

# Chapter 3

## Province of New Brunswick

### Audit: Accounting for Pensions and NB Power

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# Province of New Brunswick Audit: Accounting for Pensions and NB Power

## **Introduction**

**3.1** As the accounting for pensions and NB Power is material to the Province's consolidated financial statements and involves complex accounting issues, we have presented our observations on these topics in a separate chapter of our Report.

## **Provincial Pension Plans**

**3.2** In prior years market fluctuations and other pension related issues have exposed the Province to volatility in its financial reporting. In 2013 pension expense of \$435 million was recorded. In addition, complex accounting issues for Shared Risk Pension Plans have been encountered in the past year. The following paragraphs illustrate these trends, as well as discuss other issues associated with the plans.

## ***Pension Expense Growth and Volatility***

**3.3** Exhibit 3.1 provides details of the Province's total pension expense for the past ten years. For purposes of illustrating the potential volatility of this figure, a longer term approach of ten years has been provided.

Exhibit 3.1 - Components of Pension Expense

Components of Pension Expense										
(\$ millions)										
	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Employer's share of pension benefits earned	177.4	148.9	137.4	131.6	146.1	133.8	126.1	117.0	124.1	96.1
Net interest expense (revenue)	62.7	32.0	52.9	118.2	20.6	(9.1)	0.4	30.9	17.6	85.4
Plan amendments		-	-	-	-	-	5.9	-	-	-
Amortization of adjustments	194.9	106.5	99.7	87.1	159.7	30.3	(31.2)	(40.3)	(31.8)	(55.3)
Change in valuation adjustment	-	-	-	(15.5)	(3.3)	(0.5)	(0.1)	2.3	(1.5)	(2.0)
<b>Total pension expense</b>	<b>435.0</b>	<b>287.4</b>	<b>290.0</b>	<b>321.4</b>	<b>323.1</b>	<b>154.5</b>	<b>101.1</b>	<b>109.9</b>	<b>108.4</b>	<b>124.2</b>

**3.4** Exhibit 3.1 highlights the significant increase in the annual pension expense over the ten year period as well as the volatility of the expense. In the year ended 31 March 2004, the pension expense was \$124.2 million. By way of contrast, in the year ended 31 March 2013, the pension expense was \$435.0 million, an increase of \$310.8 million when compared to 2004. The pension expense increased in 2013 primarily due to a change in actuarial assumptions for mortality rates.

**3.5** Exhibit 3.2 compares the annual pension expense to the amount of contributions made by the Province to the various pension plans.

Exhibit 3.2 - Pension Expense and Contributions

Pension Expense and Contributions										
(\$ millions)										
	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Pension expense	435.0	287.4	290.0	321.4	323.1	154.5	101.1	109.9	108.4	124.2
Employer contributions	350.8	327.0	313.3	307.8	288.6	272.8	257.7	236.4	223.2	214.8
Excess (deficiency) of employer contributions over pension expense	(84.2)	39.6	23.3	(13.6)	(34.5)	118.3	156.6	126.5	114.8	90.6

**3.6** Exhibit 3.2 shows that for three of the past five years, the Province's contributions to its various pension plans have been less than the annual pension expense, whereas for seven of the past ten years the amount of employer contributions exceeded the amount of the pension expense.

**3.7** The year to year differences are largely due to the legislated and actuarial funding requirements of the plans being different than the measurement of pension expense as required by the Public Sector Accounting Standards. Funding requirements are intended to ensure there will be sufficient funds in the plans to payout pensioners while the pension expense is intended to measure the net cost of pension benefits earned by employees during the year.

**3.8** We also review the change in the employer's share of pension benefits earned (as noted in Exhibit 3.1). The employer's share of pension benefits earned has increased at an average rate of 7.6% per year. This is the core component of pension expense the Province incurs to provide pension benefits earned by employees during the year.

***Pension Contributions for  
the Province's Two Largest  
Plans***

**3.9** Further details on pension contributions from 2008 to 2013 for the Province's two largest plans, the Public Service Superannuation Plan (PSSA) and the Teachers' Pension Plan (TPA) are found in Exhibit 3.3.

Exhibit 3.3 - Pension Contributions for PSSA and TPA Plans

Pension Contributions for PSSA and TPA Plans (millions)							
		Employee Contributions	Employer Contributions <sup>1</sup>			Total Employee and Employer Contributions	Ratio of Employer to Employee Contributions
			Normal	Special Payments	Total Employer Contributions		
2013	PSSA	70,910	92,128	67,852	159,980	230,890	2.26
	TPA	47,877	46,139	98,627	144,766	192,643	3.02
2012	PSSA	71,463	89,385	64,931	154,316	225,779	2.16
	TPA	47,847	46,367	94,380	140,747	188,594	2.94
2011	PSSA	71,235	84,272	63,223	147,495	218,730	2.07
	TPA	47,302	45,105	91,898	137,003	184,305	2.90
2010	PSSA	69,596	92,762	60,968	153,730	223,326	2.21
	TPA	45,871	41,907	88,619	130,526	176,397	2.85
2009	PSSA	68,569	83,632	58,510	142,142	210,711	2.07
	TPA	42,686	39,897	85,047	124,944	167,630	2.93
2008	PSSA	64,550	80,036	56,367	136,403	200,953	2.11
	TPA	40,606	36,702	81,934	118,636	159,242	2.92
Total 2008-2013	PSSA	\$416,323	\$522,215	\$371,851	\$894,066	\$1,310,389	2.15
	TPA	\$272,189	\$256,117	\$540,505	\$796,622	\$1,068,811	2.93

<sup>1</sup> PSSA Employer contributions include contributions from the Province, Crown Corporations and other participants.

