REFERENCE: **Pages 4-2 & 4-7 Section 5.0**
Level of Rates and Rate Options; Test Years Adjusted IFF

QUESTION:

a) Please provide a table for each of the two test years including a column containing the *IFF11-2* (income statement and retained earnings) as filed; a column which reflects detail of all adjustments that MIPUG suggests need not be made; a column that identifies adjustments that MIPUG suggests that can be deferred to other years; and a column with the resulting adjusted IFF.

b) Please comment on the rate implications of the adjusted IFF in (a) for the test years and for the subsequent "15 sustained years of massive capital investment".

c) Please provide Mr. Bowman's schedule of a "status quo utility" IFF for the test years and beyond, with all major assumptions detailed.

ANSWER:

(a) and **(b)**

Table 1 below shows the Electric Operations Projected Operating Statement for the years 2011/12 to 2015/16 adjusted for the changes proposed by Mr. Bowman in the Pre-filed Testimony on pages 1-5 and 1-6, as updated for IFF12-1. The basic approach has been entirely retained from the Pre-Filed Testimony; only the values have been updated.

Note that it is difficult for any party other than Hydro to model the intricacies of some aspects of the IFF; however, at a coarse level the attached table gives a good approximation of the effects of the recommendations.

Table 1 below does not yet complete any quantified adjustment for Mr. Bowman's recommendations on Hydro's continued need to focus on containing operating cost escalation and normal capital spending, nor for potential adjustments to asset lives as noted at page 4-14 to 4-15 of the pre-filed testimony.

Table 1: Electric Operations Projected Operating Statement Adjusted for Initial Recommendations based on IFF12-1 ($ Millions)[1]

REVENUES	2013	2014	2015	2016	2017
Manitoba Hydro Proposed General Consumer at approved rates	1,331	1,361	1,374	1,390	1,404
1% Rate Deferral Reinstated	*(26)*				
MIPUG Proposed General Consumer at Approved Rates	**1,305**	**1,361**	**1,374**	**1,390**	**1,404**
Manitoba Hydro Proposed Additional	0	48	104	165	228
Reduced by 3.5% from 2014 onward for not approved rate adjustment in 2013/14	-	*(48)*	*(48)*	*(49)*	*(49)*
MIPUG Alternative "Additional* Rates"	-	-	**56**	**116**	**179**
Extraprovincial	357	344	343	380	406
Other	14	15	15	15	15
	1676	1720	1788	1901	2004
EXPENSES					
Manitoba Hydro Proposed Operating and Administrative	**455**	**471**	**544**	**556**	**567**
Less Change in Capitalized Overhead	*(56)*	*(58)*	*(59)*	*(60)*	*(61)*
Less IFRS Changes - DSM	-	-	*(23)*	*(22)*	*(21)*
Less IFRS Changes - Admin and General	-	-	*(37)*	*(38)*	*(38)*
MIPUG Alternative Operating and Administrative	**399**	**413**	**425**	**436**	**447**
Manitoba Hydro Proposed Finance Expense	**452**	**444**	**492**	**524**	**586**
Add Interest Expense Adjustment for difference from MH proposed Revenues	*1*	*2*	*4*	*7*	*9*
MIPUG Alternative Finance Expense	**453**	**446**	**496**	**531**	**595**
Manitoba Hydro Proposed Depreciation and Amortization	**399**	**430**	**372**	**391**	**410**
Less Reduction in Amortization of Rate Regulated Assets	-	-	*38*	*38*	*37*
Less Administrative and General Overhead Capitalized (CGAAPS and IFRS)	-	-	-	*1*	*2*
Less Change to Equal Life Group Depreciation Method	-	-	*(36)*	*(38)*	*(39)*
Less Adoption of Net Salvage 2 yrs earlier than IFF12	*(60)*	*(60)*			
MIPUG Alternative Depreciation and Amortization	339	370	374	392	410
Water Rentals and Assessments	117	116	112	112	112
Fuel and Power Purchased	143	166	179	191	206
Capital and Other Taxes	88	96	101	110	119
Corporate Allocation	9	9	8	8	8
	1,548	1,616	1,695	1,780	1,897
Non-controlling Interest	14	24	21	16	13
Manitoba Hydro Proposed Net Income	**53**	**60**	**49**	**74**	**58**
Increase (Decrease) from Proposed Changes	*89*	*68*	*65*	*63*	*62*
MIPUG Alternative Net Income	**142**	**128**	**114**	**137**	**120**
*Additional General Consumer Revenue					
Percent Increase (as per Rate Outcome point 1 - finalize rates at current levels)	3.57%	0.00%	3.95%	3.95%	3.95%
Cumulative Percent Increase	4.50%	4.50%	8.63%	12.92%	17.38%
Manitoba Hydro Proposed Equity Ratio	25%	22%	17%	15%	14%
MIPUG Adjusted Equity Ratio	25%	24%	22%	22%	22%

[1] Reduction of 1% Rate Deferral as per PUB/MH I-1 and MIPUG/MH I-20(c) where the 2012/13 first quarter balance is multiplied by four as an estimate for the total year and all subsequent years are set equal. Reduction to Additional rates calculated as a reduction from Manitoba Hydro proposed cumulative increase of 7.59% in MH12-1 to 3.95% multiplied by the 4.5% cumulative rate increase from 2012/13, shown in Manitoba Hydro proposed General Consumer at approved rates revenue. Interest Expense calculated as Difference between MH Proposed Electric Operations revenues and MIPUG Proposed multiplied by Canadian Dollar Long-Term Debt Rate from page 3 of IFF12-1 (Rate for 2016/17 not given so set equal to 2015/16). Changes to OM&A and Depreciation and Amortization from MH Exhibit #55 which updated PUB/MH I-42 for IFF12-1. Early adoption of net salvage is estimated for 2012/13 based on the amount for 2013/14 shown in MH Exhibit #55 applied to 2012/13 and 2013/14. Adjusted Equity calculated as Retained Earnings from IFF12-1 less difference between Manitoba Hydro and MIPUG proposed Net Income, less the deduction of Power Smart Write-Off in 2014/15 as per MH Exhibit #55, does not include AOCI, does not include Long-Term debt from Keeyask and Conawapa calculated from CEF12 (page 3 and 7) Total Spending less all remaining spending to incur after the year in question.

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Table 2 below shows Mr. Bowman's proposed changes to Electric Retained Earnings and Table 3 uses the Adjusted Electric Retained Earnings to calculate the rate regulated Debt Ratio for the forecast years 2012/13 to 2016/17.

Table 2: Proposed Electric Retained Earnings for Forecast Years 2012/13 to 2016/17 ($ Millions)[2]

Fiscal Year Ended	Opening Electric Retained Earnings	IFRS Write Off to Site Remediation	IFRS Write Off to Acquisition (Centra & Manitoba Hydro)	IFRS Write Off for Employee Benefits	MIPUG Alternative Net Income	Adjusted Electric Retained Earnings
2013	2,442				142	**2,584**
2014	2,584				128	**2,712**
2015	2,712	(32)	(19)	(21)	114	**2,754**
2016	2,754				137	**2,891**
2017	2,891				120	**3,011**

The adjustments not included to Retained Earnings that Manitoba Hydro has proposed for 2013/14 as a result of IFRS conversion include:

- Write Off to Power Smart Programs of $172 million;
- Write Off to Regulatory Costs of $2 million;
- Write Off to Administrative Overhead of $36 million; and
- Change to Equal Life Group Depreciation Write Off of $34 million.

Mr. Bowman also proposes to adopt the removal of net salvage in 2012/13 as per page 1-6 of the Pre-Filed Testimony.

[2] 2012/13 Retained Earnings Amount from IFF12-1 page 39. Adjustments that Mr. Bowman has not disputed deducted from Retained Earnings as per MH Exhibit #55. MIPUG Proposed Net Income from Table 1 above.

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Table 3: Adjusted Electric Operations Debt Ratio Calculation ($ Millions)[3]

	A	B	C	D	E	F	G = D - E - F	H	I	J	(G+H+I+J)/(A+B+C+G+H+I+J)
Fiscal Year Ended	Adjusted Retained Earnings	Contributions in Aid Construction	Non-Controlling Interest	Long-Term Debt	Keeyask Capital Spending To Date	Conawapa Capital Spending To Date	Adjusted Long-Term Debt - Used and Useful	Sinking Fund Investment	Short-Term Debt	Short-Term Investments	Debt Ratio w/ Retained Earnings Deduction and no AOCI
2013	**2,584**	341	99	10,253	704	286	**9,263**	(320)	109	-	**0.75**
2014	**2,712**	350	75	11,427	1,043	358	**10,026**	(129)	137	-	**0.76**
2015	**2,754**	355	76	13,070	1,448	424	**11,198**	(152)	38	-	**0.78**
2016	**2,891**	359	78	14,977	2,085	543	**12,349**	(311)	101	-	**0.78**
2017	**3,011**	363	80	16,852	2,968	788	**13,095**	(489)	-	-	**0.78**

[3] Debt - Equity Calculation for 2012/14 GRA 2007/08 - 2031/32 from MIPUG/MH I-11(c) Revised for IFF12-1 in MH Exhibit #38. Adjusted Retained Earnings from Table 2 above. Keeyask and Conawapa Capital Spending to Date Calculated from CEF12 (page 23 and 7) as Total Project Costs less costs not yet incurred.

The implications of the above adjusted scenario is that Hydro maintains a net income greater than forecast in the IFF11-2, while rate levels for customers are reduced. The cost levels better track the assets in service, and there is also recognition in the debt:equity calculation that Bipole III is expected to be in service for domestic ratepayer benefits in the next few years following this scenario (i.e., Bipole III spending is not removed from the debt:equity calculation above). In this regard, the scenario above is not yet rigorously applying a strict "used and useful" test.

This approach reasonably reflects continuity with Hydro's forecasts over the last decade as to capitalization approaches, and ensures current domestic ratepayers are not burdened by capital costs associated with plant not yet in service and not yet subject to required regulatory and planning approvals (i.e., Conawapa and Keeyask) at the same time that finances are challenged by the effects of Wuskwatim coming on-line.

Given the higher overall equity levels, this approach also better positions Hydro for the capital investment over the coming 15 years, and provides the opportunity to have the costs that are properly associated with Conawapa and Keeyask be aggregated into the overall project costs, for future amortization/depreciation once those projects are in service and providing long-lived value to ratepayers.

The above scenario also reflects net income at a level that is somewhat above what is strictly required to set aside a required minimum level of ratepayer-funded reserves. As such, even in the event some degree of additional costs are included (e.g., if some limited portion of Hydro's proposed overhead capitalization changes were to be adopted) it would not change the basic conclusion that current rates are sufficient, given present system and costs forecasts, through at least the 2014/15 year.

(c)

Mr. Bowman does not have the information required to prepare an IFF for a "status quo" perspective on Manitoba Hydro. A reasonable approach to such a forecast would be to provide an IFF that reflects the simplest set of planning assumptions available to MH – likely a mixture of SCCT and CCCTs being constructed as required for capacity and energy shortfall purposes in the year in which shortfalls arise (other than capacity and energy being made available from base case DSM and committed least-cost resources) or alternatively the least cost new hydraulic generation planning sequence. This simple baseline IFF would then become the main basis for rate regulation prior to specific new

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capital-intensive resources being committed (e.g., receiving the necessary approvals such as an Order-in-Council or some other milestone decisions confirming a very high likelihood of the project proceeding).

When the time comes for major new project assessment, such as for the NFAAT, Manitoba Hydro can provide data that is contrasted to this simple IFF, looking at an IFF scenario that includes the optional but recommended plans comprised of larger capital cost commitments and other attendant changes to the baseline IFF. This is generally similar to what was done in the Wuskwatim NFAAT hearing, where a baseline IFF consisting of Wuskwatim 2020 was compared to an "advancement" scenario with Wuskwatim in-service for 2009.

PUB/MH I-42 (Revised based on IFF12)

Reference: 2011 Annual Report Page 78, Accounting Changes/ 2012 Annual Report

Please re-file IFF11-2 Pages 31 and 33 including an additional line items quantifying the net impact of accounting changes reflected in the IFF. Please provide a further detailed schedule on the net amount, including narrative descriptions of each of the accounting changes and cite specific handbook sections.

ANSWER:

Please see the following schedules for an update to this response in reference to IFF12:

Schedule A presents the net impacts of accounting changes by operating statement line item under CGAAP and IFRS. Narratives referencing the changes are provided following the schedules.

Schedule B presents the net impacts of the accounting changes to Retained Earnings.

Schedules C & D reflect the impact of the accounting changes in the income statement and balance sheet of IFF12 respectively.

Schedule E provides an update to the Summary of Accounting Changes to OM&A as previously provided in Appendix 5.6 (page 5 of 13) updated for IFF12 which assumes the deferral of IFRS until 2014/15.

SCHEDULE A - ACCOUNTING CHANGES - IFF12

	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Forecast --> 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Ref
Electric only (in millions of $'s)															
OM&A															
CGAAP Changes															
Intangibles															
DSM	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
Planning Studies	3	2	2	2	2	2	2	2	2	2	2	2	2	3	
IT Application	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	5	4	4	4	4	4	5	5	5	5	5	5	5	5	1
Overhead Capitalized															
Stores	5	5	5	5	5	6	6	6	6	6	6	6	6	6	2
Admin& General		4	24	24	51	52	53	54	55	56	58	59	60	61	3
Store & Admin General	5	9	29	29	56	58	59	60	61	62	64	65	66	68	
Change in Discount Rate on Pension & Other Benefits				3	8	10	5	5	5	5	5	6	6	6	4
Subtotal CGAAP Changes	10	13	33	37	69	72	68	70	71	72	74	75	77	78	
IFRS Changes															
DSM							23	22	21	20	19	18	17	17	5
Site Remediation							5	5	5	5	5	5	5	5	5
Regulatory Costs							1	1	2	1	1	1	1	1	5
Pension							-	2	4	5	7	9	11	12	6
Employee Benefits (amortization of RHSA)							(3)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	6
Admin & General							37	38	38	39	40	41	41	42	7
Subtotal IFRS Changes							62	66	69	69	71	73	75	77	
Reclassifications															
Wire & Telecom Services	3	3	3	3	3	3	3	3	4	4	4	4	4	4	8
Funding Agreements		(5)	(5)	(5)	(5)	(5)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	9
Operating Expense Recoveries					8	8	9	9	9	9	9	10	10	10	10
Subtotal Reclassifications	3	(2)	(2)	(2)	6	6	6	7	7	7	7	7	7	7	
Total OM&A Accounting Changes	13	11	31	35	75	78	137	142	146	148	152	156	159	163	

SCHEDULE A - ACCOUNTING CHANGES - IFF12 cont'd

Electric only (in millions of $'s)	Actual	Actual	Actual	Actual	Forecast -->										
DEPRECIATION EXPENSE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Ref
CGAAP Changes															
Administrative & General Overhead Capitalized					(0)	(1)	(1)	(2)	(3)	(3)	(4)	(4)	(5)	(6)	3
Average Service Life				(35)	(40)	(44)	(47)	(49)	(52)	(55)	(58)	(61)	(68)	(72)	11
Subtotal CGAAP Changes	-	-	-	(35)	(40)	(44)	(48)	(51)	(54)	(58)	(62)	(65)	(73)	(78)	
IFRS Changes															
Administrative & General Overhead Capitalized							(0)	(1)	(2)	(3)	(3)	(4)	(5)	(6)	7
Reduction in Rate Regulated Assets							(38)	(38)	(37)	(35)	(33)	(31)	(30)	(28)	5
Change to Equal Life Group Depreciatin Method							36	38	39	40	41	43	52	58	12
Removal of Net Salvage from depreciation rates							(63)	(66)	(68)	(73)	(77)	(81)	(97)	(107)	13
Subtotal IFRS Changes	-	-	-	-	-	-	(65)	(67)	(69)	(71)	(72)	(74)	(80)	(84)	
Total Depreciation Accounting Changes	-	-	-	(35)	(40)	(44)	(113)	(118)	(123)	(129)	(134)	(139)	(152)	(162)	
FINANCE EXPENSE															
CGAAP Changes					0	0	0	0	0	0	1	1	1	1	
IFRS Changes					-	-	2	2	3	3	3	3	4	4	
Total Finance Expense Accounting Changes	-	-	-	-	0	0	2	3	3	3	4	4	5	5	14
CAPITAL TAX EXPENSE															
CGAAP Changes					0	0	0	0	0	1	1	1	1	1	
IFRS Changes					-	-	(3)	(3)	(3)	(3)	(3)	(3)	(2)	(2)	
Total Capital Tax Expense Accounting Changes	-	-	-	-	0	0	(3)	(3)	(3)	(2)	(2)	(2)	(1)	(1)	14

