MH Exhibit #118
February 28, 2013

# MANITOBA HYDRO

## 2012/13 & 2013/14 GENERAL RATE APPLICATION

## BOOK OF DOCUMENTS

***TAB***

Tab 1

**Net Income - Electricity Operations**

| (in millions of $) | Actual 2008 | 2009 | 2010 | 2011 | 2012 | Forecast 2013 | 2014 |
|---|---|---|---|---|---|---|---|
| Revenue | | | | | | | |
| General Consumers Revenue | | | | | | | |
| - at approved rates | $ 1,075 | $ 1,127 | $ 1,145 | $ 1,200 | $ 1,214 | $ 1,251 | $ 1,289 |
| - 1% rate deferral | | | | | (23) | | |
| Extraprovincial Revenue (net of Fuel & Power Purchased and Water Rentals) | 366 | 323 | 202 | 172 | 98 | 97 | 62 |
| Other Revenue | 8 | 16 | 6 | 6 | 6 | 14 | 15 |
| | 1,448 | 1,466 | 1,353 | 1,379 | 1,295 | 1,362 | 1,366 |
| Expenses | 1,112 | 1,209 | 1,193 | 1,240 | 1,234 | 1,404 | 1,450 |
| Non-controlling Interest | - | - | - | - | - | 14 | 24 |
| Net Income (loss) before interim and proposed rate increases | $ 337 | $ 257 | $ 160 | $ 139 | $ 62 | $ (28) | $ (59) |
| Rate rollback reinstatement | - | - | - | - | | 36 | 14 |
| Interim Rate Increases (2.0% April 1, 2012) | - | - | - | - | | 25 | 26 |
| Interim Rate Increases (2.5% September 1, 2012) | - | - | - | - | | 20 | 32 |
| Proposed rate increases (3.5% April 1, 2013) | - | - | - | - | | - | 48 |
| Net Income after proposed rate increases & rate rollback reinstatement | $ 337 | $ 257 | $ 160 | $ 139 | $ 62 | $ 53 | $ 60 |

**Retained Earnings and Financial Ratios (before interim & proposed rate increases)**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|
| Retained Earnings (electric operations) | $ 1,772 | $ 2,029 | $ 2,189 | $ 2,328 | $ 2,390 | $ 2,362 | $ 2,303 |
| Debt to Equity Ratio (electric operations) | 0.73 | 0.77 | 0.72 | 0.72 | 0.74 | 76:24 | 79:21 |
| Interest Coverage Ratio (electric operations) | 1.72 | 1.50 | 1.33 | 1.26 | 1.11 | 0.95 | 0.90 |
| Capital Coverage Ratio (electric operations) | 1.65 | 1.82 | 1.28 | 1.22 | 1.10 | 0.90 | 0.67 |

**Retained Earnings and Financial Ratios (after proposed rate increases & rate rollback reinstatement)**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|---|
| Retained Earnings (electric operations) | $ 1,784 | $ 2,028 | $ 2,190 | $ 2,328 | $ 2,390 | 2,442 | 2,502 |
| Debt to Equity Ratio (electric operations) | 0.73 | 0.77 | 0.72 | 0.72 | 0.74 | 75:25 | 78:22 |
| Interest Coverage Ratio (electric operations) | 1.72 | 1.50 | 1.33 | 1.26 | 1.11 | 1.09 | 1.10 |
| Capital Coverage Ratio (electric operations) | 1.65 | 1.82 | 1.28 | 1.22 | 1.10 | 1.09 | 0.89 |