**3.10** We note since 2008 the employer share of pension contributions for the PSSA plan increased approximately \$23 million or 17%. We further noted on average the employer contributes 2.15 times what the employees contribute. Also, since 2008 the employer share of pension contributions for the TPA plan increased approximately \$26 million or 22%. We noted on average for the TPA plan, the employer contributes 2.93 times the employee contribution amounts.

### *Special Payments*

**3.11** Due to large unfunded pension liabilities of the PSSA and TPA pension plans, in the early 1990's the Province made legislative changes to require special payments be made to these plans. Special payments the Province made to the PSSA pension plan and the TPA pension plan since 2008 are also detailed in Exhibit 3.3. Pension plan special payments are made each fiscal year as required by legislation until the benefits under the act are fully funded as determined by an actuarial valuation. Special payments are paid in

addition to the normal employer contribution for current service cost. In each subsequent fiscal year the additional amount paid will be the amount paid in the previous fiscal year increased (or decreased) by the aggregate of 2% plus the average percentage change in the Consumer Price Index.

*Exhibit 3.4 - Employer Contributions – Special Payments for PSSA and TPA Plans Since 1992*

<b>Employer Contributions - Special Payments for PSSA and TPA Plans Since 1992 (\$ millions)</b>			
	<b>PSSA Plan</b>	<b>TPA Plan</b>	<b>Total</b>
<b>2013</b>	67,852	98,627	<b>166,479</b>
<b>2012</b>	64,931	94,380	<b>159,311</b>
<b>2011</b>	63,223	91,898	<b>155,121</b>
<b>2010</b>	60,968	88,619	<b>149,587</b>
<b>2009</b>	58,510	85,047	<b>143,557</b>
<b>2008</b>	56,367	81,934	<b>138,301</b>
<b>2007</b>	53,941	78,406	<b>132,347</b>
<b>2006</b>	51,816	75,318	<b>127,134</b>
<b>2005</b>	49,968	72,630	<b>122,598</b>
<b>2004</b>	47,453	68,975	<b>116,428</b>
<b>2003*</b>	0	0	<b>0</b>
<b>2002*</b>	0	0	<b>0</b>
<b>2001*</b>	0	0	<b>0</b>
<b>2000</b>	40,489	58,852	<b>99,341</b>
<b>1999</b>	39,233	57,027	<b>96,260</b>
<b>1998</b>	37,797	54,940	<b>92,737</b>
<b>1997</b>	36,413	52,928	<b>89,341</b>
<b>1996</b>	35,318	51,336	<b>86,654</b>
<b>1995</b>	34,290	49,841	<b>84,131</b>
<b>1994</b>	33,066	48,063	<b>81,129</b>
<b>1993</b>	31,432	45,688	<b>77,120</b>
<b>1992</b>	23,000	42,500	<b>65,500</b>
<b>Total</b>			<b>\$2,183,076</b>

*\*Plans were fully funded from 2001 to 2003 therefore no special payments were made.*

**3.12** As shown in Exhibit 3.4 annual special payments of over \$2.1 billion have been made by the employer since 1992. The annual amounts have increased \$100 million since 1992 or approximately 154%. Even with these special payments included in employer contributions a funding deficiency still exists in 2013.

**3.13** Specific to the PSSA plan, the April 1, 2012 actuarial valuation for funding purposes shows an unfunded liability of approximately \$1 billion (2011 = \$507 million). The April 1, 2012 TPA plan actuarial valuation for funding purposes shows an unfunded liability of approximately \$595 million (2011 = \$458 million). As at April 1, 2012, the PSSA plan actuarial valuation for funding purposes indicates the plan is 83.6% funded (2011 = 90.9%). As at April 1, 2012 the TPA plan actuarial valuation for funding purposes indicates the plan is 87.5% funded (2011 = 89.8%).

### Pension Assets Rates of Return

**3.14** The net interest component of the pension expense depends primarily on the rate of return earned on pension fund assets. These returns are volatile, as illustrated in Exhibit 3.5 which reports the rates of return for the New Brunswick Investment Management Corporation (NBIMC) since it diversified the pension funds on 31 March 1997. The NBIMC manages the trust funds for the Province's larger pension plans including the PSSA plan, the TPA plan and the Judges' Superannuation Fund (Judges') plan.

Exhibit 3.5 - NBIMC Rates of Return

NBIMC Rates of Return			
Year	Percentage	Year	Percentage
2013	9.08	2005	8.51
2012	5.00	2004	25.27
2011	10.42	2003	(6.95)
2010	19.94	2002	3.45
2009	(18.34)	2001	(5.23)
2008	0.79	2000	20.57
2007	8.68	1999	(0.62)
2006	15.87	1998	18.68
		1997	10.17
<b>17 year annualized return</b>			<b>6.79</b>

**3.15** The returns earned by the NBIMC have ranged from a high of 25.27% in the year ended 31 March 2004 to a low of (18.34)% in the year ended 31 March 2009. Over the seventeen fiscal years the annualized rate of return of the NBIMC has been 6.79%, which is slightly above the 6.60% rate of return currently

required by the Province's independent actuary. The rate of return for accounting purposes assumed by the Province on the significant plans in the 2012-13 consolidated financial statements was 6.96%. The accounting required for the Province's pension plans remains subject to estimates and the consolidated financial statements continue to remain exposed to volatility, although as seen in Exhibit 3.5 less volatility in NBIMC rates of return has been experienced in the last three years.

