to its customers. In the tariff, six services are identified.

*Scheduling, system control and dispatch and reactive supply and voltage control*

These two services must be purchased from Transco. They are services used to schedule the transfer of electricity and to maintain the system at the correct voltages. The rates proposed for scheduling, system control and dispatch are based on the costs of operating the Energy Control Centre and were not an issue. The rates for reactive supply and voltage control are based on a proxy of three 110 MVAR synchronous condensers.

*Regulation and frequency response, operating reserve – spinning reserve, and operating reserve – supplemental reserve (10 minute and 30 minute)*

These services are required to ensure the continuous and reliable operation of the system. Customers may purchase these from Transco, a third party or self-supply. For these services, NB Power proposed that the rates be based on the costs of proxy generating units rather than the embedded cost of NB Power Generation because they stated this would produce a more appropriate price. The proxy units were identified as two types of gas fired generating facilities.

*Energy imbalance*

This service is discussed in the next section of this decision.

## **Capacity-based Services**

For the purposes of this decision, the capacity-based services include: reactive supply and voltage control; regulation and frequency response; and, the two operating reserves, spinning and supplemental. The revenue requirement for these services, whose costs are based on proxy units, is \$38.7 million. Significant argument was presented over the use of proxy unit costs to set rates.

The Board ordered NB Power to provide the costs of providing capacity-based services through the use of existing facilities. This information was filed January 31, 2003. The revenue requirement using costs of existing facilities was \$48.2 million.

WPS argued that the prices to be charged by Transco should be based on the cost of existing facilities subject to any adjustments by the Board to the capital structure and the cost of capital for the generation business. WPS stated that even with such adjustments, the costs would be higher than those produced by the proxy unit methods. JDI also recommended that rates should be based on the costs of existing facilities. JDI, however, had concerns with the costs filed by NB Power for existing facilities. JDI concluded that, until these costs can be properly determined, the three-year NEPOOL average price should be used.

The Board considers that significant differences exist between the markets in New Brunswick and New England. As well, it is not possible for the New England market to provide ancillary services to New Brunswick. For this reason the Board considers that the use of a NEPOOL average price would not be appropriate.

There was considerable discussion about the costs that will be incurred by generating facilities of NB Power in order to provide ancillary services. The Board is of the view that there is an important distinction between the costs of Transco and the costs of its suppliers. In this particular case, the costs that generators incur to provide capacity-based services are not the deciding factor in setting the rates to be charged by Transco. This is similar to the treatment of the costs of any supplier to Transco whether it be of vehicles, computers or stationary. It is the costs that Transco will actually incur that are relevant in setting the rates.

Capacity-based services will be required as of the opening of the market, anticipated to occur on April 1, 2003. It is essential that Transco have in place an arrangement whereby it will be able to obtain all the capacity-based services that it might need. The evidence indicates that the only likely source of these services in 2003/2004 is the generating facilities of NB Power Generation Corporation (Genco). Transco intends to enter into a contract with Genco for the provision of capacity-based services for 2003/2004.

NB Power testified that this contract has not been finalized. Bill 30 will give the Government effective control, directly or indirectly, of both Transco and Genco and can therefore determine the actual amount that Transco will be required to pay for capacity-based services. The Board notes that Genco will be providing ancillary services to Transco and energy services to NB Power Distribution and Customer Services Corporation (Distco). In order to be financially viable, Genco must recover all of its appropriate costs from the sale of these two services. The Board encourages the Government to ensure that the prices to be charged to Transco by Genco are fair and based on its actual prudently

incurred costs. If these prices are fair, then a 'level playing field' will exist for potential generation competition.

NB Power stated that it was their understanding that the contract would provide for a maximum payment of \$38.7 million to Genco. This amount will be lower if Transco notifies Genco that its requirements have been reduced and thereby frees up some of the capacity that Genco has committed. Transco stated that any reduction to the \$38.7 million would be passed on to its customers by way of price discounts.