SCHEDULE B - ACCOUNTING CHANGES IMPACT TO RETAINED EARNINGS - IFF12

Electric only (in millions of $'s)	Actual	Actual	Actual	Actual	Forecast -->										
IMPACT TO RETAINED EARNINGS	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	**Total**
CGAAP Changes															
Retrospective adjustment for intangible Assets		(35)													(35)
Annual change to OM&A	(10)	(13)	(33)	(37)	(69)	(72)	(68)	(70)	(71)	(72)	(74)	(75)	(77)	(78)	(820)
Annual change to Depreciation & Amortization	-	-	-	35	40	44	48	51	54	58	62	65	73	78	609
Wire & Teleom Services moved to MHI	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(4)	(4)	(48)
Annual change to Finance & Capital Tax Changes	-	-	-	-	(0)	(0)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(3)	(12)
Total	(13)	(51)	(36)	(5)	(33)	(31)	(24)	(23)	(21)	(19)	(17)	(16)	(10)	(7)	(306)
IFRS Changes															
Annual change to OM&A	-	-	-	-	-	-	(62)	(66)	(69)	(69)	(71)	(73)	(75)	(77)	(562)
Annual change to Depreciation & Amortization	-	-	-	-	-	-	65	67	69	71	72	74	80	84	581
Annual change to Finance & Capital Tax Changes	-	-	-	-	-	-	1	1	0	0	(1)	(1)	(2)	(2)	(2)
Write Offs to:															
Power Smart Programs							(172)								(172)
Site Remediation							(32)								(32)
Acquisition (Centra & Manitoba Hydro)							(19)								(19)
Regulatory Costs							(2)								(2)
Administrative Overhead							(36)								(36)
Removal of Net Salvage Depreciation							60								60
Change to Equal Life Group Depreciation							(34)								(34)
Employee Benefits							(21)								(21)
Total	-	-	-	-	-	-	(253)	2	0	2	0	0	3	5	(240)
Total Annual Impact to Retained Earnings	(13)	(51)	(36)	(5)	(33)	(31)	(277)	(21)	(21)	(17)	(17)	(16)	(7)	(2)	(546)

Reference	Description	Accounting Handbook Reference
1	The OM&A adjustments for intangible assets under CGAAP reflect a change (new section 3064 Goodwill and Intangible Assets) in the Canadian accounting standards for Goodwill and Intangible assets that was effective for MH April 1, 2009. The new standard was harmonized with IFRS and required research and promotional costs to be expensed as incurred with retrospective application. Approximately $35 million was adjusted to retained earnings in fiscal 2009/10 for research and promotional costs included in opening intangible asset balances. Effective April 1, 2009 and forward, research and promotional costs associated with intangible assets are expensed as incurred	**CGAAP – Section 3064 Goodwill and Intangible Assets** .37 No intangible asset arising from research (or from the research phase of an internal project) should be recognized. Expenditure on research (or on the research phase of an internal project) should be recognized as an expense when it is incurred. [OCT. 2008] .52 In some cases, expenditure is incurred to provide future economic benefits to an entity, but no intangible asset or other asset is acquired or created that can be recognized,…,Other examples of expenditure that is recognized as an expense when it is incurred include expenditure on: (a) start-up activities (i.e., start-up costs), (b) training activities. (c) advertising and promotional activities.
2	The OM&A adjustments for stores reflect a change in the accounting standards for costs eligible to be included in the cost of inventories. The CGAAP section 3031 Inventories is converged with IFRS and was effective for MH April 1, 2007. As per Section 3031, storage related overhead charges are no longer permitted in the cost of material in inventory.	**CGAAP –Section 3031 Inventories** .16 Examples of costs excluded from the cost of inventories and recognized as expenses in the period in which they are incurred are: (a) abnormal amounts of wasted materials, labour or other production costs; (b) storage costs, unless those costs are necessary in the production process before a further production stage; (c) administrative overheads that do not contribute to bringing inventories to their present location and condition; and

Reference	Description	Accounting Handbook Reference
3	The reduction in administrative and general overhead capitalized reflects adjustments made under CGAAP to become more consistent with other Canadian utilities. The adjustments result in the following: • an annual increase in operating and administrative expense; • reductions in plant asset values for amounts no longer capitalized; and • reductions in depreciation expense as a result of reduced asset values.	**CGAAP – Section 3061 Property, plant & equipment:** .20 The cost of an item of property, plant and equipment includes direct construction or development costs (such as materials and labour), and overhead costs directly attributable to the construction or development activity. These changes were identified through discussions with other Canadian utilities.
4	The increase in the pension and employee benefits cost is a result of a reduction in the 2011/12 discount rate and the corresponding increase in current service cost for employee benefits.	**CGAAP – Section 3461 Employee Future Benefits:** .50 " For a defined benefit plan, the discount rate used to determine the accrued benefit obligation should be an interest rate determined by reference to: (a) market interest rates at the measurement date on high-quality debt instruments with cash flows that match the timing and amount of expected benefit payments; or (b) the interest rate inherent in the amount at which the accrued benefit obligation could be settled. [JAN. 2000] .054 The discount rate is re-evaluated at each measurement date. When long-term interest rates rise or decline, the discount rate changes in a similar manner.

Reference	Description	Accounting Handbook Reference
5	IFF 12 assumes rate-regulated accounting is not permitted under IFRS and thus, rate-regulated accounting will be eliminated upon transition. The impacts of this assumption are as follows • upon transition to IFRS, a one-time adjustment to retained earnings will be made for unamortized rate-regulated account balances; • future expenditures on these items will be expensed as incurred resulting in an annual increase to operating and administrative expense; and • a reduction to depreciation and amortization for previously deferred regulatory accounts.	Unlike CGAAP and US GAAP, there is no specific IFRS standard that permits rate-regulated accounting. Generally, the application of the existing IFRS framework has not resulted in the recognition of regulatory assets and liabilities.
6	Overall, changes to the accounting for pension and benefits results in an increase in pension and benefit costs upon transition to IFRS. The primary pension accounting changes include: • upon transition, unamortized pension gains and losses will be adjusted to accumulated other comprehensive income; • the elimination of "corridor" determined amortization for unrealized pension experience gains and losses as IFRS requires annual gains and losses to be recognized in Other Comprehensive Income; and • the use of the pension discount rate for recording expected returns on plan assets as opposed to the expected market interest rate of return as per CGAAP.	**IFRS – IAS 19 Employee Benefits:** .120 An entity shall recognise the components of defined benefit cost, except to the extent that another IFRS requires or permits their inclusion in the cost of an asset, as follows: (a) service cost in profit or loss;…, (c) re-measurements of the net defined benefit liability (asset) in other comprehensive income. .125 Interest income on plan assets is a component of the return on plan assets, and is determined by multiplying the fair value of the plan assets by the discount rate specified in paragraph 83, both as determined at the start of the annual reporting period, taking account of any changes in the plan assets held during the period as a result of contributions and benefit payments. .103 An entity shall recognise past service cost as an expense at the earlier of the following dates: (a) when the plan amendment or curtailment occurs; and (b) when the entity recognises related restructuring costs or termination benefits (see paragraph 165).

	Employee benefits: The primary employee benefit related changes include: • upon transition, unamortized past service adjustments will be adjusted to retained earnings; and • future annual benefits expense will be higher for the recognition of benefits attributed to unvested employees for benefits such as sick leave and severance. Such unvested benefits were not recognized under CGAAP, but are required to be recognized under IFRS.	**Employee Benefits:** .15 Accumulating paid absences are those that are carried forward and can be used in future periods if the current period's entitlement is not used in full. ,…, An obligation arises as employees render service that increases their entitlement to future paid absences. The obligation exists, and is recognised, even if the paid absences are non-vesting, although the possibility that employees may leave before they use an accumulated non-vesting entitlement affects the measurement of that obligation.
7	The reduction in administrative and general overhead capitalized reflects adjustments to comply with IFRS upon transition. IFRS does not permit the capitalization of general administrative and overhead costs. The adjustments result in the following: • an annual increase in operating and administrative expense; • reductions in plant asset values for amounts no longer capitalized; and • reductions in depreciation expense as a result of reduced asset values.	**IFRS - IAS 16 Property, plant & equipment:** .19 Examples of costs that are not costs of an item of property, plant and equipment are:,… (d) administration and other general overhead costs.
8	The increase to OM&A resulting from Wire and Telecom services reflects a change in MH's financial reporting where the operations pertaining to Wire and Telecom services are now reported under Manitoba Hydro International.	**No accounting standard reference applies**

Reference	Description	Accounting Handbook Reference
9	The reduction to OM&A resulting from Funding payments (Town of Gillam & Frontier School Division) reflect the re-classification of these expenditures from OM&A to Capital & Other taxes as this more appropriately reflects the nature of these expenditures.	**CGAAP – Section 1000 Financial Statement Concepts** 21 For the information provided in financial statements to be useful, it must be reliable. Information is reliable when it is in agreement with the actual underlying transactions and events, … (a) …Thus, transactions and events are accounted for and presented in a manner that conveys their substance rather than necessarily their legal or other form.
10	The adjustments for operating expense recoveries are to comply with the financial reporting requirements of IFRS. Revenues that were once netted against operating costs for financial reporting will be reported as revenue in the future as IFRS generally does not permit netting of revenues and expenses.	**IFRS - IAS 1 Presentation of Financial Statements:** . 32 An entity shall not offset assets and liabilities or income and expenses, unless required or permitted by an IFRS.
11	The net result of the depreciation study under CGAAP and the average service life approach is an overall reduction in annual depreciation expense for MH due to changes in the service lives for certain asset groups. This change is required to be implemented under Canadian GAAP.	**CGAAP – 3061 Property, plant & equipment:** .28 Amortization should be recognized in a rational and systematic manner appropriate to the nature of an item of property, plant and equipment with a limited life and its use by the enterprise. .33 The amortization method and estimates of the life and useful life of an item of property, plant and equipment should be reviewed on a regular basis. [DEC. 1990 *]
12	Upon adoption of IFRS, MH will be moving from the Average Service Life method of depreciation to the Equal Life Group method; increasing annual depreciation expense.	**IFRS - IAS 16 Property, plant & equipment:** The key IFRS reference supporting the move to the ELG method is: .43 Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately. .68 The gain or loss arising from the de-recognition of an item of property, plant and equipment shall be included in profit or loss when the item is de-recognised. Gains shall not be classified as revenue.

Reference	Description	Accounting Handbook Reference
13	Upon adoption of IFRS, MH will be removing the impact of net salvage from depreciation rates; decreasing annual depreciation expense.	-The Inclusion of net salvage in depreciation rates is a regulatory practice applied under CGAAP by Canadian utilities. Given that IFRS does not recognize rate regulated activities, the practice of including negative salvage in depreciation rates will be discontinued upon transition to IFRS. No IFRS standard reference is available for rate-regulated accounting.
14	The CGAAP changes to finance expense and capital and other taxes reflect the cumulative impacts of changes 1 – 13 as identified in this chart.	**Please see descriptions as provided in 1- 13.**

SCHEDULE C - ACCOUNTING CHANGES - IMPACT ON IFF12

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
Net Impact of Accounting Changes
(In Millions of Dollars)

For the year ended March 31	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES										
General Consumers										
at approved rates	1,331	1,361	1,374	1,390	1,404	1,424	1,447	1,462	1,485	1,506
additional*	0	48	104	165	228	297	371	447	531	619
Extraprovincial	357	344	343	380	406	435	441	464	711	839
Other	6	6	6	6	6	7	7	7	7	7
CGAAP Changes: Reclassifications - Operating Expense Recoveries	8	8	9	9	9	9	9	10	10	10
	1,702	**1,768**	**1,836**	**1,950**	**2,053**	**2,172**	**2,274**	**2,390**	**2,743**	**2,981**
EXPENSES										
Operating and Administrative	380	393	406	413	420	442	448	461	480	490
CGAAP Accounting Changes:										
Reclassifications	6	6	6	7	7	7	7	7	7	7
Reduction in Administrative & General Overhead Capitalized to Plant & Intangibles	60	62	64	65	66	67	69	70	71	73
Pension Expense - Reduction in Discount Rate	8	10	5	5	5	5	5	6	6	6
IFRS Accounting Changes	-	-	62	66	69	69	71	73	75	77
Finance Expense	452	444	490	522	583	653	763	777	996	1,092
CGAAP Accounting Changes	-	-	-	-	-	-	1	1	1	1
IFRS Accounting Changes	-	-	2	2	3	3	3	3	4	4
Depreciation and Amortization	439	474	485	509	533	576	628	647	733	781
CGAAP Accounting Changes	(40)	(44)	(48)	(51)	(54)	(58)	(62)	(65)	(73)	(78)
IFRS Accounting Changes			(65)	(67)	(69)	(71)	(72)	(74)	(80)	(84)
Water Rentals and Assessments	117	116	112	112	112	112	112	113	121	126
Fuel and Power Purchased	143	166	179	191	206	221	230	231	253	264
Capital and Other Taxes	84	91	98	108	117	125	133	139	146	153
CGAAP Accounting Changes	-	-	-	-	-	1	1	1	1	1
Reclassifications	5	5	6	6	6	6	6	6	6	6
IFRS Accounting Changes	-	-	(3)	(3)	(3)	(3)	(3)	(3)	(2)	(2)
Corporate Allocation	9	9	8	8	8	8	8	8	8	8
	1,664	**1,732**	**1,807**	**1,893**	**2,009**	**2,163**	**2,349**	**2,401**	**2,754**	**2,926**
Non-controlling Interest	14	24	21	16	13	10	6	3	4	(3)
Net Income	**53**	**60**	**50**	**73**	**57**	**19**	**(69)**	**(8)**	**(7)**	**52**

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SCHEDULE D - ACCOUNTING CHANGES - IMPACT ON IFF12

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
FULL IFRS CASE
(In Millions of Dollars)