**3.16** We note for the 2011-12 consolidated financial statements the Province changed the assumed rate of return used for accounting purposes on the significant portion of plans to 6.96%. For a significant portion of the pension plans, this is the first change in this rate since the 31 March 2010 financial statements when a rate of 7.12% was used.

### *Pension Accounting Adjustments*

**3.17** Exhibit 3.6 provides the history of the Province's pension balance for accounting purposes and the important components involved in the calculation over the past ten years.

*Exhibit 3.6 - Components of the Pension Balance for Accounting Purposes*

Components of the Pension Balance for Accounting Purposes										
(\$ millions)										
	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Estimated accrued benefit obligations	10,146.6	9,318.3	8,895.7	8,570.2	8,642.5	8,289.3	7,865.5	7,324.5	6,719.6	6,380.9
Value of plan assets	9,293.9	8,674.7	8,387.0	7,703.1	6,512.4	8,024.1	8,030.5	7,449.3	6,521.7	6,086.5
Pension position before accounting adjustments	852.7	643.6	508.7	867.1	2,130.1	265.2	(165.0)	(124.8)	197.9	294.4
Accounting adjustments	(1,002.2)	(903.1)	(728.6)	(1,063.7)	(2,340.3)	(509.9)	38.6	155.0	(41.2)	(22.9)
Pension balance for accounting purposes	(149.5)	(259.5)	(219.9)	(196.6)	(210.2)	(244.7)	(126.4)	30.2	156.7	271.5

**3.18** The pension balance for accounting purposes is calculated by comparing the market value of plan assets to the actuarial estimate of accrued benefit



obligations owing to present and future pensioners. From this difference an adjustment is made for accounting purposes. The purpose of the accounting adjustment is to reduce year to year pension expense volatility by allowing actual results achieved on plan assumptions to be reported over time and not all in one year. Exhibit 3.6 provides the details of these components of the pension balance.

**3.19** Exhibit 3.6 shows that the Province's pension position before accounting adjustments declined in the year ended 31 March 2013 from \$643.6 million to \$852.7 million. The value of the estimated pension obligations before accounting adjustments exceeded the value of plan assets for the past six years.

***Accounting Deferrals and Adjustments are Permitted under Public Sector Accounting Standards***

**3.20** The accounting adjustment row is a critical part of pension accounting because it assumes a long term view, that the pension plan will be in existence over the long term and there will be volatility from year to year. Therefore, accounting standards permit for the smoothing of this volatility. Such adjustments for accounting purposes are allowed to be deferred and amortized into operating results in future years. Because the accounting adjustments are due to experience deferrals, the pension balance is in a negative liability position (presented in the Province's consolidated financial statements as a net pension liability) of \$149.5 million at 31 March 2013.

**3.21** As at 31 March 2013 the balance of accumulated experience adjustments (losses) for accounting purposes that were deferred and required to be amortized in future years totalled \$1,002.2 million. Such deferral balances from experience adjustments are common in public sector pension accounting. While the cause of the experience adjustments results primarily from changes in mortality assumptions and changes to the assumed rate of return, it is a general indication that assumptions used in pension calculations did not match actual events. This accounting adjustment balance is also an indicator of the magnitude of the amount that must be recognized as an expense over time in future years.

**Shared Risk Pension Plan Model**

**3.22** During fiscal 2012-2013 two pension plans converted to the new Shared Risk Pension Plan model: the pension plan for CUPE Employees of New Brunswick Hospitals (H-CUPE) and the pension plan for Certain Bargaining Employees of New Brunswick Hospitals (H-CBE).

**3.23** Changes were made to the previous H-CUPE and H-CBE plans including increasing retirement age, introducing conditional indexing and establishing contributions at a level to create a high probability that plan goals will be met.

***Accounting for the Province's Shared Risk Pension Plans***

**3.24** The conversion to the Shared Risk Pension Plan model was a complex process for accounting purposes as the Public Sector Accounting Standard on pensions (*PS 3250 - Retirement Benefits*) was last updated in August 2007 and does not contemplate unique arrangements such as shared risk pension plans. PS 3250 does indicate that in some circumstances a benefit plan may include both defined benefit and defined contribution elements and PS 3250 also states that "because benefit plans are often complex, careful analysis and professional judgment are needed to determine whether the substance of particular plan makes it a defined benefit or a defined contribution plan."

***Persuasive Arguments for Multiple Accounting Options***

**3.25** After reviewing the details of the shared risk pension plan arrangements and reviewing the accounting standards, we determined persuasive arguments could be made for both defined benefit and defined contribution accounting treatment based on the present accounting standards. It is important to note that this accounting decision is significant, as a defined contribution accounting treatment generally involves recording no employer obligation on the financial statements, whereas a defined benefit plan generally involves recording an obligation on the statement of financial position for the pension liability which accumulates as services are rendered by employees. Both the H-CUPE and the H-CBE pension plans had been reported in the Province's consolidated financial statements as defined contribution pension plans prior to their conversion to Shared Risk Pension Plans.