The Board is of the view that the contract will establish the cost to Transco of obtaining capacity-based services. The Board considers that this cost is the appropriate amount to be recovered from the customers of Transco. The best estimate of the cost to Transco for capacity-based ancillary services in 2003/2004 is \$38.7 million and the Board will allow Transco to charge rates for the capacity-based services sufficient to recover this amount in 2003/2004.

With respect to the specific rates to be charged by Transco for capacity-based services, there was no evidence proposing any specific changes. The rates proposed by Transco are forecast to provide the \$38.7 million approved by the Board and the Board will therefore accept the specific rates as proposed.

The Board will require monthly reports from Transco on the costs and revenues associated with the provision of capacity-based services. This will allow the Board to ensure that the rates charged to customers recover the actual costs to Transco of obtaining the capacity-based services. It will also permit the Board to ensure that any reductions in

cost are passed onto customers by way of discounts. This information will be available to the public and may be audited by the Board.

The Board will require Transco to conduct a request for proposal process in 2003/2004 to solicit bids for the provision of the capacity-based services required by Transco in 2004/2005. The Board will discuss the particulars of this process with Transco and other interested parties to ensure that services are obtained at the lowest possible cost.

JDI expressed concern over the possibility that self-generators may face significant rate increases as a result of the proposed tariff. They recommended that the Board direct NB Power to file a different rate that would apply specifically to self-generators to take into account their special circumstances.

NB Power stated that the actual impact would depend on the specific circumstances of the self-generators and that self-generators could take actions that would reduce the impact. NB Power also said that if the Board considered that the impact for these customers would constitute rate shock then it should order a phase-in of the proposed rate. Such a phase-in could occur over a period of three years and avoid the need for any ongoing special conditions for current self-generators.

The Board considers that significant increases in rates over a short time period would be an important issue for any customer. Such an event should be avoided whenever possible. The record with respect to this issue is far from clear. There are no current rates for the specific services in question, as they have not been priced separately

in the past. As well, the impact will very likely vary from one self-generator to another and there is no evidence as to the actual specific impact that will occur for any particular self-generator.

Nevertheless, the Board considers potential rate shock to be an important issue and thus directs Transco to consult with the existing self-generators to determine if a mutually satisfactory proposal may be brought to the Board for its consideration. Such a proposal must identify any specific changes requested, the amount of money involved, the time period involved and how any shortfall in revenue requirement is to be recovered. If no agreement can be reached, Transco is to report to the Board on the nature of the discussions held and why no agreement is possible. Self-generators will be given an opportunity to respond to such a report and the Board will then decide if any changes are necessary. These discussions are to be held and their results reported to the Board by June 30, 2003. Parties who wish further information on this process should contact Board staff.

### **Energy Imbalance**

Energy imbalance is a service necessary to maintain system integrity. It recognizes that generators do not always supply exactly the amount of electricity they had committed to provide and that customers do not always use exactly the amount of electricity that they had forecast. The real time cost of producing electricity can vary significantly. This could provide an incentive for suppliers to take unfair advantage of this ancillary service. Therefore it is necessary to price this service so as to encourage customers to balance supply and use. NB Power proposed a system of deviation bands and associated payments and penalties that they considered would encourage this balance while still permitting a reasonable degree of flexibility.

Intervenors took issue with the size of the deviation band, the cumulative amount of energy imbalance and the pricing for imbalance. The applicant stated that pricing for energy imbalance is meant to serve as a market signal for participants to adhere to their schedule. Emera questioned why real time prices were not used for imbalance. The applicant noted that real time transparent energy prices do not exist in New Brunswick.

The Board considers that customers should normally be able to keep imbalances within a reasonable level. For those who cannot or choose not to do so, the Board believes that it is important to minimize the possibility that other customers would have to pay more because certain customers have significant imbalances. In the absence of real time market prices in New Brunswick, the incentive to stay in balance must be based on other factors. The Board considers that the methodology proposed by NB Power is a reasonable way to encourage customers to balance supply and use and provides adequate flexibility.