For the year ended March 31	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ASSETS										
Plant in Service	15,502	16,621	17,386	18,635	19,286	22,928	23,465	26,615	30,796	31,439
CGAAP Accounting Changes pre 2013	(72)	(72)	(72)	(72)	(72)	(72)	(72)	(72)	(72)	(72)
CGAAP Accounting Changes	(56)	(114)	(173)	(233)	(294)	(356)	(420)	(485)	(551)	(619)
IFRS Accounting Changes	-	-	(37)	(75)	(113)	(152)	(192)	(233)	(274)	(316)
Accumulated Depreciation	(5,248)	(5,655)	(6,050)	(6,497)	(6,981)	(7,517)	(8,107)	(8,719)	(9,417)	(10,167)
CGAAP Accounting Changes pre 2013	35	35	35	35	35	35	35	35	35	35
CGAAP Accounting Changes	40	84	132	183	237	295	357	422	495	573
IFRS Accounting Changes	-	-	27	56	87	123	162	205	255	311
Net Plant in Service	**10,201**	**10,899**	**11,248**	**12,032**	**12,185**	**15,284**	**15,228**	**17,768**	**21,267**	**21,184**
Construction in Progress	2,108	2,878	4,198	5,128	6,794	5,439	6,879	5,422	3,038	4,821
Current and Other Assets	1,869	1,735	1,752	1,939	2,151	2,388	2,205	2,335	2,420	2,086
IFRS Accounting Changes	-	-	(361)	(361)	(361)	(361)	(361)	(361)	(361)	(361)
Goodwill and Intangible Assets	196	184	172	159	151	144	139	135	132	132
CGAAP Accounting Changes pre 2013	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
CGAAP Accounting Changes	(3)	(6)	(9)	(12)	(15)	(18)	(21)	(24)	(27)	(31)
Regulated Assets	236	232	224	213	203	192	183	174	166	160
CGAAP Accounting Changes pre 2013	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
CGAAP Accounting Changes	(1)	(3)	(4)	(6)	(7)	(9)	(10)	(12)	(14)	(15)
IFRS Accounting Changes	-	-	(215)	(203)	(191)	(179)	(169)	(158)	(148)	(141)
	14,590	**15,902**	**16,987**	**18,873**	**20,892**	**22,863**	**24,056**	**25,262**	**26,456**	**27,817**
LIABILITIES AND EQUITY										
Long-Term Debt	9,428	11,199	12,741	14,614	16,304	18,077	19,972	20,739	22,062	23,412
Current and Other Liabilities	2,086	1,569	1,726	1,710	2,017	2,220	1,598	2,061	1,955	1,934
IFRS Accounting Changes	-	-	17	16	14	13	12	12	11	11
Contributions in Aid of Construction	336	345	350	355	359	369	375	382	389	396
Retained Earnings	2,580	2,671	2,740	2,834	2,912	2,948	2,896	2,904	2,904	2,958
CGAAP Accounting Changes pre 2013	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)
CGAAP Accounting Changes	(33)	(64)	(88)	(111)	(132)	(151)	(168)	(184)	(194)	(201)
IFRS Accounting Changes	-	-	(252)	(250)	(250)	(247)	(247)	(247)	(243)	(239)
Accumulated Other Comprehensive Income	299	287	219	172	133	102	83	63	40	12
IFRS Accounting Changes	-	-	(361)	(361)	(361)	(361)	(361)	(361)	(361)	(361)
	14,590	**15,902**	**16,987**	**18,873**	**20,892**	**22,864**	**24,055**	**25,263**	**26,456**	**27,817**

SCHEDULE E - SUMMARY OF ACCOUNTING CHANGES - ELECTRIC OPERATIONS - IFF12
(in thousands of dollars)

	2009/10 Actual	2010/11 Actual	2011/12 Actual	2012/13 Forecast	2013/14 Forecast	2014/15 Forecast
Reduction to Costs Capitalized						
Stores Overhead	$ 5,100	5,202	5,306	5,412	5,520	5,631
Executive Costs	2,000	2,040	2,081	2,122	2,165	2,208
Property Taxes on Facilities	2,000	2,040	2,081	2,122	2,165	2,208
Interest on Common Assets (Facilities & Equipment)		11,165	11,388	11,616	11,848	12,085
General & Administrative Departmental Costs		4,500	4,590	4,682	4,775	4,871
Interest on Motor Vehicles		3,780	3,856	3,933	4,011	4,092
IT Infrastructure & Related Support				17,100	17,442	17,791
Building Depreciation & Operating Costs				9,500	9,690	9,884
Technical & Softskills Training						10,659
Service Areas (Management Accounting, HR, Safety, etc.)						8,721
Administrative & Clerical Support Staff						8,721
Division & Department Manager						6,783
Fleet & Stores Administration						1,938
	9,100	28,727	29,302	56,488	57,617	95,592
Intangible Assets						
Ineligible for Capitalization	4,080	4,162	4,245	4,330	4,416	4,505
Rate Regulated Accounts						
Power Smart Program						22,913
Site Remediation						4,680
Regulatory Costs						829
	-	-	-	-	-	28,422
Pension & Benefits						
Change in Discount Rate			3,445	8,352	9,918	5,398
Health Spending						(3,215)
Past Service Pension Costs						(592)
	-	-	3,445	8,352	9,918	1,591
Reclassifications						
Wire & Telecom Services	3,060	3,121	3,184	3,247	3,312	3,378
Funding Payments (Town of Gillam & Frontier School Division)	(5,000)	(5,100)	(5,202)	(5,306)	(5,412)	(5,520)
Operating Expense Recoveries				8,300	8,466	8,635
	(1,940)	(1,979)	(2,018)	6,241	6,366	6,493
Total	$ 11,240	$ 30,910	$ 34,973	$ 75,411	$ 78,318	$136,603

MANITOBA	**Board Order 116/08**
THE PUBLIC UTILITIES BOARD ACT	
THE MANITOBA HYDRO ACT	
THE CROWN CORPORATIONS PUBLIC REVIEW AND ACCOUNTABILITY ACT	**July 29, 2008**
Edited for format and typographical errors only **August 25, 2008** **Further amended September 4, 2008**	

Before: Graham Lane CA, Chair
Robert Mayer Q.C., Vice-Chair
Susan Proven, P.H.Ec., Member

AN ORDER SETTING OUT FURTHER DIRECTIONS, RATIONALE AND BACKGROUND FOR OR RELATED TO THE DECISIONS IN BOARD ORDER 90/08 WITH RESPECT TO AN APPLICATION BY MANITOBA HYDRO FOR INCREASED RATES AND FOR RELATED MATTERS

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This agreement provides, in part, for compensation and remedial measures to ameliorate the impacts of the Churchill River Diversion (CRD) and Lake Winnipeg Regulation (LWR projects). Comprehensive settlements have been reached with all communities except Cross Lake. Expenditures incurred to mitigate the impacts of the CRD and LWR projects were $17.3 million during fiscal 2006/07 and, to March 31, 2007, $616 million had been spent in the effort. MH forecast to spend an additional $30.5 million in fiscal 2007/08 and a further $29.9 million in fiscal 2008/09.

In recognition of the anticipated future additional mitigation payments, the Corporation recorded a liability of $132 million as at March 31, 2007. Mitigation related expenditures are amortized over the remaining life of the Generation and Transmission assets to which they pertain.

MH has also entered into agreements with the Province of Manitoba whereby MH has assumed certain obligations of the province with respect to certain northern development projects.

To-date, MH has assumed obligations totalling $143 million and in return, Water Power Rental charges were fixed until March 31, 2001. The remaining liability outstanding as at March 31, 2007 was $13 million.

5.5 Future Changes in Accounting Standards

5.5.1 Adoption of International Financial Reporting Standards (IFRS)

The Canadian Accounting Standards Board (AcSB) has established that 'publicly accountable enterprises' (MH, including its subsidiaries, is such a body) are to prepare their audited accounts in accordance with International Financial

Reporting Standards (IFRS). In short, IFRS is to replace current Canadian Generally Accepted Accounting Principles (GAAP) and it is to be implemented effective January 1, 2011. As annual accounts are provided with comparative information for the previous year, MH will be required to also develop IFRS-based accounts as of fiscal 2010 – 2011, to be disclosed as comparative information when it files its 2011/12 accounts.

In advance of the adoption of IFRS, Canadian GAAP standards have changed for rate-regulated operations. Specifically, section 1100 General Accounting of the CICA Handbook will apply to the "recognition and measurement of assets and liabilities subject to rate-regulation" for fiscal years beginning on or after January 1, 2009.

MH stated that the interim changes to GAAP are not expected to have an impact on its fiscal 2008/09 or 2009/10 financial results and statements. MH has taken the position that it will continue to be allowed its current accounting practices for rate regulated assets through its adoption of a secondary source of GAAP found in US accounting standards, also related to accounting for regulated operations. The assets and liabilities subject to rate regulation pursuant to US accounting standards amounted to $115 million at March 31, 2007.

Yet, early adoption of IFRS is provided for by GAAP and, depending on the actions of the Board, may result in a change in accounting for rate-regulated assets ahead of the required adoption date for IFRS.

5.5.2 Future Financial Implications of Adoption of IFRS

MH indicated that the major implications expected from the adoption of IFRS are reduced annual and forecast net income and retained earnings as of the date of adoption. These impacts are due to "stricter" standards than now exist with Canadian GAAP as to what must be capitalized as opposed to what should be charged to operations in a given year.

Although the implications for MH are not fully known, there is a likelihood that IFRS will require MH to recognize a higher level of expense each year, and a corresponding lower level of costs will be deferred and capitalized.

The current version of the International Accounting Standard (IAS) 38 - Intangible Assets, on which IFRS is based, is much more comprehensive than current Canadian GAAP. In order for an intangible asset to qualify, it must be separable from the entity, such that it can be sold, transferred, licensed or otherwise disposed of to another entity. Also, in order to record an intangible asset, it must be probable that future economic benefits are attributable to the asset and will flow to the entity.

If regulatory assets and deferred pension costs are not allowed under IFRS, the deferred balances at the date of implementation will no longer be allowed to be presented on the balance sheet and will be deducted from Retained Earnings, restating retained earnings to a lower balance.

MH stated that the full impact that IFRS will have on MH financial statements is not known at this time, as IFRS accounting standards are still in the discussion stage, with some of the discussion centred specifically on the capitalization policies of rate-regulated enterprises.

A major matter of considerable potential importance to the issue of rates to be resolved is whether IFRS will allow capitalization and deferral of certain costs for recovery through rates over future periods, providing that the utility's regulator assures that future rates will reflect the deferred or capitalized costs.

MKO also recommended that MH and the Board clearly distinguish MH's necessary and appropriate costs (expenditures and investments related to operations, mitigation and agreement obligations) from "charitable donations". MKO suggested that endowments funded by MH's net export revenues (intended to benefit "MH Affected Communities", such as for regional economic development, community infrastructure and the enhancement of fish and wildlife) should not be "charitable donations".

5.8 Board Findings

The Board remains concerned with the growth of OM&A expenses, particularly the level and growth of these expenditures <u>prior</u> to deferrals, capitalization and allocations to subsidiaries.

As stated in Order 101/04:

> "The Board will expect MH to maintain vigilance over its costs, so that the additional revenues [from PUB approved rate increases] contribute as they are intended to move towards achieving the debt to equity target more quickly than suggested in MH's 2003 Integrated Financial Forecast."

Expectations from past recommendations related to OM&A expenses have not been met. The Board expects MH to control OM&A expense levels to assist in meeting its financial targets. Further control of OM&A costs is vital given the planned major capital expansion, and in light of the fact that MH will not meet its debt to equity target over the current forecast period.

And, in this Order, the Board continues to be concerned with MH's "aggressive" capitalization and deferral policies with respect to OM&A expenses. While there is an argument for the practice, the net result is that costs now being incurred are not reflected in rates until years, in fact decades, later, meaning the current

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generation of ratepayers leave the results for the generations that will follow to meet.

The following concern, from Order 143/04, echoes past concerns raised by the Board with respect to the capitalization policies followed by MH. The Board then stated:

> "The Board is concerned with the range and level of costs being capitalized by MH. While the Board understands that many of the projects undertaken by MH are long-term in nature, both from a benefit and cost perspective, aggressively capitalizing costs and selecting long amortization periods increases the rate risks to future generations of electric customers. If the Board questions whether aggressive capitalization policies are prudent...... The Board does not dispute that MH's accounting is based on GAAP, only that GAAP also provides for a more conservative capitalization approach."

In Order 117/06 the Board further stated:

> "The Board is concerned with MH's present capitalization and notes MH's comment that net export revenue represents a form of "windfall" which cannot be guaranteed to continue at recent levels. Even though net export revenues have been significant over the past decade, progress towards the debt:equity target of 75:25 is slow."

The Board notes MH defends its level of OM&A expenditures on the basis of 'need' and has argued that it has successfully 'controlled OM&A cost per customer account'. The Board is of the view that this premise will remain not fully substantiated, given the enormous amount and percentage of total OM&A costs that have been and are forecast to be capitalized, at least until adequate peer benchmarking has been performed and the results reviewed.

As expressed in past Orders, for two decades MH's annual net income result has been assisted/increased by its deferral and capitalization process. If non – direct construction costs (an allocation of the salary of staff in contracts not involved in actual construction but more in planning in supporting roles) had been expensed in the period incurred, rather than capitalized or deferred, annual net income would have been considerably lower, and possibly negative in many years; OM&A cost per customer account would have been much higher; rate pressure would have been considerably greater than has been demonstrated to date; and retained earnings would be much lower.

As indicated, while there is an argument for MH's current approach (to expense costs in the current period and reflect them in current rates, when the costs relate to projects not expected to provide benefits until the future, would mean charging the current generation of MH's customers for costs that could arguably be met by future generations), MH's rate structure and rates, even including the increases directed and indicated in Order 90/08, is premised on past and future OM&A cost deferrals and capitalization. If the approach was to change (a distinct possibility with the upcoming adoption of IFRS), costs now capitalized in the current period would be expensed. This would, again as previously noted, result in current and future ratepayers being billed for costs reflective not only of current costs but also cost burdens avoided by past ratepayers as a result of the current process of deferral and capitalization.

The Board does not believe OM&A should be adjusted based on the corporate strategic plan target of $640 per customer as suggested by the Coalition. The Board is not convinced the benchmark is completely relevant, given the level of expense deferrals and capitalization impacting the current result. Once more stringent capitalization requirements are put in place with IFRS such a metric may have more value and use in the establishment of rate requirements.

To arbitrarily direct, as some interveners have suggested, that a significant amount of expense not be reflected in rates, as a way of sending a message to

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18.0 IT IS THEREFORE RECOMMENDED THAT

1. MH seek independent advice as well as advice from government and its credit rating agencies as to the merits of a possible elimination of the sinking fund requirements;
2. The Board remains concerned with the Corporation's ongoing aggressive deferral and capitalization accounting practices, and recommends that MH consider an early adoption of IFRS standards. The Board further recommends that both the Board's prior concerns and current views, as expressed in this Order, be brought to the attention of both MH's external auditors and its independent consultant assisting the Corporation with its IFRS transition strategy;
3. Because of the current and future impact on rates of the unprecedented capital program and related tentative export sales contracts, the Board repeats its recommendation to government that *The Public Utilities Board Act* be amended to make the Board's regulation of MH equivalent to the Board's regulation of Centra Gas, by removing the exemption now provided under Section 2(5) of the Act;

   Or alternatively, the Board recommends that government renews the mandate provided to the Board in 1990 (via OIC 1990-177), a mandate that provided for a detailed and comprehensive integrated review of MH's Major Capital Projects in light of pending export commitments (then-covering the period 1990 to 2009). Such an updated mandate would allow for a similar review covering the period 2009 to 2028;
4. Because of the impact (and potential impact) on consumer rates, the Board recommends MH seek the Board's prior review and approval of

MANITOBA	Board Order 5/12
THE PUBLIC UTILITIES BOARD ACT	
THE MANITOBA HYDRO ACT	
THE CROWN CORPORATIONS PUBLIC REVIEW AND ACCOUNTABILITY ACT	January 17, 2012

Before: Graham Lane CA, Chairman
Robert Mayer Q.C., Vice-Chair

A FINAL ORDER WITH RESPECT TO MANITOBA HYDRO'S APPLICATION FOR INCREASED 2010/11 AND 2011/12 RATES AND OTHER RELATED MATTERS

9.0.0 OPERATING AND ADMINISTRATIVE EXPENSES

9.1.0 OVERVIEW

Operating and maintenance expense (also referred to as O&A, OM&A, or operating, maintenance and administration costs) is one of MH's three largest expense categories in any given year. Over 75% of MH's O&A relate to labour costs, including employee benefits. The actual and forecast operating and administrative expenses for fiscal years 2008 to 2012 are as follows:

Operating and Administrative Costs ($Millions)

	Actual			IFF10-01	
Fiscal Year	**2008**	**2009**	**2010**	**2011**	**2012**
Labour and Benefits	$477.8	$509.9	$541.0	$556.3	$569.1
Other Expenses	$160.8	$177.30	$182.0	$183.9	$186.5
Total Costs	**$638.6**	**$687.2**	**$723.0**	**$740.2**	**$755.6**
Operating and Administration Charged to Centra	($56.3)	($59.0)	($61.0)	($63.4)	($64.0)
CICA Accounting Changes		$5.0	$9.0	$9.0	$9.0
Provision for Accounting Changes				$18.0	$13.5
	$582.3	**$633.1**	**$688.0**	**$703.8**	**$714.1**
Capital Order Activities	($192.3)	($203.1)	($224.3)	($235.0)	($239.7)
Capitalized Overhead	($67.3)	($65.7)	($69.2)	($71.0)	($72.5)
Total Capitalized	($259.6)	($268.8)	($293.5)	($306.0)	($312.2)
O&A Attributable to Electric Operations	**$322.7**	**$364.3**	**$377.6**	**$397.7**	**$401.9**

O&A, before capitalized expenditures, has increased from $582.3 million in 2008 to $688 million in 2010. O&A expenditures were forecast to grow from $703.8 million in 2011 to $714.1 in 2012.