**3.26** Our assessment involved a complex evaluation of

the plans' legislation and plan provisions. We caution that pension plan legislation and specific pension plan provisions may differ between pension plans (and different jurisdictions), and an assessment on a plan by plan basis is required to determine the appropriate accounting treatment of any pension plan conversion. Each pension plan must be assessed on its own merits. A high degree of professional judgment was exercised in the accounting model determination for 2013.

***Province Advocates  
Defined Contribution  
Pension Plan Accounting***

**3.27** A significant question in the accounting analysis pertained to which party bears the risk in the pension arrangement: the employer or employee. The Province's position was that the shared risk plans should be accounted for as defined contribution plans given the risks inherent in the plans are largely borne by the employees. This is due to plan provisions where the employer has a defined level of contribution with limited variability, there is a legal separation of the Province from the assets and liabilities of the plans and the fact that benefits, including base benefits, indexing and other ancillary benefits, are not guaranteed under the terms of the plans.

***H-CUPE and H-CBE  
Provincial Pension  
Expense***

**3.28** Exhibit 3.7 shows the provincial expense for pensions for the H-CUPE and H-CBE plans in the past five years.

*Exhibit 3.7 - Pension Expense (\$ millions)*

<b>Pension Expense (\$ millions)</b>					
	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
<b>H-CUPE</b>	27.5	14.1	13.2	12.3	15.5
<b>H-CBE</b>	32.7	26.5	25.4	24.2	19.5
<b>Total</b>	60.2	40.6	38.6	36.5	35.0

**3.29** We also note changes occurred in fiscal 2012-2013 to pension contribution rates at the time of conversion to the shared risk pension plan model as noted in Exhibit 3.8.

Exhibit 3.8 - Pension Contribution Rates as a Percentage of Payroll

Pension Contribution Rates as a Percentage of Payroll (percentage)				
	Shared Risk Model (Employee)	Prior to Shared Risk Model (Employee)	Shared Risk Model (Employer)	Prior to Shared Risk Model (Employer)
<b>H-CUPE</b>	9.0 %	6.17 %	10.1 % <sup>1</sup>	Employee <sup>1</sup> Matched
<b>H-CBE</b>	7.8 %	6.04 % - 7.46 %	7.8% <sup>2</sup>	Employee <sup>2</sup> Matched

<sup>1</sup> Employer portion paid by General Government

<sup>2</sup> Employer portion paid by the related employer entity

**3.30** In addition, certain part time employees, many of which participated previously in the Province's Part Time and Seasonal Pension Plan (a defined contribution plan), are now included in the new shared risk pension plan. In some instances this had led to part time employee pension contribution rates increasing from at least 4.50% to 7.8%. These contributions are matched by the employer.

**3.31** The changes in increased pension contribution rates as seen in Exhibit 3.8 and increased members (with the inclusion of part time employees) have led in part to the increased provincial pension expense noted in Exhibit 3.7 in 2013 of \$19.6 million for the H-CUPE and H-CBE plans. This represents an increase in provincial expenses for these two plans of approximately 48% in 2013.

**Funding Policy Details for  
H-CUPE and H-CBE**

**3.32** A key clause in the funding policy indicates in the event the open group funded ratio, as defined by the *Pension Benefits Act*, falls below 100% for two successive year ends, the employer contribution increase is limited to ½ of 1% of the payroll of the active members of the plans. In 2013 this would have amounted to \$1.63 million for H-CUPE and \$2.8 million for H-CBE.

**3.33** The pension plans include a funding deficit recovery plan designed to ensure the sustainability of the plans as well as funding excess utilization plans which outline actions that may be taken when the open group funded level exceeds 105%.

**3.34** These plans, under the Shared Risk Pension Plan

models are governed by the Board of Trustees and therefore the Province has no claim to any assets or surpluses of the plan, nor does it have any legal obligation beyond the contributions required under the plan's funding policy.

**3.35** An increase in contributions is the first mechanism of a funding deficit recovery plan, which is designed to ensure the sustainability of the plans. Other mechanisms include changes to early retirement rules, reductions in benefit accruals for future service, and as a last step, the reduction of base benefits for all members for both past and future service. The funding deficit recovery plan specifies the order of priority that these mechanisms be applied.

**3.36** The H-CUPE and H-CBE plans also have funding excess utilization plans that outline actions that may be taken when the open group funded level exceeds 105%. Mechanisms include the reversal of any previous ancillary and base benefit reductions, the provision of indexing, the establishment of reserve funds, benefit improvements, and contribution decreases limited to 1% of the payroll of the active members for both the employer and employees. The funding excess utilization plan specifies how much of the excess funds can be utilized and the order of priority.

***Defined Contribution  
Accounting Accepted for  
H-CUPE and H-CBE***

**3.37** The additional contributions on the part of the Province are defined and limited with minimal variability expected from one year to the next. In substance then, we concluded employees bear key risks in the shared risk pension plans for H-CUPE and H-CBE, and therefore defined contribution accounting treatment for these plans is appropriate at this time.