The Board therefore approves the energy imbalance methodology, the deviation bandwidths and the pricing for energy imbalance as proposed by NB Power. The Board believes that market openness and transparency will be enhanced if hourly and cumulative monthly values of energy imbalance for each participant are posted on the Transco website for public viewing.

Renewable Energy Services Ltd. addressed the Board on wind generation issues. The variability in wind generation makes it very difficult for a generator to operate within the deviation band for energy imbalance. The Board understands that wind generators may often be

connected directly to the distribution system and therefore not subject to the tariff. However, some may need to connect directly to the Transco system. The Board is of the opinion that Transco should review the practices of wind and other renewable energy generators and recommend any tariff amendments that it considers to be appropriate.

## **TARIFF ISSUES**

### **Allocation of Existing Interconnection Capacity**

The total transmission system capacity for interconnections is 2,377 MW. This includes 700 MW of capacity on the Maine Electric Power Company (MEPCO) interconnection that accesses the New England market and 223 MW of capacity on the interconnection to Prince Edward Island. There are currently 720 MW of long-term firm reservations crossing interfaces into adjacent jurisdictions.

In 1998, when the existing tariff was implemented, NB Power grandfathered long-term firm commitments for transmission capacity. They stated that these represented 60 to 65 % of the capacity on the MEPCO interconnection. The grandfathered contracts were with third parties and NB Power Generation. It was stated this was done in accordance with industry standards whereby long-term firm commitments are honoured by providing equivalent reservation under any new tariff. They considered this practice to be consistent with the requirements of FERC Order 888.

NB Power held an "Open Season" for bids on the remaining unreserved transmission capacity, from January to March 1998. The applicant



testified that the only party who bid on the unreserved capacity was the generation unit of NB Power.

NS Power established that NB Power Generation has reserved 670 MW of the 700 MW capacity on the MEPCO interconnect. There is a third party contract for 28 MW of capacity leaving only 2 MW of capacity unreserved on the interconnection to New England. Mr. Marshall stated that about 40% of the 670 MW reserved capacity on the interconnect is under long-term contract. NB Power believes it appropriate that the transmission reservation contracts established under the existing tariff should be continued under the new tariff.

Emera recommended that reservation commitments arising from the 1998 open season should not be preserved unless they are supported by existing long-term energy supply contracts as of April 1, 2003. Emera's view was that the tariff existing in 1998 had not been approved by a regulatory body and that it was impossible for any third party to bid given the extent of regulatory uncertainty.

It was noted that Hydro Quebec did raise the following concerns regarding the 1998 tariff:

- the lack of regulatory authority over the tariff; and,
- a rate for through service that was 40% higher than the rate for out service.

As a result of this concern, NB Power later agreed to discount the through service rate so that it equaled the rate for out service. Also, they agreed to implement functional unbundling under a code of

conduct. Hydro Quebec, in response, opened their system for reservations from NB Power.

NB Power suggested that Emera was not prepared to accept the financial risk associated with reserving capacity at the time of the open season in 1998. Since that time, Emera Energy Services Inc, an Emera affiliate, has obtained a FERC marketing license.

NB Power referenced a decision by the Quebec Régie that permitted the grandfathering of transmission rights. Ontario Power Generation had argued that reservations between Hydro Quebec and TransÉnergie should be set aside and the capacity be put up for bids in an open season. The Régie rejected the argument.

NB Power stated there was no evidence presented that indicated any improper transactions between its affiliates. They considered that transmission capacity had been acquired during an open and transparent bidding process.

Northern Maine supported NB Power's position on grandfathering reservations. Northern Maine identified a possible issue that was the *hoarding* of transmission capacity in order to gain competitive advantages. Hoarding may be considered to occur when a party buys up reservations, but does not use the capacity. The Board asked the parties to address this issue.

Emera submitted a written response and argued against hoarding. They felt it related to a party's conduct after a contract was in place. Emera proposed that a remedy to alleviate hoarding was to disallow

the grandfathering of contracts not supported by third party long-term supply contracts.