MH capitalized $259.6 million in 2008 or over 55% of O&A costs in that year. The level of capitalized O&A increased to $293.5 million in 2010 and MH is forecast to capitalize $306 million (43%) in 2011 and $312.2 million (44%) in 2012.

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From 2005 through 2010, MH's O&A expenses have grown at a compound average growth rate of almost 5% annually while inflation for that period has been under 2%.

MH had forecast O&A to be $380 million in 2011 and $403 million in 2012 based on IFF09-1, the basis for this Rate Application. MH provided an update at the hearing with IFF MH10-1, where O&A expenses are revised to $397.7 million in 2011 and $401.9 million in 2012, as reflected in the above table. MH attributed the increases in part to accounting changes since 2009 to comply with International Financial Reporting Standards (IFRS).

9.2.0 STAFFING LEVELS

A major driver in the increase in O&A expense is due to increased staffing levels which are projected.to grow from 5,769 Equivalent Full Time (EFTs) in 2004 to 6,669 EFTs, an increase of 900 EFTs or over 15%. The change in MH staffing by division since 2004 is as follows:

anticipated mitigation payments to be incurred, the Corporation has recorded a liability of $129 million as of March 31, 2010.

MH has also entered into agreements with the Province whereby MH has assumed obligations of the Province with respect to certain northern development projects. MH assumed obligations totalling $145 million for which water power rental charges were fixed until March 31, 2001. The remaining liability outstanding as of March 31, 2010 was $12 million. All mitigation cost obligations, including those Provincial obligations assumed by MH, are capitalized and amortized over the remaining life of the generation and transmission assets to which they pertain.

9.5.0 INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

9.5.1 IFRS Transition

International Financial Reporting Standards (IFRS) will be adopted by Canadian Generally Accepted Accounting Principles (GAAP) to be implemented effective January 1, 2011. Canadian utilities have been granted an optional one-year deferral of the implementation of IFRS to years commencing on or after January 1, 2012. This allows for a transition of accounting standards that do not recognize rate-regulated assets and liabilities. MH will be required to prepare IFRS-compliant financial statements for its fiscal year 2012/13 with comparative financial information for 2011/12.

The implementation of IFRS has prompted MH to delay undertaking Board-requested studies, including an independent benchmarking study of key performance metrics comparing MH's operations with other utilities as well as an Asset Condition Assessment Report. These studies were ordered in Directive 4 and Directive 7, respectively, of Order 150/08.

9.5.2 *Rate-Regulated Assets & Liabilities*

IFRS does not currently recognize rate-regulated accounting. If standards remain unchanged, MH will be required to write off the accumulated balance of its rate-regulated assets against retained earnings and expense expenditures previously deferred due to rate regulation as incurred.

MH stated that its rate-regulated assets were $299 million as of March 31, 2010, of which $229 million relate to electric operations and $70 million to gas operations. A major component of rate-regulated assets is approximately $40 million in annual Power Smart DSM program costs. Currently, DSM expenditures are amortized over a 10-year period. Under IFRS, the amount would be expensed in the year incurred.

With respect to the implications of conversion to IFRS on the rate-setting process, MH believes that any changes in accounting practices can be accommodated within the rate-setting framework. Since IFRS result in changes to the timing when certain costs will be recognized in its operating accounts, MH believes that some mechanism may be required to defer certain costs for rate-setting purposes. MH stated that it would provide the Board with alternatives to consider at the appropriate time.

9.5.3 *Other Accounting Impacts*

Canadian GAAP converged with IFRS related to accounting for Goodwill and Intangible Assets in fiscal 2010. IFRS does not allow planning studies to be capitalized, which were previously amortized over 15 years, unless there is assurance that the facilities will be built. As a result, MH was required to write off $37 million in deferred costs including computer development, general advertising and promotion and planning studies to retained earnings, impacting MH's 2008/09 retained earnings. Included in the write off were $25.2 million in unamortized planning studies.

IFRS also has more restrictive requirements for the type of expenditures that can be capitalized. IFRS does not allow advertising and promotional activities, administrative and other general overhead expenditures, property and business taxes and interest on common assets to be capitalized. MH adjusted its overhead capitalization policy accordingly by reducing the amount of overhead capitalized to capital projects from 24% to 17% for 2010/11.

As a result of the accounting policy changes, MH reduced its total capitalized overhead by $5 million in 2008/09 and an additional $4 million in 2009/10. It also made a provision of $18 million in 2010/11 and $14 million in 2011/12, reflecting a reduction in the overhead rate.

9.6.0 O&A COST CONTROL PROCESS

MH's forecast provides for a productivity factor in the order of 0.5% to 1% annually in the setting of its business unit O&A targets. In response to the economic downturn, MH has put in place measures to constrain the increase of O&A, including a freeze on hiring of new positions (with the exception of line trades trainees), restrictions on out-of-province travel, rationalization of fleet vehicles, extension of service lives of computers and equipment and reduction of overtime costs where possible.

MH indicated that such measures were short-term and that cost containment measures would not compromise system safety and reliability. MH stated that such steps had resulted in reducing the year-over-year changes in O&A by 5% or $16 million in the first 10 months of the current fiscal year.

In Order 116/08 the Board stated:

> *"Although Hydro's operating and administrative expenses appear reasonable, the Board urges Hydro to continue to control these expenses through aggressive cost control initiatives and management of the labour force. The Board appreciates that some operating and administration expenses, particularly payments to the Province, are beyond Hydro's control. However, it remains necessary for Hydro to continue to be diligent in taking steps to control all such costs and improve efficiencies. Corporate Performance measures such as operating and administration cost per customer or per kW.h targets are of great assistance in*

fundamentally, Option A and Option R, pay 70 percent, according to that table we looked at in Board book of documents at page 373. And as I understood, am I correct, the Option R is much more valuable to Manitoba Hydro than the Option A?

Is that correct?

MR. DAVID CORMIE: It's much more valuable to us now, yes. But there are times when -- when the capacity market is strong that -- that Option A could be as -- as valuable.

MR. ANTOINE HACAULT: I'd like to thank each of the members of the panel for having had their discussions with me and having provided some very useful answers. Thank you.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: We could probably take a break. I would advise the Chair that it's not the intention of MIPUG to participate in the DSM discussions and examinations, because it doesn't particularly affect us and, putting it bluntly, we don't ever get awards of cost so we have to be very cost conscious.

MR. BOB PETERS: Mr. Chairman, with the

to do so.

MR. BOB PETERS: Okay. Thank you.

--- UNDERTAKING NO. 59: Manitoba Hydro to indicate the number of customers in the NUG program, including description of customers, without any identifying information

MR. RAYMOND LAFOND: Can I intervene? The DSM program is dedicating 19 percent, essentially, of its funds to industrial users? If I heard correctly this morning from the MIPUG representative was that his clients did not use this program.

Can you explain to me the difference between these two (2) comments?

MS. LOIS MORRISON: MIPUG represents the large industrial power users group. The industrial programs here would reflect all industrial customers, not just the very large ones. However, I will say that we work very closely with the -- all industrial customers, including the large top consumers. And although they may not participate in the incentive portions of what we offer, we provide technical expertise and feasability studies. We part fund feasability studies that help those customers identify energy efficiency opportunities.

Case in point, recently we funded a study with one that identified energy efficiency opportunities that would have payback of less than half a year. Well, in that case, the customer is going to undertake it without us pro -- needing to provide any incentives to do so. But because we participated in that -- that activity with them and part funded the study, we're -- we are working very closely with his customers.

MR. RAYMOND LAFOND: Thank you.

CONTINUED BY MR. BOB PETERS

MR. BOB PETERS: Mr. Weins, I'm still caught up on this N-U-G, or the NUG, concept. Do you set a rate at which you purchase the power back from them? Is that something your department does?

MR. ROBIN WEINS: You're really going to test my memory on this, Mr. Peters, because I haven't been involved in this type of situation for many, many years. At a very small scale, what happens is that the -- basically, in those periods where a customer may be selling back into the grid, that

CAC/MH I-6

Subject: **Credit Rating**
Reference: **Tab 2, Page 3, Lines 22 – 24 and Lines 26 – 29; & Page 4, Lines 26 - 28**

Preamble: **MH states: Manitoba Hydro is concerned about the projected decrease in its interest coverage ratio given the importance of this financial metric to bondholders and credit rating agencies.**

MH also states: Without the rate relief proposed in this Application for 2012/13 and 2013/14, the interest coverage ratio is projected to further deteriorate below the 1.0 level (which could have serious negative consequences on the credit rating of the Province and Manitoba Hydro).

MH further states: Manitoba Hydro does not believe that it is acceptable to allow net income slip into a loss position and risk credit rating implications together with the need for larger rate increases at a later date.

a) **Please clarify whether the Province of Manitoba is currently on credit watch with any of the rating agencies?**

b) **Has the Province of Manitoba ever been on credit watch with any of the rating agencies?**

c) **If Province of Manitoba has ever been on credit watch with any of the rating agencies. please provide the rating comment discussing the "watch".**

d) **Please clarify whether MH is currently on credit watch with any of the rating agencies?**

e) **Has MH ever been on credit watch with any of the rating agencies?**

f) **If MH has ever been on credit watch with any of the rating agencies. please provide the rating comment discussing the "watch".**

g) **On what evidence does MH rely that without the rate relief proposed could have serious negative consequences on i) the credit rating of the Province, ii) the credit rating of MH?**

h) Please undertake to provide copies of all credit agency reports with respect to each of MH and the Province of Manitoba issued subsequent to the date of the IR responses.

i) Provide a analytical demonstration of how the credit rating agencies consider the importance of interest coverage ratio, for

- **For private enterprises,**
- **For governments,**
- **For crown corporations.**

j) Please provide all references in credit rating agency reports that MH's debt equity ratio had an impact on MH's credit rating.

k) Please provide all copies of credit rating reports where MH's credit rating was downgraded as a result in a decrease of the thickness of equity in its debt equity ratio, with specific page and paragraph references where the downgrade was demonstrated to be so caused.

l) Please provide copies of all credit rating agency reports MH is aware of where a utility's credit rating was changed as a result of a change in accounting policy/treatment/methodology.

m) Provide copies of all credit rating reports where MH's rating was reduced (if at all) due to a change in accounting policy/treatment/methodology and compare those circumstances to the current proposed circumstances of adjustments to retained earnings and net income and assets and liabilities arising from MH's proposal in respect of the adoption of IFRS.

n) Provide copies of credit rating reports that demonstrate, while utilities are in construction phase, such as that undertaken by MH from time to time, recognition of these activities will impact financial ratios but not result in a downgrade in credit rating.

ANSWER:

The following answer is the response to CAC/MH I – 6 (a)-(n):

Manitoba Hydro's Role in Maintaining Credit Rating Stability

The credit ratings for the Province of Manitoba and Manitoba Hydro have historically maintained their strength, with the last downgrade occurring over 25 years ago when S&P downgraded the Province of Manitoba in 1986.[1] Manitoba Hydro and the Province of Manitoba are not currently on credit watch and are listed as stable by each of DBRS, Moody's and S&P. Reasons cited by the credit rating agencies for this stability include "the province's diversified economy, which tends to underperform the Canadian average in boom years, but outperform in years of weak economic conditions." [2]

Although Manitoba Hydro's ratings are a flow through credit of the Province of Manitoba, Manitoba Hydro has a significant portion of the total provincial debt and the Corporation's financial performance is therefore a contributing factor toward the financial strength and stability of the Province's credit rating. As noted by Moody's in their most recent credit analysis on the Province of Manitoba:

> "Roughly one third of the province's total direct and indirect debt is attributed to Manitoba Hydro (issued and on-lent by the province) and is considered to be self-supporting. This Crown Corporation's ability to meet its own financial obligations, without recourse to provincial subsidies is a positive credit attribute for the province." [3]

The importance of Manitoba Hydro financial performance to the Province of Manitoba's credit rating was further expanded upon by Moody's in their most recent credit opinion on the Manitoba Hydro Electric Board (MHEB) when they stated that:

> "MHEB's rating reflects the Province's guarantee and liquidity support. However, MHEB's financial ratios, including interest coverage, are an indication of the extent to which it is capable of supporting its debt independently, which is a consideration in the rating of the Province." [4]

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1 S&P downgraded the Province of Manitoba on July 29, 1986. Moody's Investors Service downgraded the Province of Manitoba on May 8, 1985. Due to the age of the reports, they are not available from S&P and Moody's.

2 Moody's Investors Service, "Credit Analysis: Province of Manitoba" dated September 5, 2012; page 1 (see Appendix 20 Attachment 20).

3 Moody's Investors Service, "Credit Analysis: Province of Manitoba" dated September 5, 2012; page 3 (see Appendix 20 Attachment 20).

4 Moody's Investors Service, "Credit Opinion: Manitoba Hydro Electric Board" dated August 15, 2012; page 2 (see Appendix 20 Attachment 15).

Manitoba Hydro is considered to be self-supporting by all of the credit rating agencies. The importance of Manitoba Hydro's financial performance to the credit rating of the Province of Manitoba is reinforced by the fact that each Province of Manitoba credit report includes a discussion on Manitoba Hydro.

Manitoba Hydro continues to be self-supporting and during the past few years has achieved the strongest financial position in the Corporation's history. However, there are numerous financial challenges facing Manitoba Hydro. For example, the risk associated with high leverage and weak debt servicing capability has been demonstrated with the ongoing European sovereign debt crisis, with some European countries experiencing credit rating downgrades and escalating interest rates. There have also been recent credit rating downgrades to Canadian provinces. For example, in August 2009, Moody's downgraded the Province of New Brunswick and included the following statements in their report:

> "As a result of anticipated borrowing requirements, New Brunswick's debt metrics are projected to weaken over the medium-term. …
>
> The rating action also reflects Moody's assessment of the risks associated with New Brunswick Power (NBP). The narrowing of NBP's margins in recent years, in conjunction with high leverage and risks related to the refurbishment of the Point Lepreau nuclear generating station, represents an element of risk for the NBP. As such, NBP's provincially-guaranteed debt, which is borrowed by the province and on-lent to NBP, constitutes a contingent liability for the province." [5]

In October 2010, S&P also cited New Brunswick Power as a credit concern when they revised their outlook on the Province of New Brunswick to negative:

> "borrowing on behalf of New Brunswick Power Corp. to refurbish the Point Lepreau nuclear generating station and for more routine capital needs will increase the province's self-supported debt further. Furthermore, we expect that the continuing delays in the completion of the Point Lepreau refurbishment will necessitate additional borrowing." [6]

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[5] Moody's Investors Service, "Rating Action: Moody's Downgrades Province of New Brunswick's Debt Rating to Aa2" dated August 24, 2009; page 1 (see Attachment 1).

[6] Standard & Poor's, "Research Update: Province of New Brunswick Outlook To Negative On Worsening Budgetary Performance; 'AA-' Rating Affirmed" dated October 7, 2010; page 3 (see Attachment 2).

The Importance of Positive Net Income and Strong Financial Metrics

As evidenced in their reports, the credit rating agencies perform detailed quantitative financial analysis with a focus upon net income, interest coverage, and debt leverage indicators. Manitoba Hydro does not have access to quantitative analysis from the credit rating agencies that would specifically indicate the sensitivity of Manitoba Hydro's financial performance on its credit rating. A loss position would be a negative credit rating factor, as the resultant low levels of cash flow reduce an entity's ability to manage its financial risks and service its debt.