***Future Accounting  
Standards Changes May  
Impact Accounting  
Decision***

**3.38** It is important to note accounting standards are in the process of evolving and there have been changes in pension accounting standards internationally. In addition, pension accounting standards in Canada may also change to better reflect the emerging structures of new pension plan models. We will continue to monitor accounting standards as they evolve, and our conclusion on the appropriate accounting treatment for the H-CUPE and H-CBE plans may change in future depending on the changes in accounting standards.

**3.39** Given the Province's announced intention to convert more pension plans to shared risk pension plans we believe the question of appropriate accounting treatment will be an even more important issue in future audits.

## Accounting for NB Power and NB Electric Finance Corporation

**3.40** The Province's consolidated financial statements include the results of many Crown corporations and agencies. One of the largest and most complex is the NB Power group of companies (NB Power). NB Power is included in the Province's consolidated financial statements through the New Brunswick Electric Finance Corporation (NBEFC). This company was established in 2004 under the authority of the *Electricity Act*, Chapter E-4.6. The NBEFC holds and manages the debt and debt related assets and liabilities of NB Power.

**3.41** Some key principles used in accounting for these companies in the Province's consolidated financial statements are noted below:

- NB Power is a viable business which can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources outside of the government;
- the NBEFC will be able to receive sufficient payments from NB Power to repay the debt taken on by the NBEFC; and
- the operation of an independent rate setting process.

**3.42** We have decided to provide an analysis of the operating results of the NBEFC and NB Power due to the complexity and uncertainty of the underlying accounting issues, particularly rate regulatory accounting, and because these entities' financial results have a significant impact on the Province.

**3.43** Net earnings of the NBEFC and NB Power for the past five years are provided in Exhibit 3.9.

Exhibit 3.9 - NB Electric Finance Corporation and NB Power Net Earnings (loss)

NB Electric Finance Corporation and NB Power Net Earnings (loss) (\$ millions)					
	2013	2012	2011	2010	2009
NBEFC	21.4	145	11	(212)	35
NB Power	69	173	67	(117)	70

Source: NB Power audited financial statements

**3.44** Each year NB Power's earnings or loss is included in the NBEFC year end results. Then the NBEFC earnings, in turn, are included in the Province's consolidated financial statements.

**3.45** The NBEFC's primary source of revenue and cash generation is from NB Power. Since the NBEFC manages the debt of NB Power it is dependent on payments from NB Power to service its debt.

**3.46** To interpret the results of NB Power's operations, it is necessary to understand how rate regulatory accounting impacts their results.

### ***NB Power and Rate Regulatory Accounting***

**3.47** Rate regulatory accounting allows NB Power to recognize regulatory assets which represent the right to collect future revenues associated with certain costs incurred in current or prior periods. The costs are expected to be recovered from customers in future periods through the rate-setting process.

**3.48** As at 31 March 2013, NB Power had regulatory assets of \$1,072 million (\$1,020 million for the refurbishment of the Point Lepreau Generating Station (PLGS) and \$52 million related to the lawsuit settlement with Petróleos de Venezuela S.A.). With respect to the PLGS regulatory deferral asset, these costs are already incurred in current and prior periods. In other words, these costs would have been recorded as expenses in the statements of earnings of corresponding years, if NB Power did not apply rate regulatory accounting.

**3.49** Our analysis in this section focuses on the regulatory deferral asset associated with the refurbishment of PLGS, since it represents 95% of total regulatory assets of NB Power.

**3.50** The regulatory deferral asset associated with the refurbishment of PLGS accumulated during the construction period includes:

- the normal period costs (net of any revenues) incurred by NB Power Nuclear Corporation (Nuclearco);
- the costs of replacement power incurred by NB Power Generation Corporation (Genco), during the refurbishment period;



- less costs included in current rates; and
- interest on the regulatory deferral asset.

**3.51** These amounts are to be recovered from ratepayers over 27 years, the refurbished station's estimated operating life.

**3.52** Period costs are costs and expenses incurred by Nuclearco during the out of service period, other than those costs and expenses recorded as capital costs of the project.<sup>1</sup> Typical period costs are:<sup>2</sup>

- transmission services;
- operations, maintenance and administration to maintain reliable operating systems, licensing requirements, and ensure safer reliable operation post refurbishment;
- amortization and decommissioning;
- taxes on the buildings and property; and
- interest charges on long term and short term debt (excluding debt for the capital project and the regulatory deferral asset) and debt portfolio management fees.

**3.53** The cost of replacement power represents Genco's fuel and purchased power cost it incurred to provide the energy that would have been produced by PLGS to serve in-province load. Part of this cost is offset by the current existing electricity rates which reflect the cost of purchased power that would normally have been produced by PLGS.

**3.54** Exhibits 3.10 and 3.11 provide the details of the PLGS deferral.

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<sup>1</sup> *Electricity Act* Section 143.1(2)

<sup>2</sup> New Brunswick Energy and Utilities Board. Matter 171: PLGS Deferral Account. "Attachment A – Detailed Explanation of Nuclear Non-Capital Costs" pages 14-17

Exhibit 3.10 - Breakdown of PLGS regulatory deferral asset (\$ millions)