NB Power's written response identified a difference between hoarding and holding transmission capacity. They argued that hoarding may occur when reservations for scheduled energy are not used. NB Power stated there was no evidence presented that they had hoarded capacity.

The applicant stated that holding transmission reservations, which are used, is acceptable. Also, NB Power stated, that if they did not have energy scheduled on their reservation by 11:00 AM on the day prior to the reservation, then that capacity was released and made available to other market participants.

NB Power showed that since 2000, this had occurred about 1200 different times. They stated that this was an anti-hoarding safeguard that Emera, Hydro Quebec and NS Power had utilized.

This decision is the first time that a tariff governing the use of NB Power's transmission system will have been approved by a regulatory body. The Board considers that, prior to this time, a completely fair and non-discriminatory environment for bidding on transmission capacity did not exist. The Board believes that an open season should be held for all transmission capacity that is not subject to a firm contract involving a party who is not affiliated with NB Power.

The Board directs Transco to consult with Board staff to establish an appropriate process for this purpose. The transmission capacity that will be the subject of the open season is to be made available for use

beginning on April 1, 2004. The open season is to be completed no later than the fourth quarter of calendar 2003. This will allow sufficient time for Transco to obtain approval of any changes to its rates that are necessary as a result of the open season.

### **Reciprocity**

The proposed tariff includes a section on reciprocity. It states that it is a requirement for customers receiving transmission service to provide comparable service on facilities owned or controlled by them.

NB Power, during the hearing, provided proposed changes to the tariff. One such change provided for a waiver of the reciprocity requirement subject to the following conditions:

- that the transmission system owned or controlled by the customer or its corporate affiliate be operated under a FERC Order 889 compatible Standards of Conduct prior to the commencement of service to the transmission system owner or its corporate affiliate; and
- the transmission customer or its corporate affiliate commit to the implementation of an open access transmission tariff that would be compatible with FERC Order 888 and delivered through an Open Access Same-Time Information System (OASIS) system by January 1, 2004.

NB Power requested that the proposed waiver expire on January 1, 2004. The current plan to open the Nova Scotia electricity market to competition would result in only 2% to 3% of load being subject to competition. In New Brunswick, substantially more of the market will

be open to competition, as much as 40% of total load. The Board notes that NB Power did not request, as a condition, that the Nova Scotia market be opened to competition for large industrial customers.

NS Power supported the principle of reciprocity. However, there is no access to the Nova Scotia market comparable to what will be available in New Brunswick. There is a committee developing recommendations for the restructuring of the Nova Scotia market and it is anticipated that the market will open for wholesale competition in 2005. NS Power, therefore, requested a waiver of the reciprocity requirement until the transition process is complete. They also requested that the issue of reciprocity be resolved by an independent body.

The Board finds that a waiver of the reciprocity requirement is appropriate and that such a waiver should be subject to conditions. The Board considers that the conditions proposed by NB Power are reasonable and will accept them.

The Board does not believe that a deadline of January 1, 2004 is appropriate. The Board is of the opinion that the date for the expiry of the waiver of reciprocity should be January 1, 2005.

### **System Losses**

Under the existing tariff, transmission losses are calculated on a path specific basis. NB Power forecasts the usage for the coming month by path and then calculates the losses. When the actual usage differs from the forecast, the estimated amount for transmission losses by path differs from the actual figures.

The applicant stated that the new tariff is meant to be non-discriminatory. Network customers would be treated the same as point-to-point customers. The tariff application proposes a uniform percentage loss for all transactions on the transmission system. Actual system losses for 2000-2001 were 3.27% and NB Power proposes using 3.3% as the system power loss for the tariff.

The Northern Maine Independent System Administrator (Northern Maine) stated that metering on the existing service paths used for through and out service, allows for the actual losses to be determined. They stated that actual losses should be applied.

Emera supported calculating line losses by specific paths and argued that it may be easier and more profitable for NB Power to assign a system wide loss factor. Emera argued that the cost for losses should be borne where they are incurred.