The credit reports provided in response to CAC/MH I-5(a) and found in Appendix 20 indicate that net income, coverage ratios and debt leverage metrics are considerations in the rating of Manitoba Hydro and the Province of Manitoba. The credit rating reports also identify financial challenges facing Manitoba Hydro, for which rate relief could avoid downward rating pressure. A representative sample of credit rating agency concerns and monitoring is as follows:

> "Manitoba Hydro's leverage remains one of the highest among government-owned integrated utilities in Canada, limiting its financial flexibility going forward." [7]

> "Preliminary results for fiscal 2013 indicate that depressed export prices and lower net income will put pressure on the utility's interest coverage ratios." [8]

> "MHEB's financial forecasts indicate that management expects to generate sufficient cash flow to service the interest on its debt. However, the anticipated weakening of the MHEB's financial profile during its upcoming expansion program means that the company has less cushion against unexpected events such as poor hydrology, capital cost overruns or construction delays. Should such unexpected events arise, MHEB might need to seek larger rate increases, curtail its capital spending or take other actions to ensure that the company continues to be able to service its debt without relying on the Province." [9]

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7 DBRS, "Rating Report: The Manitoba Hydro-Electric Board" dated November 28, 2011; page 3 (see Appendix 20 Attachment 4).

8 Standard & Poor's, "Rating Report: Manitoba Hydro-Electric Board" dated September 14, 2012; page 2 (see Appendix 20 Attachment 22).

9 Moody's Investors Service, "Credit Opinion: Manitoba Hydro Electric Board" dated August 15, 2012; page 2 (see Appendix 20 Attachment 15).

> "MHEB has a minimum 25% equity target that it may be challenged to maintain after fiscal 2012. It may not achieve the target again until sometime during the middle of the next decade. Borrowings required to finance MHEB's significant capital program and weak spot export power prices are expected to drive the company's equity ratio below 20% later this decade, as monies are spent on the new projects but before they start producing cash flow. This ratio is projected to strengthen rapidly after Conawapa enters service, and we also note that some combination of larger rate increases, an earlier and more dramatic recovery of export power prices or a reduction in debt financed capital spending could assist MHEB in achieving its financial targets earlier than is indicated by its current forecast." [10]

> "We will continue to monitor developments with Manitoba Hydro's capital plan to ensure that our conclusion regarding the self-supporting status of the utility's debt remains appropriate." [11]

While the conversion to International Financial Reporting Standards (IFRS) is being monitored by the credit rating agencies, no rating action is anticipated as a result of Manitoba Hydro's conversion to IFRS or any change in accounting policy, treatment or methodology. Therefore, Manitoba Hydro does not intend to exhaustively research and file credit rating agency reports on this subject matter.

The Importance of Rate Relief

The credit rating agencies identify Manitoba Hydro's regulatory framework and the PUB's support of Manitoba Hydro's rate applications and its financial targets as positive rating considerations:

> "We believe Manitoba Hydro's monopoly, gas and electric franchises, and regulatory frameworks provide satisfactory cash flow stability." [12]

> "Manitoba's Public Utilities Board (PUB) has been supportive of Manitoba Hydro's rate applications and its financial targets." [13]

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[10] Moody's Investors Service, "Credit Opinion: Manitoba Hydro Electric Board" dated August 15, 2012; page 2 (see Appendix 20 Attachment 15).

[11] Moody's Investors Service, "Credit Analysis: Province of Manitoba" dated September 5, 2012; page 4 (see Appendix 20 Attachment 20).

[12] Standard & Poor's, "Rating Report: Manitoba Hydro-Electric Board" dated September 14, 2012; page 1 (see Appendix 20 Attachment 22).

[13] DBRS, "Rating Report: The Manitoba Hydro-Electric Board" dated November 28, 2011; page 2 (see Appendix 20 Attachment 4).

Underscoring this positive rating consideration are the following PUB findings regarding the importance of Manitoba Hydro's financial performance on the credit ratings and the financing costs of the province and of Manitoba Hydro:

> "The three measures of financial health and stability (debt to equity, interest coverage and capital coverage) are taken seriously by debt rating agencies and others, and while the ratios may not be expected to be maintained throughout the whole forecast period due to the effects of the expanded capital program, they still remain important." [14]

> "It is the Board's understanding that rating agencies look prominently at MH's financial strength in assessing the credit rating of the Province. A weakening of the financial strength of MH would not be viewed favourably by those credit rating agencies and may have implications impacting the credit rating of the Province, making provincial borrowing more expensive. Such a development would not be in the public interest." [15]

[14] Public Utilities Board of Manitoba Order 116/08; Page 127.
[15] Public Utilities Board of Manitoba Order 116/08; Page 130.

PUB/MH I-67

Reference: Tab 5 Page 18 of 36, Schedule 5.6.0 Finance Expense

f) Please provide a schedule detailing the maturities of MH's current long-term debt issues.

ANSWER:

Please see the debt maturity schedule as at June 30, 2012.

Note that the maturity dates listed in the schedule provide the most outward obligation dates on any debt series (the latter of physical debt or forward interest rate swap maturity dates). Therefore in cases where the maturity of a forward interest rate swap for a debt series is beyond the maturity date of the associated physical debt, a refinancing of the underlying physical debt will be required in advance of the maturity date listed in the schedule. Consequently, this schedule should not be utilized to determine the commitment dates for the refinancing of the existing physical debt.

Also, the interest rates shown in this schedule indicate the coupon rates on the debt and not the all-in yield cost to Manitoba Hydro.

MANITOBA HYDRO
LONG TERM DEBT MATURITY SCHEDULE
AT June 30, 2012
(IN MILLIONS $)

SERIES	CURRENCY	MATURITY	COUPON RATE	CAD $	US $	TOTAL CAD (US @ 1.0191)
C107	CAD	9/4/2012	3BA + 0.40%	100.0		100.0
ER2	CAD	12/3/2012	3BA + 0.192%	50.0		50.0
4I	CAD	2/11/2013	9.375%	10.0		10.0
5A	CAD	6/30/2013	5.750%	40.0		40.0
5B	CAD	6/30/2013	5.750%	1.3		1.3
DE	USD	7/22/2013	8.120%		188.4	192.0
C112-1	CAD	9/16/2013	5.485%	100.0		100.0
C112-2	CAD	9/16/2013	5.531%	100.0		100.0
EZ4	CAD	12/3/2013	3BA + 0.0925%	9.5		9.5
EZ3	CAD	12/3/2013	1.257%	208.3		208.3
4J	CAD	1/20/2014	8.000%	15.0		15.0
EZ-1	USD	1/21/2014	5.989%		50.0	51.0
EZ	USD	1/21/2014	5.929%		100.0	101.9
FS-1	USD	4/28/2014	3LIBOR + 0.0976%		100.0	101.9
HB11-5FL	CAD	6/15/2014	2.300%	38.7		38.7
FM-4	CAD	9/1/2014	3BA + 0.484%	100.0		100.0
C115	CAD	5/4/2015	3BA + 0.23%	50.0		50.0
4K	CAD	5/12/2015	9.125%	12.0		12.0
EY2	CAD	12/3/2015	3BA + 0.0455%	50.0		50.0
EY	CAD	12/3/2015	5.490%	200.0		200.0
C121-3	CAD	4/19/2016	3BA + 0.20%	100.0		100.0
HB11-5FX	CAD	6/15/2016	2.750%	7.4		7.4
HB11-3FX	CAD	6/15/2016	1.750%	8.6		8.6
AZ	CAD	7/17/2016	3BA + 1.08%	200.6		200.6
ER	CAD	9/3/2017	7.467%	200.0		200.0
C-011	CAD	9/22/2017	7.525%	55.5		55.5
4L	CAD	11/17/2017	6.250%	20.0		20.0
BM	CAD	1/15/2018	3BA + 3.29%	255.0		255.0
FC-3	CAD	6/2/2018	7.169%	200.0		200.0
FS-2A	CAD	6/2/2018	7.295%	100.0		100.0
FS-2B	CAD	6/2/2018	7.405%	100.0		100.0
EE	USD	9/15/2018	9.500%		200.0	203.8
BU	USD	12/1/2018	9.625%		200.0	203.8
3V	CAD	12/30/2018	10.000%	3.5		3.5
3W	CAD	12/30/2018	10.000%	2.0		2.0
3X	CAD	12/30/2018	10.000%	5.0		5.0
3Y	CAD	12/30/2018	10.000%	2.0		2.0
CO77-3	CAD	2/11/2020	3BA - 0.175%	50.0		50.0
CO77-2	CAD	2/11/2020	4.455%	100.0		100.0
FO-1	USD	3/15/2020	5.897%		150.0	152.9
FP-2	CAD	6/3/2020	4.150%	125.0		125.0
FP-3	CAD	6/3/2020	4.150%	250.0		250.0
FO-2	USD	10/2/2020	6.955%		203.1	206.9
FO-3	USD	10/2/2020	6.955%		47.0	47.8
CO	USD	9/15/2021	8.875%		300.0	305.7
4A	CAD	12/31/2021	9.100%	3.5		3.5
FH-1	USD	2/1/2022	6.405%		250.0	254.8
FH-2	USD	2/1/2022	6.406%		100.0	101.9
FH-3	USD	9/16/2022	6LIBOR + 0.1295%		150.0	152.9

SERIES	CURRENCY	MATURITY	COUPON RATE	CAD $	US $	TOTAL CAD (US @ 1.0191)
C119-2	CAD	9/5/2025	3BA + 0.425%	150.0		150.0
DT	CAD	12/22/2025	7.750%	170.0		170.0
DT-2	CAD	12/22/2025	7.750%	130.0		130.0
4N	CAD	2/2/2029	5.900%	30.0		30.0
4M	CAD	2/2/2029	5.900%	30.0		30.0
FM-3	CAD	9/1/2029	6.689%	50.0		50.0
FM-2	CAD	9/1/2029	6.734%	75.0		75.0
FM-1	CAD	9/1/2029	6.634%	25.0		25.0
C119-1	CAD	9/1/2029	6.575%	100.0		100.0
CL	CAD	3/5/2031	10.500%	300.0		300.0
CLW	CAD	3/5/2031	10.500%	299.9		299.9
C116	CAD	3/5/2031	6.300%	100.0		100.0
4B	CAD	4/1/2031	5.840%	3.7		3.7
4C	CAD	4/1/2031	5.840%	1.4		1.4
4Y	CAD	5/1/2031	5.650%	4.4		4.4
CO52	CAD	10/29/2032	6.300%	30.0		30.0
FP-1	CAD	4/12/2035	5.754%	175.0		175.0
EZ5	CAD	12/3/2035	4.774%	46.0		46.0
EZ2	CAD	12/3/2035	4.774%	54.0		54.0
FA	CAD	3/5/2037	4.687%	150.0		150.0
FA-4	CAD	3/5/2037	4.505%	50.0		50.0
FJ	CAD	9/12/2037	5.104%	250.0		250.0
PB-2	CAD	3/5/2038	4.600%	300.0		300.0
FS-2D	CAD	11/1/2038	4.909%	81.0		81.0
C125-1	CAD	11/1/2038	4.767%	85.0		85.0
C125-2	CAD	11/1/2038	4.697%	19.0		19.0
C119-3C	CAD	12/1/2038	5.245%	15:0		15.0
C119-3A	CAD	12/1/2038	5.245%	50.0		50.0
C119-3B	CAD	12/1/2038	5.232%	50.0		50.0
FS-2C	CAD	3/1/2039	4.761%	100.0		100.0
FK-2	CAD	3/5/2040	4.650%	300.0		300.0
FR-2	CAD	3/5/2041	4.100%	250.0		250.0
CO40	CAD	3/5/2042	3BA + 0.179%	50.0		50.0
FT	CAD	3/5/2042	4.492%	400.0		400.0
GA	CAD	3/5/2043	3.350%	300.0		300.0
CO68	CAD	3/5/2044	4.565%	50.0		50.0
FN	CAD	3/5/2050	4.700%	200.0		200.0
FN-2	CAD	3/5/2050	4.700%	75.0		75.0
4Z	CAD	6/9/2057	7.100%	7.0		7.0
C110	CAD	3/5/2060	5.200%	125.0		125.0
C109	CAD	3/5/2063	4.625%	50.0		50.0
Total LTD				**7,604.3**	**2,038.4**	**9,681.6**

-- we've just done it in a hearing in Northwest Territories.

And it's not to dismiss the value of audited statements. Audited statements are -- are of fantastic value to -- to a Board like this, even audited statements that are audited on a different standard than the Board is working on. It's because you can work through a list of -- of reconciling items.

But if your motivations are different, if your motivations are -- are fairness versus discretion, are -- are fully allocating costs to different time periods and different customer classes rather than purely reflecting incremental costs so that an -- an investor or a lender can see -- can see the -- a different financial picture of the utility, then you -- you can't end anywhere but, We need to have two (2) different ways of portraying the --

MR. RAYMOND LAFOND: Okay. So your recommendation is that you agree that Hydro moves to IFRS standards for auditing purposes but that Hydro also produce some reconciling statements with issues such as depreciation and a few others?

MR. PATRICK BOWMAN: Yeah. Mr. Lafond, my recommendations would go the other direction. My recommendations would be this Board determine what it

needs and Hydro determine how to deal with that, in terms of its standards.

But practically, if we want to go straight to the standards, I would say that there has not been fair information provided about the full impact of IFRS. There has been mistaken information, there has been some interpretations that I would like to go through, in terms of how people have defined the IFRS issues. And as a result, the line that says, "IFRS impacts on Hydro are minimal," is incorrect. The IFRS impacts on Hydro and its customers are actually quite large.

And I would -- you know, if it were up to my control, I would say an outcome like BC went through may be very practical for Manitoba, which says, Fine, adopt IFRS, but I'm going to give you two (2) or three (3) things that I say on these items we're going to use a different standard. And as long as it's clear and transparent, it doesn't seem that it causes huge issues for BC getting audited, for example; or Ontario, who has a Crown that's -- that's been using a different standard than -- than the BC has -- directs; in their case, a holding company using US GAAP.

It's really not my place to say, I found the accounting standard and it's -- it's -- it's US or

it's IFRS with exceptions or it's -- it's any of these things. That's, effectively, a separate decision.

THE CHAIRPERSON: I do have a question though. The implication that by -- the Board's setting of rates based on IFRS standards were being unfair, could you explain that to me how -- how it is that the Board agreeing to set rates based on IFRS statements is unfair, given that this has become the standard for reporting in Canada?

I mean, when the accounting profession in Canada follows IFRS, are you suggesting that that is unfair?

MR. PATRICK BOWMAN: I don't believe IFRS or financial reporting is a -- is a forum that is -- spends a whole lot of time worrying about questions of fairness like would arise in this forum. They have different motivations. And I would say --

THE CHAIRPERSON: Well, let's -- let's address --

MR. PATRICK BOWMAN: Yeah.

THE CHAIRPERSON: Let's get down to the point that you're suggesting, is that by virtue of this Board asking for a different calculation of overheads, that would be fairer than using the calculations that Manitoba Hydro has used for its Rate Application?

MR. PATRICK BOWMAN: Yeah. I -- I am saying that, and I'm -- I'm saying that it's -- it's almost universal in the voices that were also commenting on problems with IFRS when people were reviewing it. And I'm saying it's the same standards that are being applied by other utility boards who have utilities who are regulated under different standards, US GAAP or IFRS or any of them. They're saying, We need to find a way to find a standard that meets a test of fairness. And their conclusion was, in -- in almost all of these cases, the -- the pure IFRS version does not meet all of the tests I require to meet the test of fairness.

THE CHAIRPERSON: Okay. So looking at overheads, this Board -- pardon me, this panel -- pardon me, the previous panel suggested to Manitoba Hydro that it needed to re-examine its overhead policy, which Manitoba Hydro's -- Manitoba Hydro has now done.

Now, you're now suggesting that that was an unfair decision?