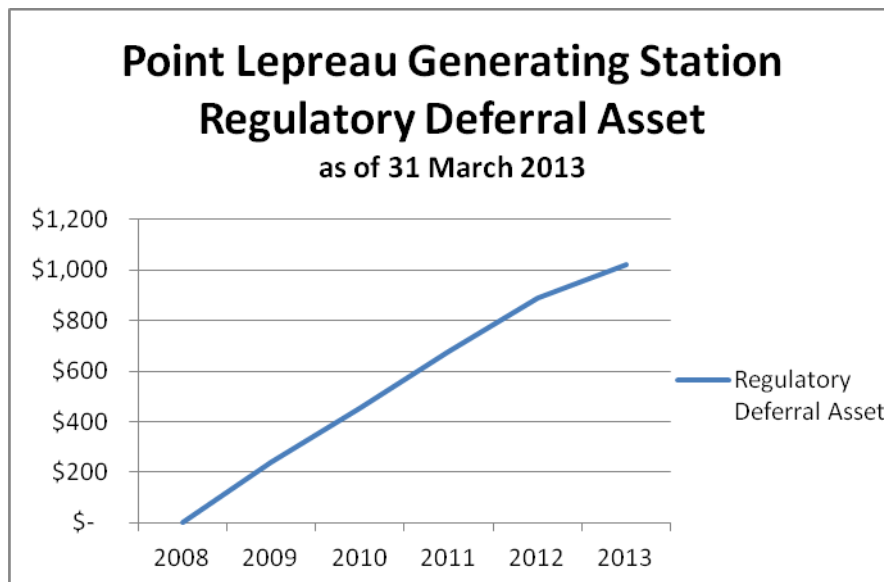
Breakdown of PLGS regulatory deferral asset (\$ millions)							
	2008	2009	2010	2011	2012	2013	Total
Costs of replacement power	\$ -	\$ 267	\$ 223	\$ 239	\$ 200	\$ 100	\$ 1,029
Period costs	2	176	176	164	189	132	839
Interest on deferral	-	4	16	27	37	44	128
Offset for costs included in current rates	-	(209)	(206)	(206)	(209)	(123)	(953)
Amortization of deferral	-	-	-	-	-	(23)	(23)
<b>Total</b>	<b>\$ 2</b>	<b>\$ 238</b>	<b>\$ 209</b>	<b>\$ 224</b>	<b>\$ 217</b>	<b>\$ 130</b>	<b>\$ 1,020</b>

Source: NB Power audited financial statements

**3.55** The regulatory deferral asset started to accumulate in 2008. The balance has grown rapidly from \$2 million in 2008 to \$1 billion as of 31 March 2013.

**3.56** Note that amortization of the deferral asset of \$23 million commenced in 2013 given the return to service of Point Lepreau in November of 2012. The deferral account is intended to be recognized as an expense to NB Power over the 27 year operating life span of the nuclear generating station.

Exhibit 3.11 - Point Lepreau Generating Station Regulatory Deferral Asset



Source: NB Power audited financial statements

### ***NB Power's Recent Earnings or Loss?***

**3.57** Exhibits 3.12 and 3.13 provide information about NB Power's earnings for the past four years. The

effects of rate regulatory accounting are factored out to reflect financial performance from operations.

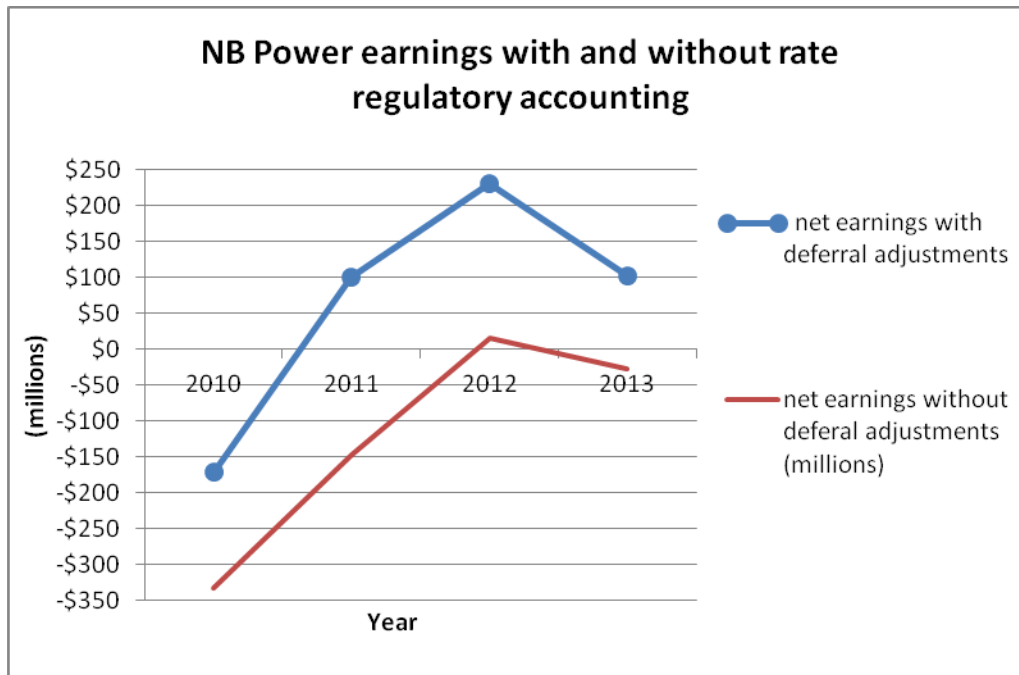
Exhibit 3.12 - NB Power earnings (loss) adjusted to remove the effects of rate regulatory accounting

NB Power earnings (loss) adjusted to remove the effects of rate regulatory accounting (millions)				
	2013	2012	2011	2010
Net earnings (loss) <sup>1</sup> - rate regulatory accounting	\$ 102	\$ 231	\$ 99	\$ (170)
Less regulatory deferral adjustment to earnings	(82)	(175)	(216)	(147)
Less interest on deferral	(47)	(40)	(30)	(16)
Net earnings (loss) <sup>1</sup> adjusted to remove the effects of regulatory deferrals	\$ (27)	\$ 16	\$ (147)	\$ (333)

Source: NB Power audited financial statements

<sup>1</sup>Before special payments in lieu of taxes calculated based on net earnings to the NBEFC in accordance with Regulation 2008-9 of the Electricity Act.