NB Power provided a table of real power losses by path. The table showed that most path losses vary significantly from the average that NB Power proposes. NB Power stated that information on circuit loading and the average line loss from Courtney Bay to interfaces with Nova Scotia, Prince Edward Island, Quebec and Maine, was not available. All generators and loads within New Brunswick share a common transmission network.

The Board believes a postage stamp approach that results in non-discriminatory treatment of all customers is appropriate. The Board therefore accepts the use of a 3.3 % system average loss factor as fair and reasonable.

## **Product And Service Agreement (Agreement)**

An Agreement dated March 1, 2000, between NB Power and Northern Maine covers the terms of service between the parties. A condition of the Agreement was that no change could be made to the terms, conditions or rates until a regulator was assigned to oversee the tariff.

The Agreement includes most services covered by the tariff. The Board is the regulator of the tariff, which fulfills the condition for changes to rates and terms under the Agreement. The Board believes it appropriate that the tariff apply to the rates for existing services under the Agreement.

## **Dispute Resolution**

The tariff establishes a dispute resolution procedure that provides all customers with a method to resolve complaints with Transco. JDI had NB Power confirm that a complaint could also be referred to the Board. JDI requested that the option to take matters to the Board should always be available.

JDI raised the issue of the cost of binding arbitration in their summation. They questioned the reasonableness of a process that would require a complainant to bear the costs to proceed through the dispute resolution process, without having the ability to take a complaint directly to the Board.

The Board agrees with JDI and directs NB Power to revise section 12.5 of the tariff to clarify that:

1. Customers may refer a complaint directly to the Board.

2. Customers may refer a complaint to the Board if they are dissatisfied with the results from the dispute resolution process.
3. A complaint referred directly to the Board cannot afterward proceed to the dispute resolution process.
4. Complaints filed with the Board must be in writing and are to include reasons and evidence in support of the customer's position.
5. The Board may require a complainant to provide such security for the costs incurred or to be incurred by the Board, as it considers reasonable. Security may be forfeited to the Board if the complaint is not substantiated.

### **Inadvertent Energy**

The applicant stated that energy deviation within normal system operator to system operator operations would be considered as inadvertent energy. The fundamental principle for repayment of inadvertent energy is that it must be repaid in kind; peak energy for peak energy and off-peak for off-peak. It was confirmed that the NB Power and NS Power system operators were working to resolve the issue of inadvertent energy between the operators. NS Power agreed with the tariff modifications proposed by NB Power to address inadvertent energy through the Joint Operating Committee.

NB Power agreed with Northern Maine that, under the existing Agreement, inadvertent energy is settled hourly to facilitate the operation of the Northern Maine Market. NB Power amended the tariff wording so as to allow hourly settlement for energy imbalance with Northern Maine to be done under the Agreement.



The Board agrees that normal operational deviations are likely inadvertent. The Board believes that it is the responsibility of the system operator to determine inadvertent energy between operators, as well as the method for repaying that energy. The Board also believes that market openness and transparency will be enhanced if hourly inadvertent energy flows are posted on the Transco website for public viewing.

### **Re-dispatch Costs**

Normally the system operator will use or dispatch the least cost generating assets to meet load. However, there are occasions when this is not possible and assets are re-dispatched out of economic merit order to deal with system constraints or equipment failures. For example, re-dispatch may be required to maintain system reliability. Transco is obliged to re-dispatch on a least cost non-discriminatory basis between all network resources. Any costs associated with re-dispatch are to be recovered from those customers who are using the system at the time that the out-of-order situation occurs.

A condition of receiving network integration service is that the customer agrees to make its network resources available for re-dispatch. When a customer signs a service agreement with Transco, they must designate their resources and the price at which those resources could be re-dispatched.

JDI questioned NB Power about the opportunity for network customers to provide updates or changes to their variable cost for re-dispatch. NB Power advised there would be a confidential mechanism within the OASIS that would allow customers to update their pricing. Re-dispatch pricing is confidential between the customer and Transco.

The Board agrees with the practice of re-dispatch on a least-cost, non-discriminatory basis and the use of a confidential pricing mechanism on OASIS. The Board directs Transco to keep records on costs and revenues associated with all re-dispatch transactions. This information will be subject to audit by the Board to ensure fair and non-discriminatory treatment for all parties.