MR. PATRICK BOWMAN: I'll have three (3) comments on that. One (1) is -- and -- and I have been through the -- the order in some detail and was involved in the proceeding. One (1) comment is, the review was done at a time when I do not believe there

Report 8: October 2011

BC HYDRO: THE EFFECTS OF RATE-REGULATED ACCOUNTING

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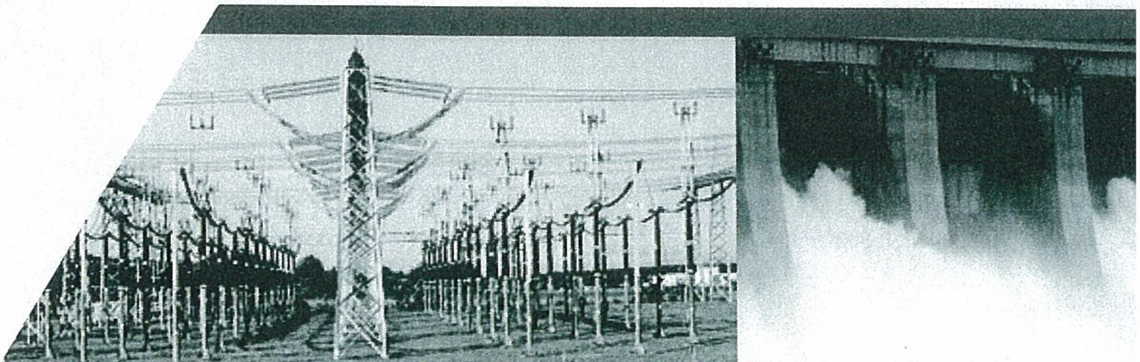

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of British Columbia

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The Honourable Bill Barisoff
Speaker of the Legislative Assembly
Province of British Columbia
Parliament Buildings
Victoria, British Columbia
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Dear Sir:

As mandated under Section 11 of the *Auditor General Act*, I have the honour to transmit to the Speaker of the Legislative Assembly of British Columbia my 2011/2012 Report 8: *BC Hydro: The Effects of Rate-Regulated Accounting.*

Each year, BC Hydro produces independently audited financial statements, prepared in accordance with Canadian generally accepted accounting principles (GAAP). This report speaks to the financial condition of BC Hydro, as reflected in its audited financial statements but with further analysis.

As allowed under Canadian GAAP, BC Hydro uses rate-regulated accounting in its financial statements. In effect, rate-regulated accounting allows BC Hydro to defer to future years certain expenses that would normally be recorded in the current year's financial statements. As of March 31, 2011, a net total of $2.2 billion in expenses had been deferred and, by government's own estimate, the balance is predicted to grow to nearly $5 billion by 2017.

There does not appear to be a plan to reduce the balance of these accounts, let alone halt their growth. Rate-regulated accounts must be managed carefully. If overused, rate-regulated deferrals can mask the true cost of doing business, distort the financial condition of an enterprise and place undue burdens on future ratepayers.

However, Canada will be adopting international accounting standards (IFRS) in the coming year, which does not allow for deferral accounts. As such, expenses that are currently being deferred under rate regulation would be shown each year, bringing to the forefront the financial consequences of management decisions and highlighting the challenges that lie ahead. Unfortunately, though, government is requiring BC Hydro to adopt part of an American accounting standard that allows rate regulation, abandoning the transparency that will be required by Canadian GAAP. It is my hope they will reconsider.

John Doyle

John Doyle, MAcc, CA
Auditor General

Victoria, British Columbia
October 2011

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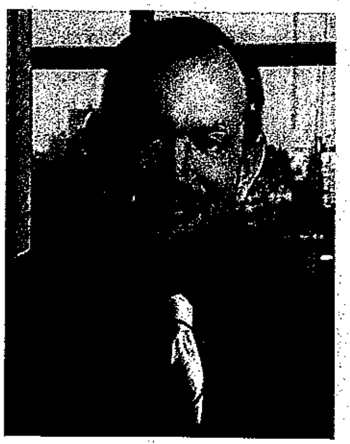


JOHN DOYLE, MAcc, CA
Auditor General

LAST YEAR I determined that a review of BC Hydro's accounting practices, particularly those related to rate regulation, was in order. Rate-regulated accounting is explained more fully in this report, but in short it involves deferring expenses and revenues to future years in order to "smooth out" the effects of unexpected costs or windfall profits. Currently, BC Hydro's financial statements contain a net total of $2.2 billion in deferred costs, to be expensed in future years. By government's own estimate, the balance of rate-regulated deferrals is already large and is projected to balloon to almost $5 billion by 2017.

Around the time my staff began their work, which was conducted in accordance with section 11 (8) of the *Auditor General Act*, government commissioned its own financial and administrative review of the Crown corporation. As a result, I deferred the release of my report to allow for the completion of government's review. This permitted me to tailor my comments accordingly and avoid duplicating the review's recommendations, on which government and BC Hydro had already committed to act. On August 11 this year, *Review of BC Hydro, June 2011* was released.

Government's report noted a number of challenges for BC Hydro, and made over 50 recommendations regarding its operations. The report also presented policy options and suggestions – something that is outside of an auditor's mandate. Indeed, it has not been my intention to intrude into the rate-setting discussion, as that is the responsibility of others.

Rate-regulated deferrals were identified as an issue, and discussed in government's report. I think government's discussion of the effects of rate-regulated accounting provided useful information for understanding the topic; however, two significant concerns remain for me. First, growth of deferral accounts cannot continue indefinitely. I am concerned that there does not appear to be a plan to reduce the balance of these accounts, let alone halt their growth. Rate-regulated accounts must be managed carefully. If overused, rate-regulated deferrals can mask the true cost of doing business, distort the financial condition of an enterprise and place undue burdens on future ratepayers.

My second concern is that discussions regarding the disposition of deferral accounts should be supported by a comprehensive understanding of BC Hydro's financial condition. In any organization, annual financial statements are the cornerstone of management's accountability for the resources entrusted to them. Like all Crown corporations in British Columbia, BC Hydro produces independently audited annual financial statements prepared in accordance with Canadian generally accepted accounting principles (GAAP). BC Hydro's independent auditors provided an unqualified opinion that the consolidated financial statements for the year ended March 31, 2011 were fairly presented in accordance with Canadian GAAP.

However, Canadian GAAP is in a process of transition. Soon, business enterprises such as BC Hydro will be required to report under International Financial Reporting Standards (IFRS). Of particular interest in relation to BC Hydro is that, effective next year, the deferrals permitted by rate-regulated accounting will no longer be allowed. In my view, the increased transparency required by IFRS is very positive, particularly in relation to BC Hydro, because it brings to the forefront the consequences of financial management decisions and highlights the challenges that lie ahead.

Unfortunately, government has taken a different position. The *Budget Transparency and Accountability Act* was amended in the 2010 session to allow for departures from GAAP, if authorized by Treasury Board via regulation. In July of this year, Treasury Board issued the Government Organization Accounting Standards Regulation, which requires BC Hydro to adopt one part of an American accounting standard that allows rate regulation, thereby avoiding the transparency required under Canadian accounting standards – transparency that is essential to understanding BC Hydro's financial condition as a standalone enterprise.

John Doyle, MAcc, CA
October 2011

AUDIT TEAM

Russ Jones
Assistant Auditor General

Michael Macdonell
Assistant Auditor General

Brent Blackhall
Senior Manager

Kenneth Ryan-Lloyd
Manager

Ben Hurd
Manager

WE RECOMMEND THAT GOVERNMENT:

1 determine, at the earliest opportunity, how BC Hydro will recover the net deferred costs in its regulatory accounts.

2 prescribe that the annual financial statements for BC Hydro be prepared fully in accordance with Canadian generally accepted accounting principles.

THE MINISTRY OF ENERGY AND MINES (Ministry) appreciates the Auditor General's report on the Effects of Rate regulated Accounting (Report). The Report complements the recent Review of BC Hydro (Review) undertaken at the direction of the Premier and Minister of Energy and Mines. Recommendations from both the Report and Review will be considered by BC Hydro in preparing its amended revenue requirements application which will be submitted at the end of November 2011 to the BC Utilities Commission (BCUC) and reviewed in an open, transparent and public hearing process.

As a result of the Review, the Ministry has already been working with BC Hydro on the projected growth of its regulatory accounts. BC Hydro has three general categories of regulatory accounts. The first captures variances in key cost drivers between what was forecast when rates were set, and what actually occurs. These key drivers include energy costs, which fluctuate based on annual variances in inflows into BC Hydro's reservoirs, and income from electricity trade. Over time, it is expected these regulatory assets and liabilities will generally average out. Should there be a large accumulation of amounts owing from future ratepayers, a rate rider has been established to reduce these balances and ensure current ratepayers are not unduly transferring cots to future ratepayers. A rate rider of 2.5% is built into current rates and will contribute approximately $100 million per year, in addition to the averaging effect of forecast variances, to lowering these account balances.

The second category of deferral accounts includes capital-like accounts that are established to match the costs of assets and programs to the beneficiaries. In this category are demand-side management programs where costs are recovered over the life of program savings, and costs associated with major projects such as Site C and the Smart Metering and Infrastructure Program, where recovery commences when the asset is brought into service and costs are matched over the projected life of the assets consistent with BC Hydro's amortization schedules. Capital-like accounts are the largest contributor to projected growth in regulatory accounts over the next five years (approximately 80%).

The third category of regulatory accounts are generally off-sets to provisions, such as First Nations negotiations and settlements and environmental remediation provisions, or by the transition to International Financial Reporting Standards and the impact this will have on accounting for post-employment benefits. These provisions represent significant one-time adjustments for costs which should be recovered from ratepayers in future periods. Setting up offsetting regulatory accounts provides for recovering the related costs over a reasonable time period, which also more closely reflects the actual payment of the related liabilities.

The retention of rate regulated accounting in British Columbia is a policy decision that the government has made to maintain rate stability, and one that is also being made in other jurisdictions. In Ontario, Hydro One has adopted full US GAAP, including rate regulated accounting; others include Fortis Inc. with operations in British Columbia and Alberta, Enbridge Gas Distribution Inc., and TransCanada Corporation. The implications of rate regulation will continue to be transparently disclosed in the audited financial statements of both BC Hydro and the Province (see Note 4 in BC Hydro's 2010/11 Annual Report and Note 37 in the Notes to Consolidated Summary Financial Statements in the 2010/11 Public Accounts).

FINANCIAL MANAGEMENT IS IMPORTANT

FINANCIAL MANAGEMENT is concerned with the planning, administration and control of financial resources. This includes decisions regarding cash flows, investments, debt levels and repayment terms and, in the case of a utility, the rates charged to customers. Financial management decisions are focused on the viability of an enterprise to ensure, among other things, that:

- there is sufficient cash on hand to pay bills as they come due,
- the cost of borrowing is kept to a minimum,
- the return on investments is maximized, and
- there is sufficient income to pay dividends to shareholders and invest in the business over the long term.

Strong financial management is essential to any business enterprise. However, as a publicly owned utility, BC Hydro must follow directions from government regarding the rates it can charge customers, the rate of return it must earn on investment and the dividend it is required to pay to government – decisions that are at the core of financial management.

Rate Setting

Among the most important financial management decisions for BC Hydro are the rates it charges its customers. However, BC Hydro is a regulated enterprise. This means that BC Hydro is not free to adjust the rates it charges its customers when it requires additional revenue to cover its operating costs. BC Hydro must make an application to a regulatory authority to make rate changes, and must abide by the decision of that body.

In British Columbia the utility industry is regulated by the BC Utilities Commission (BCUC), which was created under the *Utilities Commission Act*. The BCUC is a provincial agency; government, through the Lieutenant-Governor-in-Council, appoints the BCUC commissioners, and the government sometimes gives special direction to the BCUC regarding the exercise of its powers and the performance of its duties.

Delivering power to consumers at competitive rates has been government policy. Government's review of BC Hydro recognized the economic benefits of keeping electricity costs as low as possible: "*BC Hydro is a significant asset to the province, having provided relatively low-cost power to the citizens of British Columbia for over 50 years. This has helped make B.C. an attractive place to live and a competitive place to do business.*" Accordingly, the report focused on options for minimizing the most recent proposal for a rate increase by BC Hydro.

This has limited the revenue available to BC Hydro. Regardless of the established rate, BC Hydro and the BCUC aim for stability in electricity rates so that charges to consumers are predictable: prices do not rise and fall with the natural volatility of the cost to BC Hydro of producing, or having to buy, a unit of electricity. BC Hydro's submissions to the BCUC are public, as are the hearings where they are considered, but can be hundreds of pages in length.

When BC Hydro has applied to the BCUC to have its rates approved, it has asked that certain types of costs or surpluses be eligible for deferral. BC Hydro first established a deferral account on March 30, 2000, to mitigate the impact of short-term volatility of revenues and expenses on ratepayers. This Rate Stabilization Account was created to ensure that BC Hydro could achieve the annual rate of return on equity required by government by transferring amounts to and from the account as needed depending on the required net income for the year.

In 2004 the Rate Stabilization Account was cleared out and government issued a regulation effective for 2005 and beyond that mandated the BCUC to allow BC Hydro to establish more specific deferral accounts as required. Since 2005, the balance in these new deferral accounts has grown from $182 million to $2.2 billion at March 31, 2011, and is comprised of 27 different accounts according to BC Hydro's most recent annual report (see Appendix A).

Rate of Return

Another feature of financial management at BC Hydro is that government requires it to earn a specified rate of return on government's investment in the utility. Provincial legislation requires the BCUC to ensure that BC Hydro's rates allow it to collect sufficient revenue in each fiscal year to enable it to achieve its target annual return on equity. The Province has established that the annual return for BC Hydro be equal to the pre-tax return on equity of the nearest private comparator utility (Terasen Gas – now part of Fortis BC) plus an annual premium up to fiscal 2012, and just equal to that comparator thereafter. For the year ended March 31, 2011, the target rate was 14.3%.

Dividends

In addition to meeting the required return on equity, BC Hydro is also required to pay a dividend to the Province (its only shareholder). The most recent dividend, accrued for the year ended March 31, 2011, was $463 million.

As stated in government's review, "*currently, BC Hydro's annual dividend payment to the Province [the shareholder] is equal to 85% of net income, providing the debt (80%) to equity (20%) ratio is maintained. In light of the desire to satisfy shareholders and prevent dividend cuts, publicly traded utilities will typically pay out at a level at which they deem sustainable over the long term. In comparison, government owned utilities are free to readjust their payout policy as necessary to meet joint objectives (government and utility). Delivering reliable, low-cost power is generally seen as more important than maximizing the return to the shareholder.*"

BC Hydro has been required to fulfil specific policy directions from government, such as for energy self-sufficiency, that have increased costs. This has presented BC Hydro with considerable challenges as it also worked to meet government's objectives for relatively low, stable rates. In the process of meeting these challenges, financial management principles and transparent financial reporting have become confused.

FINANCIAL MANAGEMENT AND FINANCIAL TRANSPARENCY ARE BEING CONFUSED

Financial management and public financial reporting have significantly different purposes. The purpose of public reporting is to serve the interests of transparency and public accountability by describing objectively the results of financial management using an agreed-upon reporting framework. In our view, rate-regulated accounting as it is being practiced is not consistent with this objective. Not only does rate-regulated accounting obscure financial management decisions that have been made, it allows management (sanctioned by the regulator) to determine how results will be publicly reported rather than following objective standards of presentation.