Exhibit 3.13 - NB Power earnings with and without rate regulatory accounting



Source: NB Power audited financial statements

**NB Power’s current use of rate regulatory accounting is accepted under Canadian GAAP**

**3.58** Expenses that would ordinarily be deducted in calculating net earnings have been deferred to future years under rate regulatory accounting. Rate regulatory accounting is an accounting framework

commonly used by utilities and other regulated entities across North America. While this practice is currently acceptable under Canadian generally accepted accounting principles (GAAP), it creates the appearance of profitability, however if rate regulatory accounting had not been applied, this would not have been the result, and NB Power would have recorded reduced profitability as shown in Exhibits 3.12 and 3.13. The impact of the deferral adjustments on the reported financial performance of NB Power is significant.

**3.59** In addition to the \$1 billion regulatory deferral asset, NB Power has invested \$1.4 billion as of 31 March 2013 in capital costs toward the refurbishment project. In total, NB Power invested \$2.4 billion as of 31 March 2012 on the Point Lepreau refurbishment project before returning to service during the year.

***We reviewed NB Power's model of future financial results***

**3.60** As part of our work, we examined the model which supported NB Power's ability to charge rates in the future at a sufficient level to fully collect the amount of the regulatory asset.

**3.61** This modeling, as supplied by NB Power, projected positive net earnings in the range of \$66 to \$159 million over the next 30 years. Our work did not focus on the validity of the model to accurately reflect NB Power's operations. Rather we examined the NB Power model and manipulated critical inputs to evaluate the impact on projected net income. Our objective was to evaluate both the plausibility of existing inputs used, as well as the impact on the model if more conservative inputs were substituted.

**3.62** As shown in Exhibit 3.14, inputs, when changed, would not independently turn the model into a deficit position:

Exhibit 3.14 - Impact of Input Changes on NB Power's Financial Model

Model Input Manipulated	NB Power Model Input	OAG change Input	Model Impact
Point Lepreau load factor	Load factors ranging from a high of 93% to a low of 82%	Load factors reduced by 1%	A \$2.2 million unfavourable impact to net earnings annually for each percentage load factor not achieved
Interest rates	Long term rate of 5.95% Short term rate of 4%	Increased long term and short term rates to 10%	Unfavourable impact to net earnings between \$39 million and \$51 million annually over the next 10 year period.
Consumption growth	Increasing year over year in-province consumption load	Constant in-province load at 2013 amount	Unfavourable impact to net earnings between \$2 million and \$7 million annually.
Projected inflation rates for expenses independent of revenue rate changes.	Constant inflation rate of 2%	Constant inflation rate changed to 5%	Initial unfavourable impact of \$10 million in year one, and if sustained greater than 7 years profitability would be fully deteriorated.
Rate increases	Rate increases annually of 2% starting in 2014	Rate increase changed to 0%	First year net income reduced by \$24 million. In three years projected net income surpluses turn into a deficit.

***Model input that would shift NB Power into a deficit***

**3.63** The one critical model input that, by itself, could put projected net income into a deficit position was rate increases. NB Power projected rate increases of 2% in each year starting in 2014. Should these rate increases not be realized, the initial year's net income would be reduced by \$24 million. If no rate increases were to be compounded year over year and assuming all other factors stay constant, it would take three years for all projected net income surpluses to turn into a deficit.

***Modeling Conclusion***

**3.64** We did not find any model input as forecasted by NB Power to be implausible. With the exception of rate increases, we did not find any single input to be significant enough to jeopardize the modeled profitability.

**3.65** We would like to highlight the following points:

- Modeling is a projection of future events: Should

NB Power's modeling not accurately reflect actual operations then projected surpluses may not be realized as modeled. Additionally, should some of the less than optimistic assumptions highlighted above happen in combination or other unforeseen events come to pass then projected surpluses may not be realized as modeled.

- Realized rate increase: as highlighted above, the rate increase assumption is the one input that would by itself put the model into a deficit. Given the historic government involvement in NB Power's rate setting process, these rate increase requirements for future profitability should be of particular relevance to stakeholders.

***Regardless of the accounting, the PLGS refurbishment cost (\$2.4 billion as at 31 March 2013) must be recovered through rates***

**3.66** It is important to note, regardless of the accounting for the PLGS regulatory deferral asset, the fact remains, the PLGS refurbishment cost (\$2.4 billion as of 31 March 2013 including \$1.4 billion construction cost and \$1 billion deferral) will have to be collected from ratepayers over time.