### **System Expansion**

Transco is responsible to undertake studies to determine the need for system expansion. It will determine the cost of the expansion and the system benefits, if any. A customer requesting transmission service, that requires system expansion, may be required to make a payment in aid of construction if the revenue provided by the expansion is determined to be insufficient to cover the cost of providing the service. NB Power agreed that the cost of an expansion could be reviewed with a customer when a payment in aid of construction is required.

JDI expressed concerns in respect to possible cost overruns on system expansion, where a payment in aid of construction is required. NB Power advised that the first step would be a discussion between the customer and Transco. If no agreement were reached, then the customer could use the dispute resolution process or refer the matter directly to the Board.

The Board agrees with the system expansion policy as included in the tariff and the method for dealing with possible cost overruns.

## **Standards of Conduct**

The tariff includes a Standards of Conduct that places restrictions on the exchange of confidential information between the system operator and market participants.

JDI questioned whether the tariff was FERC compliant and whether the Standards of Conduct should be required to comply with possible changes that have been proposed by FERC.

The Board notes that there was considerable discussion about whether the proposed tariff will comply with existing or future FERC requirements. The Board considers that it has a responsibility to approve a tariff that is appropriate for use in New Brunswick. It is the responsibility of the applicant to ensure that a tariff that is appropriate for New Brunswick will also permit the company to operate in US markets.

The Board is setting requirements that Transco must comply with as a result of this decision. With those in mind, the Board considers that the specific requirements contained in the Standards of Conduct are reasonable at this time. The Board therefore approves the Standards of Conduct as submitted.

## **Tariff Word Changes**

NB Power filed proposed changes to certain sections of the tariff. Except for the wording on reciprocity that was discussed above, no party took issue with the proposed changes. The Board directs NB Power to revise the tariff to include all of the other proposed changes. The tariff is also to be revised to reflect all of the adjustments required

by this decision of the Board. NB Power is to file the revised tariff with the Board for its review.

## **OTHER ISSUES**

### **Benchmarking**

Benchmarking is a process that allows a public utility to assess its performance relative to similar companies. JDI argued that benchmarking was an important management technique in establishing efficiencies, particularly when trying to implement PBR. While the principles of benchmarking were not disputed, NB Power maintained that it is very difficult to identify appropriate companies for comparison, given New Brunswick's geography and weather. Although NB Power maintained that the transmission business unit is an efficiently run operation, no evidence was given to support this claim.

The Board agrees that benchmarking is an important element in evaluating a company's performance and efficiency. The Board accepts that identifying the appropriate indicators is an interactive process and will likely be ongoing as Transco matures. The Board directs Transco to file with the Board a proposal regarding appropriate indicators and peer companies that can be used for benchmarking by June 30, 2003 for its consideration. The Board expects to make its decision on the proposal by July 31, 2003. The first report on benchmarking is to be submitted to the Board by October 2003 and quarterly thereafter.

### **Quality of Service**

NB Power proposed that certain performance measures be used to demonstrate that Transco will continue to provide reliable and efficient

service. The company recommended that performance be measured in three areas: reliability, environmental stewardship and safety. Examples of the performance measures are:

- the average duration of power outages;
- the number of spills per year; and
- the number of days lost due to accidents.

The Board accepts the proposed measures and objectives as a reasonable starting point for a review of the service provided by Transco. The Board may direct that additional performance measures be added in the future if it considers that such measures would provide useful information.

The Board requires Transco to provide this information quarterly together with a full explanation of any shortfall in the objectives and a description of remedial measures planned.

In order to provide a basis for comparison, the Board will require Transco to file historical information on these performance measures for itself and other transmission companies. The details of the information to be provided are to be discussed by the staff of Transco and the Board. A proposal shall be submitted to the Board for its review by October 31, 2003.