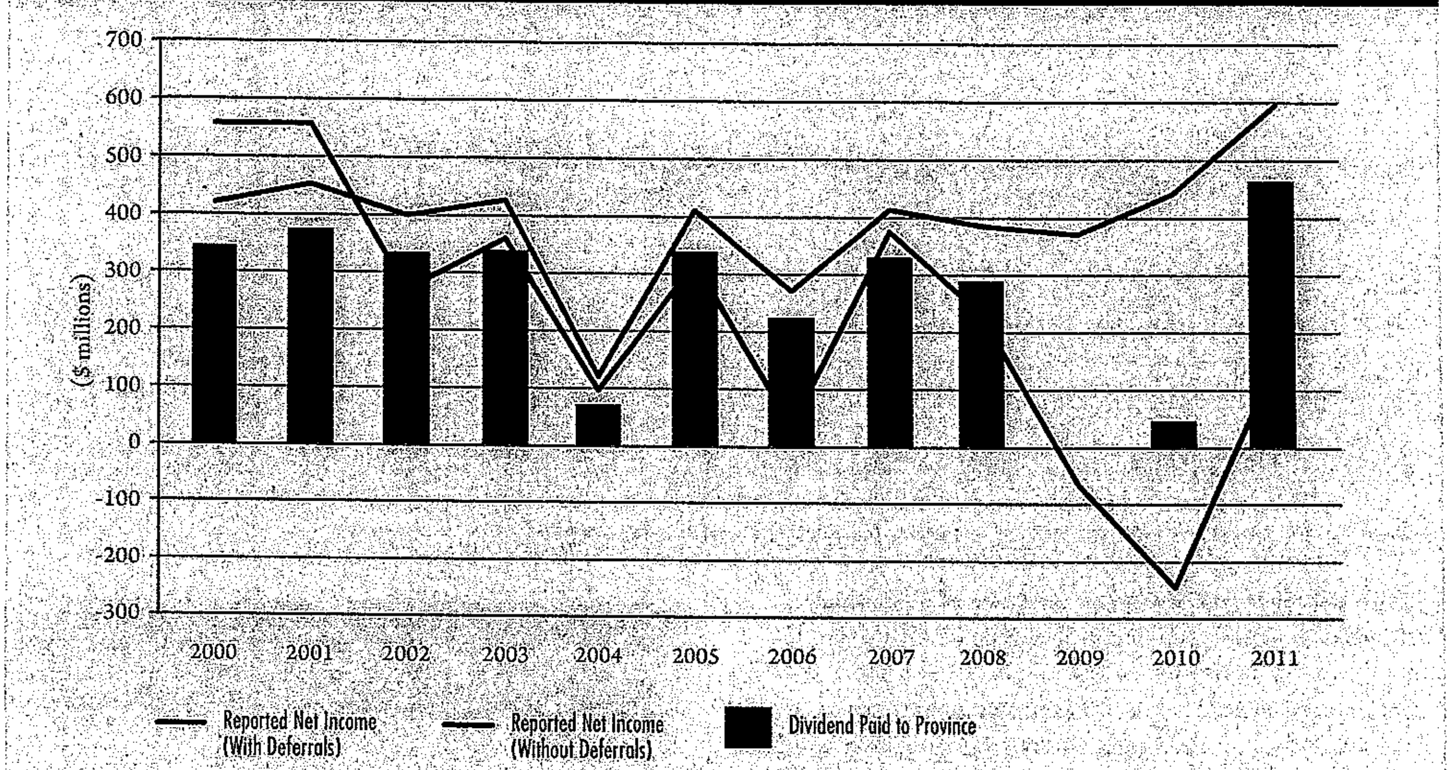
For example, to achieve its target return on equity, BC Hydro needs revenues to exceed expenses by a certain amount each year. For the March 31, 2010 fiscal year the target return on equity of 13% assumed that budgeted revenues would exceed budgeted expenses, creating net income of $402 million. However, at the end of the year actual expenses exceeded actual revenues, creating a loss of $249 million before deferrals. To achieve the target return on equity, $696 million in expenses were deferred. This resulted in a final net income of $447 million, and a return on equity that was close to the desired target.

Expenses that would ordinarily be counted in calculating net income have been deferred to future years (allowed under rate-regulated accounting). While this practice is currently acceptable under Canadian generally accepted accounting standards (GAAP), it creates the appearance of profitability where none actually exists.

Essentially, accounting deferrals of this nature confuse the need to achieve legitimate policy objectives with the objectives of transparent financial reporting. BC Hydro's deferral accounts are an essential management tool for ensuring rate stability. Similar concepts are commonly used in the insurance industry to moderate the effect of fluctuating short-term returns on investments and year-to-year variations in claims history. However, these notional deferred balances are used for financial management purposes only. They do not impede fair and full financial reporting because they do not appear in the financial statements of these enterprises.

The impact of deferrals on BC Hydro's reported performance, and the public's ability to understand the Crown corporation's financial position, has been significant. As depicted in Exhibit 1, over the last decade the impact of deferrals has been to consistently increase BC Hydro's reported net income.

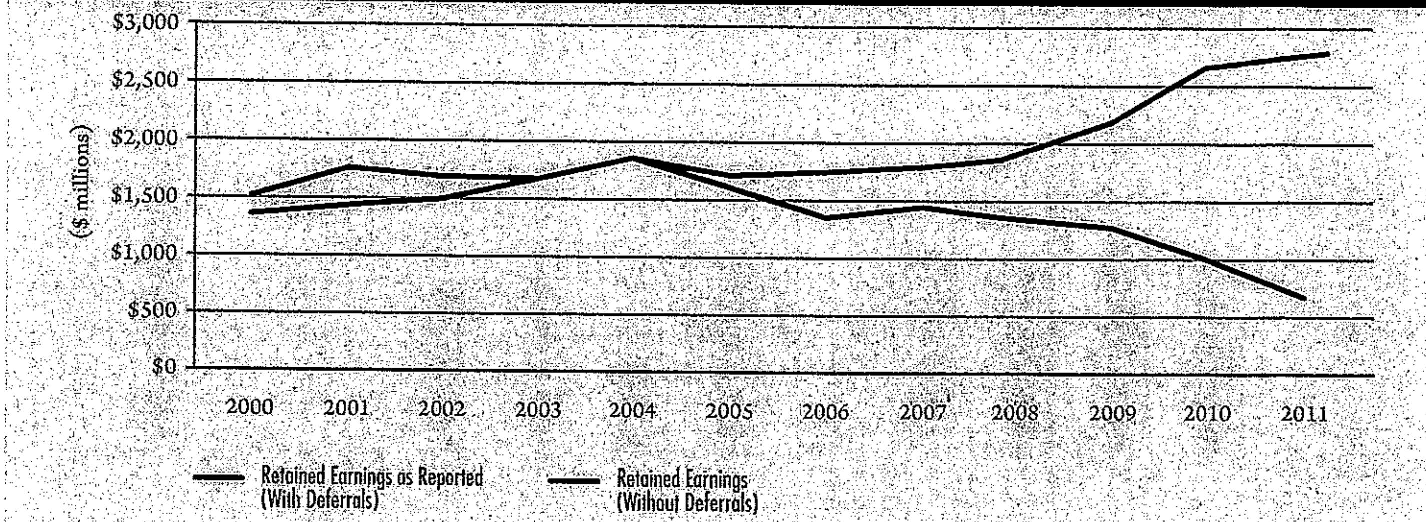
Exhibit 1: BC Hydro's net income relative to dividends paid to the Province of B.C., 2000–2011 ($millions)



Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro's annual reports.

Higher reported income has required BC Hydro to pay higher dividends to its shareholder. When the effects of rate-regulated deferral accounting are removed, government collected a larger dividend than BC Hydro's net income without deferrals in 2002, 2005, 2006, 2008, 2010 and 2011.

Exhibit 2: Trends in retained earnings, 2000–2011 ($millions)

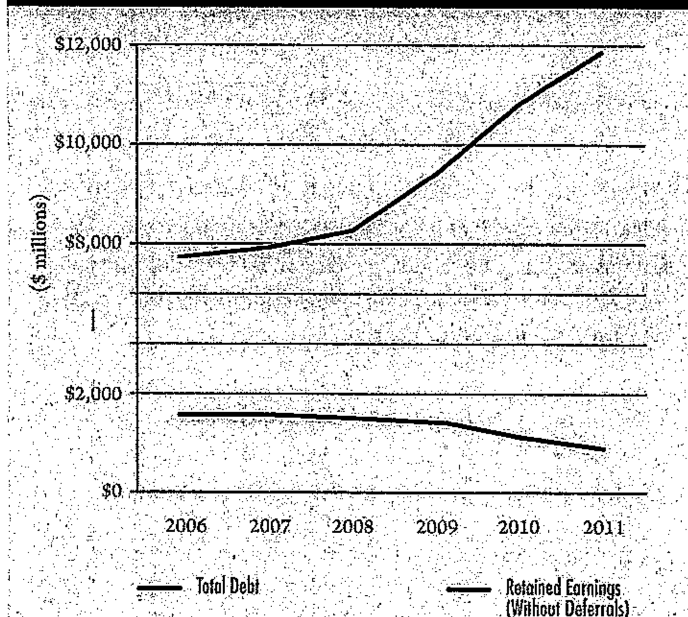


Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro's annual reports.

Deferral accounts have also had an impact on retained earnings. Retained earnings represent the financial resources that companies retain to reinvest in the business or pay down debt. They are increased by income, and reduced by losses and the payment of dividends to shareholders. As shown in Exhibit 2, BC Hydro's reported retained earnings have shown a steady increase over the last decade. However, when the effects of rate-regulated deferrals are taken into account, the opposite is true. If the trend continues as predicted in government's review, BC Hydro's financial statements will report negative equity under Canadian GAAP – potentially challenging the "going concern" assumption that underlies BC Hydro's financial reporting.

While retained earnings before deferrals have been declining, debt has been growing. BC Hydro's debt has increased from $7.5 billion in 2006 to $11.6 billion as at March 31, 2011. Exhibit 3 shows the declining financial condition playing out since 2006.

Exhibit 3: Retained earnings and total debt, 2006-2011 ($millions)



Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro's annual reports.

Interest

When a company obtains financing from an external lending source, an interest cost is usually incurred. Where such costs are related to the routine operations of the enterprise, generally speaking they are recorded in the financial records as an expense in the period in which the cost is incurred.

BC Hydro applies interest to 14 of its 27 deferral accounts, with balances totalling just under $1 billion. The rationale for applying interest is that, for certain categories of deferrals, regardless of the source of financing, there is an opportunity cost associated with using funds to defer costs that should be accounted for. Therefore, each year, these deferral accounts grow by additions as well as interest applied on the account balances. Charging interest on deferral account balances results in longer recovery periods. Like a mortgage, interest must first be covered before the deferral account's principal balance can be paid down. For fiscal 2011, the interest amount on all 14 of these deferral accounts was $37 million, compared to a pay down of principal of only $32 million, while new deferral additions of $442 million were added to these accounts.

The application of interest to deferral accounts is another example of how financial management and financial reporting have been confused. Businesses regularly use available internal resources to fund projects and operations, but notional interest is calculated only for the purpose of financial decision making (i.e. calculating opportunity cost to determine the best financing options). This sort of notional interest is not reflected in the financial statements.

Because BC Hydro includes notional interest on deferred account balances in its financial statements, we have two notable concerns. First, the practice of adding notional interest to deferral account balances extends the period over which they are amortized and recovered. Second, because the net change in deferral account balances is recorded as an adjustment to the financial statements, notional interest has the effect of increasing BC Hydro's net income, influencing calculations of return on equity and the dividend payable to government.

INTERGENERATIONAL IMPACTS

As shown in Appendix B, BC Hydro has made significantly greater use of rate-regulated deferral accounts than comparable Canadian hydro utilities. While deferral accounts can be helpful in ensuring rate stability in the near term, over the long term significant costs deferred today may be unfairly passed on to future ratepayers who receive little or no benefit. This concept of a potential unequal matching of costs and benefits is known as intergenerational inequity.

The Province's legislation governing BC Hydro requires the BCUC to set rates that allow the deferral accounts to be cleared from time to time and within a reasonable period.However, that "reasonable period" is not defined in legislation. The BCUC, however, agreed with BC Hydro in its 2009-2010 *Revenue Requirements Application* that four to six years would be a reasonable period to recover the costs of certain deferral accounts classified as "cost-of-energy."

However, we found that the cost-of-energy deferral accounts are not being recovered in four to six years. The plan for some deferral accounts is for them to be recovered over longer periods or, in some cases, recovery plans do not yet exist.

It is unclear how BC Hydro plans to recover the significant balance of deferred costs, and over what period. In fiscal 2011, interest charges applied to deferred accounts ($37 million) exceeded the amortization of these accounts ($32 million). It is difficult to see how balances will be reduced with this additional burden of interest, which has not been factored into BC Hydro's most recent rate submission. The projection in government's review of BC Hydro indicates that deferral balances will increase sharply and stay high over many years, even with currently approved rate increases.

What is clear, however, is that the current trend of escalating deferred expenses is unsustainable. Government's report recommends "that BC Hydro work with the Province to perform a more in-depth review of the growth of regulatory accounts and determine a more sustainable approach to utilizing them over the long term." Better use of regulatory accounts is certainly in order, but is not enough.

Government's report suggests that the balance of regulatory accounts will stop growing at about the $5 billion mark, although it does not indicate what needs to change in order to achieve this. In addition, the report predicts that the balance of deferred costs will remain largely unchanged for the next decade, and will only gradually decline thereafter: again, with no indication of how this will be achieved. The report also concludes that "the sharp increase in net regulatory assets is a concern." We agree, and therefore make the following recommendation:

RECOMMENDATION 1 – ***We recommend that government determine, at the earliest opportunity, how BC Hydro will recover the net deferred costs in its regulatory accounts.***

OPTIONS

Government has three options for recovering deferred costs that need to be considered individually or in combination.

1 – Rate Adjustments

Government's report notes that BC Hydro has "not made any allowance with respect to the ability of BC Hydro to recover the regulatory assets through future rates." Government's policy has been to keep rates low. To avoid undue intergenerational inequity, rates could be adjusted, ensuring repayment over periods related to the benefit received by most customers.

2 – Operating Efficiencies

Government's recent report noted a number of opportunities to increase operational efficiency in the short and long term. We did not review evidence supporting any of government's specific suggestions; however, should these cost savings materialize, increased net revenues could be applied to deferral account balances.

3 – Infusion of Cash

Since the first deferral account was established in 2000, $3.2 billion has been withdrawn from BC Hydro in the form of dividends paid to the Province. Private sector companies usually pay dividends based on a history of positive financial results. As shown in this report, when the impact of rate-regulated deferrals is taken into account, BC Hydro's net equity – the funds available to invest – has been depleted over the last decade, in part by the dividends paid to the Province.

DECISIONS NEED TO BE SUPPORTED BY TRANSPARENT FINANCIAL REPORTING

The Canadian Institute of Chartered Accountants (CICA) establishes GAAP in Canada. The CICA has observed that "from an economic perspective, rate regulation can have a direct bearing on the economic resources, obligations and performance of a rate-regulated enterprise. It can influence rates that, combined with market conditions, can have an economic impact on current and future revenues and cash flows, thereby affecting future economic benefits and obligations." In other words, rate regulation can distort reported financial results and subsequent decision making.

Rate-regulated deferral accounting is not permissible under International Financial Reporting Standards (IFRS). Canada will be adopting IFRS as Canadian GAAP for business enterprises such as BC Hydro. Therefore, this is the last year that Canadian accounting standards allow the reporting of deferral accounts in general purpose financial statements. Starting in fiscal 2013 (next year), the full cost of operating expenses should be shown in the year they are incurred, rather than being deferred to future years.

Government's own report noted "concerns that the extensive use of the regulatory accounts reduces transparency of the financial information." We agree, and have highlighted some of these effects in this report. It is interesting to note that BC Hydro projects $1.5 billion in additional deferrals related to the implementation of IFRS – a situation that may bring into question whether or not IFRS will have been implemented. These impacts exemplify why BC Hydro should no longer use rate-regulated deferrals in its financial reporting.

Unfortunately, government has taken a different position. *The Budget Transparency and Accountability Act* was amended in the 2010 session to allow for departures from GAAP, if authorized by Treasury Board via regulation. In July 2011, Treasury Board issued the Government Organization Accounting Standards Regulation, which requires BC Hydro to adopt one part of an American accounting standard that allows rate regulation and thereby avoids the transparency that will be required under Canadian accounting standards.

In addition to the $2.2 billion net deferral balance that is recorded as an asset, the effect of rate regulation in 2010/11 (as disclosed in note 37 of the Province's Summary Financial Statements) has been to increase the net earnings of BC Hydro, and thus reduce the annual deficit recorded by the Province by $447 million (fiscal 2010: $705 million). In addition to undermining the credibility of the financial reporting of BC Hydro, one of British Columbia's most essential institutions, the potential departure from GAAP will be of such significance that it will require the Auditor General to consider qualifying his opinion on the Province's Summary Financial Statements.