**3.67** In addition, if the Province wishes to continue to account for NB Power as a viable business on the Province's consolidated financial statements, NB Power's financial results must demonstrate viability. That is, NB Power must maintain its operations and meet its liabilities (including debt repayments) from sources outside of government (ratepayers).

**3.68** Currently, NB Power's \$4.7 billion debt is not included in the Province's Net Debt. The NB Power amounts reported in the Province's consolidated financial statements are limited to net income and net assets included in the NBEFC. If NB Power was to have significant recurring losses and become an investment loss for the Province, it would be an indication NB Power is not viable on its own. At that time, all debts, assets, liabilities, revenue and expenses of NB Power would be included in the Province's consolidated financial statements.

***History of government involvement in the NB Power rate setting process***

**3.69** The Energy and Utilities Board (EUB) is an independent, quasi-judicial board charged with regulating public utilities. The EUB regulates aspects of electricity and natural gas utilities to ensure that customers receive safe and reliable service at

reasonable rates. To fulfil its mandates and responsibilities, it is important for the EUB to remain independent.

**3.70** However with respect to NB Power, successive governments have played a role in the rate setting process by imposing rate increase caps or freezes. Four recent occasions include:

- In 2006, under the authority of the *Electricity Act*, Chapter E-4.6<sup>3</sup> cabinet overturned a decision by the EUB to allow an increase of rates by an average of 9.64%. Government reduced the increase to an average of 6.57 %.
- In 2008, the government issued a policy directive to NB Power "*barring unforeseen circumstances, the maximum average power rate increase for each of the next three years through 2010 will not surpass three per cent.*"
- In 2010, the government committed to implement a three-year electricity rate freeze for NB Power ratepayers. NB Power implemented the freeze in October 2010.
- The new *Electricity Act*, 2013 Chapter 7, which came into force on October 1, 2013 includes the option for NB Power to change rates without application to the EUB on October 1, 2013 and October 1, 2014, to a maximum of 2% annually. Future rate changes will require an application to the EUB for approval.

**3.71** Guidance under GAAP is not broad enough to be applied outside of very specific events and circumstances, therefore other sources of GAAP needed to be considered, such as guidance from the US Financial Accounting Standards Board (FASB). Using Accounting Standards Codification 980-Regulated

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<sup>3</sup> Electricity Act 105(1), Chapter E-4.6, *The Lieutenant-Governor in Council may, within 30 days after the filing of the order or decision of the Board with the Clerk of the Executive Council under section 104, on the Lieutenant-Governor in Council's own motion, modify or reverse an order or decision made by the Board respecting the charges, rates and tolls to be charged by the Distribution Corporation, and such modification or reversal is binding on the Board and on all parties, and the decision of the Lieutenant-Governor in Council.*

Operations (formerly referred to as FASB's Financial Accounting Standards 71– *Accounting for the Effects of Certain Types of Regulation*) NB Power supports its use of rate regulatory accounting.

**3.72** When rate regulatory accounting was first used for the PLGS refurbishment in fiscal 2007-2008 a conclusion on NB Power's appropriate use of rate regulatory accounting was performed by the OAG. As the PLGS has now returned to service on November 23, 2012, and other events have evolved since this initial conclusion, the OAG revisited the issue during the year.

**3.73** One of the criteria an enterprise that has regulated operations has to meet to be able to use rate regulated accounting, under this guidance, is:

*“The enterprise's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator or by its own governing board empowered by statute or contract to establish rates that bind customers.”<sup>4</sup>*

**3.74** We have determined that NB Power continues to meet this criterion, based on the determination that the Province and the EUB are considered to be empowered by statute or contract to establish the rates that bind customers.

**3.75** Other criteria relate to if the rates charged to customers are designed to recover the enterprise's costs of providing the regulated services and if the rates are set at a reasonable level. We have determined that NB Power continues to meet these criteria, given their projected recovery model as reviewed in paragraph 3.64.

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<sup>4</sup> *Financial Accounting Standards Board, Statement of Financial Accounting Standards No.71, paragraph 5 (a).* Canadian generally accepted accounting principles do not include an explicit rate regulatory accounting framework and therefore, additional guidance may be consulted such as the United States of America Financial Accounting Standards Board (FASB).



***NB Power's adoption of IFRS may be delayed to 2015/16***

**3.76** NB Power was expected to convert to International Financial Reporting Standards (IFRS) as required by changes in accounting standards. However, due to a decision of the Accounting Standards Board (February 2013) NB Power can elect to defer IFRS implementation until the fiscal year ended 31 March 2016.

**3.77** Currently, IFRS does not recognize regulatory deferred assets or liabilities. Therefore, once adopted NB Power may have to decide how to account for the PLGS regulatory deferral asset in a different manner. To date we have had preliminary discussions with NB Power regarding possible accounting treatments of the regulatory deferral asset.

**Conclusion**

**3.78** Given this impacts a future audit year, we will follow relevant decisions of the Accounting Standards Board and assess NB Power's transition plan to IFRS as events unfold.

***NB Power uncertainties***

**3.79** In conclusion, uncertainty regarding the Province's accounting for NB Power, includes:

- accuracy of assumptions in the long term projections;
- accuracy of the forecasted model for the recovery of the PLGS deferral asset; and
- the ability to demonstrate it is a viable business that can maintain operations, repay debt and liabilities from non-government sources.

**3.80** We will continue to monitor relevant events and hold discussions with NB Power and government to review these issues.