### **Municipal Electric Utilities Concerns**

Énergie Edmundston, Perth-Andover Electric Light Commission and Saint John Energy are electric utilities that operate in their own municipalities. These three municipal electric utilities will be referred to as the MEU.

The MEU raised concerns that uncertainty with respect to the restructuring of NB Power has made it difficult to judge the overall impact of the process on their residential and commercial customers. They appealed to the Board to exercise its discretion to make its approval of the tariff conditional upon a clarification of the nature of such impacts and the finalization of policy details. The MEU also requested the Board to protect the interests of their customers.

The Board notes that the Government's White Paper expressed similar concerns. The White Paper stated that the migration to the new market structure must be done in a timely fashion and involve the appropriate regulatory agencies. It also proposed that a standard offer service be available to all customers at regulated prices and on terms that are consistent with the service they now obtain. The White Paper also proposed that the Board have the authority to review the rates of distribution utilities on its own motion or at the request of a customer.

Bill 30, presently before the Legislative Assembly, does provide for standard offer service to be offered by Distco. This will be based on a contract between Distco and Genco. Bill 30 does not clearly identify who will set the prices to be charged by Genco. However, it is clear that the proposed legislation does not intend that the Board have any authority in regards to setting prices for Genco. With respect to Distco, Bill 30 does not permit the Board or a customer to initiate a rate review. Distco is free to set its rates as long as the increase is below 3% or the rate of inflation. This is similar to the existing legislation under which NB Power has not been subject to a public review of a rate increase since 1993.

The Board is sympathetic to the concerns of the MEU but it must make its decisions within the authority given to it by the legislation. The Board believes that it is important that the public be aware of the limitations under which the Board must operate with respect to setting rates.

The Board considers that the concerns of the MEU regarding their lack of a sound understanding of the potential impact of restructuring may well be shared by other customers and these concerns should be addressed. The Board recommends that NB Power conduct public information sessions to discuss the various aspects of the restructuring of the electricity market in New Brunswick.

## **REPORTING REQUIREMENTS**

The Board will require Transco to provide to the Board, or keep available for inspection by the Board, information on the following:

- financial results
- costs and revenues associated with the provision of capacity-based services
- costs and revenues associated with all re-dispatch transactions
- benchmarking
- quality of service
- affiliate transactions

## **SUMMARY OF CONCLUSIONS**

The following is a list of the major decisions made by the Board with respect to the application. Page numbers show where the decisions occur in the text.

### Performance Based Regulation (p. 6)

The Board considers that the PBR proposal of NB Power is not appropriate at this time. The Board therefore has not used a PBR plan to establish rates in this decision.

### Rate Base (p.8)

The Board is satisfied that an amount of \$327.7 million is a reasonable estimate of the average rate base for 2003/2004.

### Capital Structure (p.9)

The Board considers that the minimum percentage for equity should be 35% and therefore approves a capital structure of 65% debt and 35% equity.

### Finance Charges (p.10)

The Board therefore will accept the amount of \$138.3 million as the average amount of existing long-term debt for Transco for 2003/2004.

The Board therefore reduces, for regulatory purposes, the cost of existing long-term debt by \$0.4 million.



The Board therefore approves a total cost for existing long-term debt for 2003/2004 of \$14.3 million.

The Board therefore reduces the allowed amount of interest on new debt to \$5.5 million from \$5.6 million.

The Board accepts NB Power's estimate of \$0.5 million for interest on short-term debt.

The Board accepts NB Power's estimate of \$1.4 million for AFUDC.

The Board approves total finance charges of \$18.9 million for 2003/2004, which is \$0.5 million less than the amount requested by NB Power.

#### Return on Equity (p.17)

The Board will set the rate of return on equity for 2003/2004 at 9.5%.

The Board will allow Transco to earn a return on equity up to 10.5%.

The Board does not expect Transco to file a request for a rate increase in 2003/2004 unless the rate of return on equity is forecast to fall below 8.5%.

#### Operating, Maintenance and Administration Expenses (p.19)

The Board is of the view that the forecasts for 2003/2004 have been properly tested and provide the best information on which to set rates. The Board will therefore use 2003/2004 as the test year for establishing rates in this decision.