We appreciate the concept of regulated deferrals as a theoretical management tool that is integral for stable rate setting. But this objective is significantly different than the objectives of transparency and accountability that underlie financial reporting. Accordingly, we make the following recommendation:

RECOMMENDATION 2 – ***We recommend that government prescribe that the annual financial statements for BC Hydro be prepared fully in accordance with Canadian generally accepted accounting principles.***

LOOKING AHEAD

BC HYDRO IS A COMPLEX organization that is integral to the financial health of the Province and the lifestyles we all enjoy. A number of issues relating to cost structures, differential revenues and long-term planning arose during the course of this work that bear consideration for further work by this Office.

As always, we will follow up on this report's two recommendations.

IN ACCOUNTING TERMINOLOGY, the practice of holding items that would normally be expensed in the current period, and instead disclosing them on the balance sheet to be expensed later, is known as "deferring" the cost. There are very limited and specific circumstances where deferrals are allowed in GAAP, such as recording the cost of purchasing long-term assets, which are expensed (depreciated or amortized) over many years to match the expected service life or earning potential of the assets.

Canadian utilities have been using a deferral technique known as *rate-regulated accounting* where entities use special accounts to carry forward windfall revenues and/or unexpected costs to future periods. This allows utilities to smooth out the effect of these events, and dampens short-term impacts on the rates charged to their customers.

BC Hydro uses a number of deferral accounts for both revenues and expenses; however, deferred costs predominate. BC Hydro's financial statements for the year ended March 31, 2011 disclose a total of $2,436 million in deferred costs and $276 million in deferred revenues, for a net total of $2,160 million. Deferral accounts have been set up and endorsed by the BCUC to cover a range of purposes, including:

- the variances between forecasted costs and revenue expectations;
- the maintenance of assets;
- costs for First Nations negotiation, litigation and settlement;
- environmental compliance and remediation; and
- foreign exchange gains and losses.

As disclosed in BC Hydro's audited financial statements, in the absence of rate regulation almost all of these amounts would have been included as revenues or expenditures in the financial statements in the year they occurred. Deferred costs are recorded as "assets" to the utility company because they have a future benefit (the ability to offset the cost against future revenue). Conversely, deferred revenues are recorded as "liabilities" since they represent a reduction from current revenues.

While deferral accounts can help ensure rate stability in the near term, over the long term they have the potential for unfairness to future ratepayers if significant costs incurred today are recovered from future ratepayers, who may receive little or no benefit. This concept of a potential unequal matching of the costs and benefits is known as intergenerational inequity.

For example, if a storm were to damage hydroelectric infrastructure and result in immediate costly repairs, it is the customers currently using the hydroelectric system that benefit most directly from repair work to restore service. However, if these costs are deferred over a long period, future customers can end up paying for repairs for which they received little or no direct benefit.

The concept of deferrals is not unique to the energy utility industry. Insurance organizations experience variations in their revenues (investment income) and expenses (claims history). For the purposes of determining rates charged to customers, the immediate effects of sometimes significant short-term fluctuations in revenues and expenses are smoothed over a number of years.

This process is quite distinct from how these organizations report their overall financial results. The example below illustrates how WorkSafeBC differentiates between reported financial results, and the financial management process that determines rates:

"In accordance with Canadian generally accepted accounting principles, WorkSafeBC's consolidated financial statements reflect the market value of investments at the end of the reporting year (fair value accounting). They provide a snapshot or point-in-time reading of financial assets... [But] to avoid rate fluctuations generated by financial market volatility, WorkSafeBC continues to set premium rates using smoothed investment accounting ... "

(Source: WorkSafeBC 2010 Annual Report and 2011-13 Service Plan.)

BC Hydro regulatory accounts, balances and descriptions as at March 31, 2011

Regulatory Assets

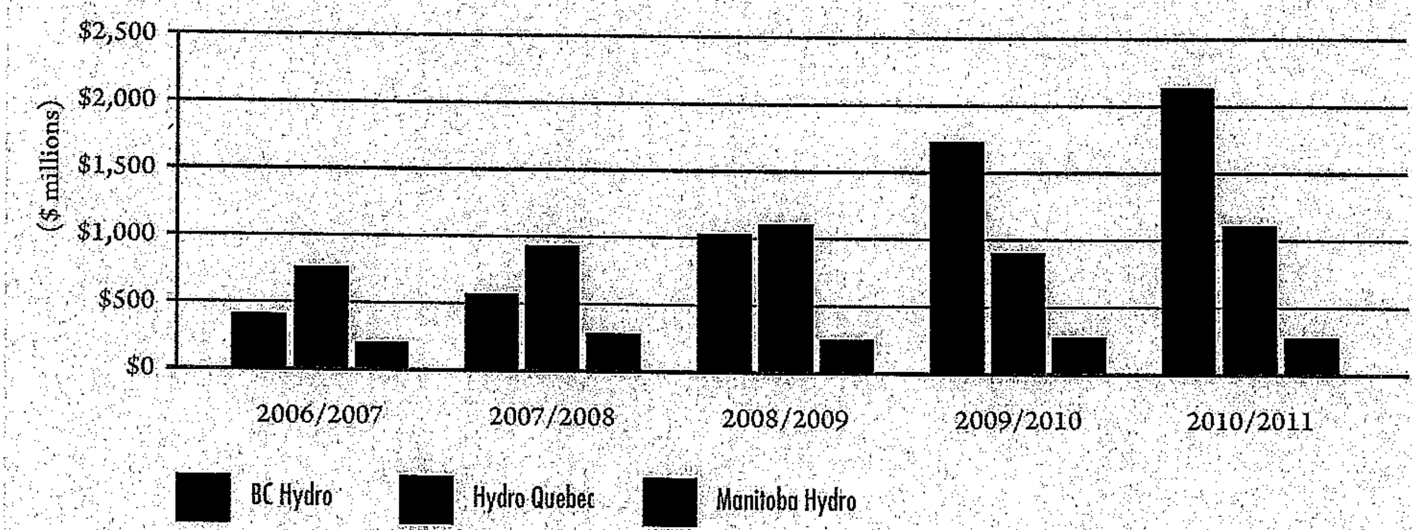
Account	Balance at Mar 31, 2011 (millions)	Description (unless noted otherwise, all accounts would normally be recorded in BC Hydro's operating results under GAAP)	Impact on 2010/11 Net Income (millions) Increase/(Decrease)
Heritage Deferral Account	$247	This account is intended to mitigate the impact of certain variances between the forecasted costs in a revenue requirements application (to BCUC) and actual costs of service associated with the Heritage Resources by adjustment of net income.	($78)
Non-Heritage Deferral Account	$362	This account is intended to mitigate the impact of certain cost variances between the forecasted costs in a revenue requirements application and actual costs related to energy acquisition and maintenance of BC Hydro's distribution assets by adjustment of net income.	$243
BCTC Deferral Account	$0	Under a Special Directive issued by the Province, variances that arose between the costs of transmission services included in BC Hydro's rates and BCTC's rates are deferred. The balance of this account has been transferred to the Non-Heritage Deferral Account.	($18)
Trade Income Deferral Account	$188	Under a Special Directive issued by the Province, this account is intended to mitigate the uncertainty associated with forecasting the net income of BC Hydro's trade activities. The impact is to defer the difference between the Trade Income forecast in the revenue requirements application and actual Trade Income.	$66
Demand Side Management Programs	$506	DSM programs are designed to reduce the energy requirements on BC Hydro's system. Costs of the programs include materials, direct labour and applicable portions of administration charges, equipment costs, and incentives.	$64
First Nation Negotiations, Litigation and Settlement Costs	$399	This account relates to provisions for and costs incurred with respect to First Nation negotiations, litigation and settlements. Costs relating to identifiable tangible assets that meet the capitalization criteria are recorded as property, plant and equipment.	–
Non-Current Pension Cost	$72	Variances that arise between forecast and actual non-current pension cost are deferred.	($14)
Site C	$104	Site C expenditures incurred in fiscal 2007 through fiscal 2011 have been deferred.	$44

Account	Balance at Mar 31, 2011 (millions)	Description (unless noted otherwise, all accounts would normally be recorded in BC Hydro's operating results under GAAP)	Impact on 2010/11 Net Income (millions) Increase/(Decrease)
Environmental Compliance	$231	A liability provision for environmental compliance and remediation arising from the costs that will likely be incurred to comply with the Federal Polychlorinated Biphenyl (PCB) Regulations enacted under the *Canadian Environmental Protection Act* and the remediation of environmental contamination at Rock Bay.	($90)
Other Regulatory Accounts	$327	Other regulatory asset accounts with individual balances less than $60 million include the following: Depreciation Study Adjustments, Contributions in Aid of Construction Amortization Variance, Capital Project Investigation Costs, Procurement Enhancement Initiative Costs, Smart Metering and Infrastructure Project Costs (SMI), GM Shrum Unit 3 Outage, Home Purchase Option Plan, Return on Equity (ROE) Adjustment, and Waneta Rate Smoothing.	$62
Total Regulatory Assets	**$2,436**		$279
Regulatory Liabilities			
Future Removal and Site Restoration Costs	$140	This account was established by a one-time transfer of $251 million from retained earnings. The costs of dismantling and disposal of property, plant and equipment will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation. In the absence of rate regulation, it is likely a liability would not be recognized under GAAP.	($19)
Foreign Exchange Gains and Losses	$106	Foreign exchange gains and losses from the translation of specified foreign currency financial instruments are deferred.	$5
Finance Charges	$4	Variances that arise between forecast and actual finance charges are deferred.	($100)
Other Regulatory Accounts	$26	Other regulatory liability accounts with individual balances less than $15 million include the following: Net Employment Costs, Amortization of Capital Additions, Storm Damage, and Taxes.	($168)
Total Regulatory Liabilities	**$276**		($167)
Net Regulatory Assets	**$2,160**		**$447**

Source: BC Hydro 2011 Annual Report page 59.

THE CHART BELOW shows that the growth of deferral account balances for BC Hydro has greatly exceeded that of both Quebec and Manitoba for the same five-year period. Government's recently issued review of BC Hydro forecasts deferred expense balances to continue to grow, reaching $4.9 billion by 2017.

Comparison of deferral account balances for B.C., Quebec and Manitoba hydro utilities, 2006/07–2010/11 ($millions)

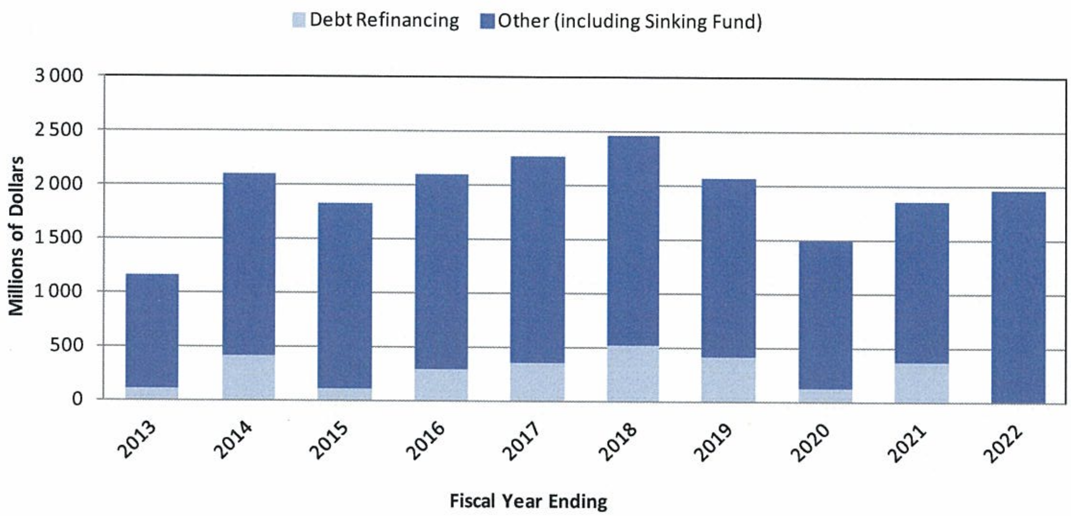


Source: Compiled by the Office of the Auditor General of British Columbia from annual reports of BC Hydro, Manitoba Hydro and Hydro Quebec.
Note: Quebec Hydro fiscal year-end is December 31, while both BC Hydro and Manitoba Hydro fiscal year-ends are March 31.
Note: no deferral accounts were in use at Hydro Quebec prior to 2004.

4.0 BORROWING REQUIREMENTS

Manitoba Hydro's forecast consolidated borrowing requirements are portrayed in Figure 4-1 below.

Figure 4-1: Projected Consolidated Borrowing Requirements



Manitoba Hydro arranges long-term financing in the form of advances from the Province of Manitoba. Both long- and short-term borrowings are guaranteed by the Province (except for mitigation bonds issued by the Manitoba Hydro-Electric Board). Manitoba Hydro's target range is to hold 15% to 25% of debt in floating rate instruments in order to minimize debt costs without undue interest rate exposure.

Also note that a considerable portion of BC Hydro's business services are outsourced to a third party firm (Accenture) which results in a substantial number of FTE equivalent services (originally 1540 employees[3]) not showing up in BC Hydro's employee numbers. These employees are not included in the above Table 1.

The most reliable recently compared analysis of BC Hydro and Manitoba Hydro was prepared by the BC Hydro Review panel in June 2011, as they had ready access to both BC Hydro and related Accenture data. Their comparison of the GW.h produced per FTE is shown in Figure 1 below, which was provided as Figure 2.2.5 in their report[4].

Figure 1: GW.h Produced per FTE for BC Hydro, Manitoba Hydro and Hydro Quebec – per the BC Hydro Review Panel

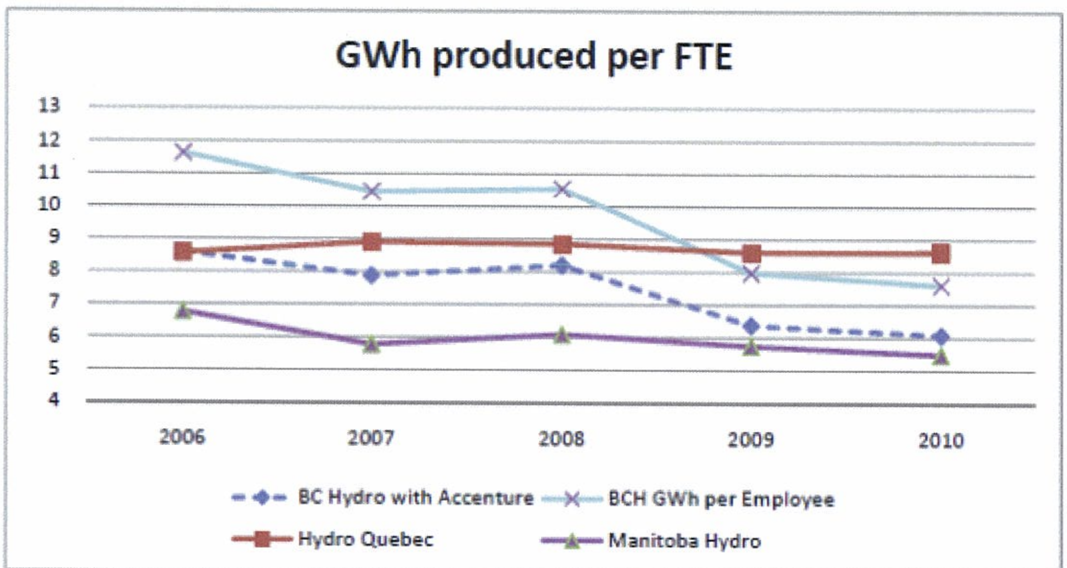


Figure 2.2.5

As shown in Figure 1 above, the energy produced per FTE has remained relatively constant at Hydro Quebec over the period 2006-2010, but has declined for both BC Hydro and Manitoba Hydro. In this metric, lower or declining values reflect lower performance. The BC Hydro values are understood to be prior to the panel's recommendation to reduce staffing by over 1000 positions.

[3] http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs/359905/backgrounder.pdf.
[4] http://www.newsroom.gov.bc.ca/downloads/bchydroreview.pdf.