The Board therefore will require that an Affiliate Relationships Code be established.

The Board considers the amount proposed by NB Power to be reasonable and therefore accepts the estimate of \$37.6 million for OM&A expenses for 2003/2004.

The Board therefore will require monthly reports from Transco providing details on its actual financial results, the forecast amounts and an explanation of any significant variances. The reports are to be filed within 15 days of the previous month end.

#### Payment in Lieu of Taxes (p.23)

The Board has calculated an amount of \$8.5 million as the payment in lieu of taxes, which is a reduction of \$1.3 million from the amount proposed by NB Power.

#### Amortization (p.24)

The Board considers the amount proposed by NB Power to be reasonable and therefore accepts the \$18.4 million as the amortization expense for 2003/2004.

#### Conclusions - Transmission Revenue Requirement (p.25)

The Board approves a transmission revenue requirement of \$94.3 million, which is \$4.1 million less than the original amount requested by NB Power, a reduction of 4.2%.

Therefore, NB Power is directed to reduce the rates for all services, except ancillary services, by 4.2% and to file the new rates with the Board for its review.

The Board directs Transco to file with the Board for its review any proposed changes to existing accounting policies that would have a significant financial impact.

The Board directs its staff to hold discussions with Transco staff and other interested parties for the purpose of defining the minimum filing requirements for use by Transco in future rate applications.

#### Ancillary Services (p.29)

The Board encourages the Government to ensure that the prices to be charged to Transco by Genco are fair and based on its actual prudently incurred costs. If these prices are fair, then a 'level playing field' will exist for potential generation competition.

The best estimate of the cost to Transco for capacity-based ancillary services in 2003/2004 is \$38.7 million and the Board will allow Transco to charge rates for the capacity-based services sufficient to recover this amount in 2003/2004.

The rates proposed by Transco are forecast to provide the \$38.7 million approved by the Board and the Board will therefore accept the specific rates as proposed.

The Board considers potential rate shock to be an important issue and thus directs Transco to consult with the existing self-generators to

determine if a mutually satisfactory proposal may be brought to the Board for its consideration.

The Board therefore approves the energy imbalance methodology, the deviation bandwidths and the pricing for energy imbalance as proposed by NB Power.

The Board is of the opinion that Transco should review the practices of wind and other renewable energy generators and recommend any tariff amendments that it considers to be appropriate.

#### Tariff Issues (p.37)

The Board believes that an open season should be held for all transmission capacity that is not subject to a firm contract involving a party who is not affiliated with NB Power.

The Board is of the opinion that the date for the expiry of the waiver of reciprocity should be January 1, 2005.

The Board therefore accepts the use of a 3.3% system average loss factor as fair and reasonable.

The Board believes that it is the responsibility of the system operator to determine inadvertent energy between operators, as well as the method for repaying that energy.

The Board agrees with the practice of re-dispatch on a least-cost, non-discriminatory basis and the use of a confidential pricing mechanism on OASIS. The Board directs Transco to keep records on costs and revenues associated with all re-dispatch transactions.

The Board agrees with the system expansion policy as included in the tariff and the method for dealing with possible cost overruns.

The Board therefore approves the Standards of Conduct as submitted.

Other Issues (p.49)

The Board directs Transco to file with the Board a proposal regarding appropriate indicators and peer companies that can be used for benchmarking by June 30, 2003 for its consideration.

The Board accepts the proposed measures and objectives as a reasonable starting point for a review of the service provided by Transco.

The Board recommends that NB Power conduct public information sessions to discuss the various aspects of the restructuring of the electricity market in New Brunswick.

DATED AT THE CITY OF SAINT JOHN, NB THIS 13<sup>TH</sup> DAY OF MARCH 2003.

-----  
David C. Nicholson, Chairman

-----  
L.C. Bremner, Commissioner

-----  
J. Cowan-McGuigan, Commissioner

-----  
R. A. Richardson, Commissioner

-----  
K.F. Sollows, Commissioner