# Tab 2

**<u>CAC/MH I-6</u>**

**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.

# Tab 3

# Financial Targets

**Debt/Equity**:

Maintain minimum debt/equity ratio of 75:25

**Interest Coverage**:

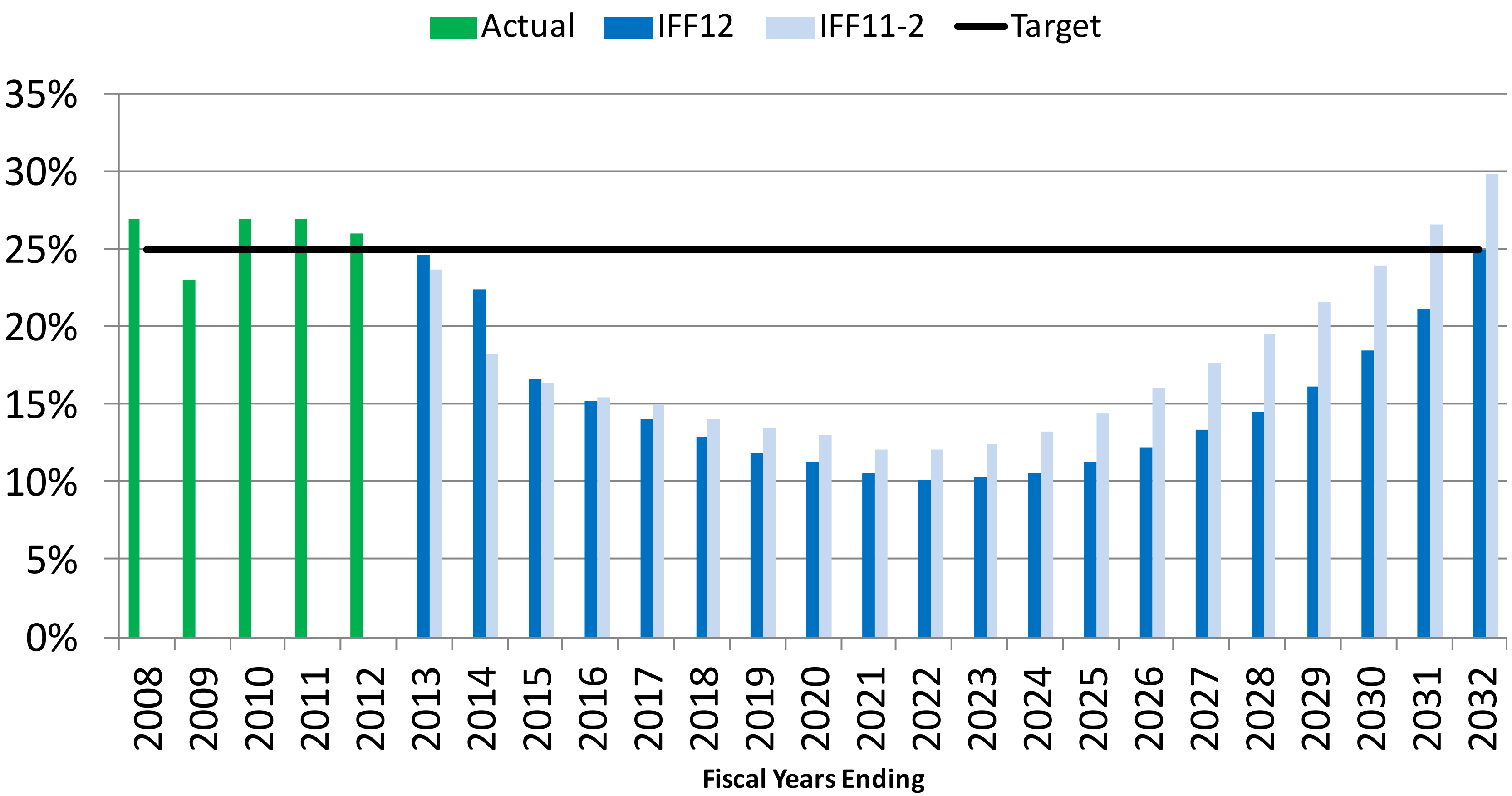
Maintain interest coverage ratio of > 1.20

**Capital Coverage**:

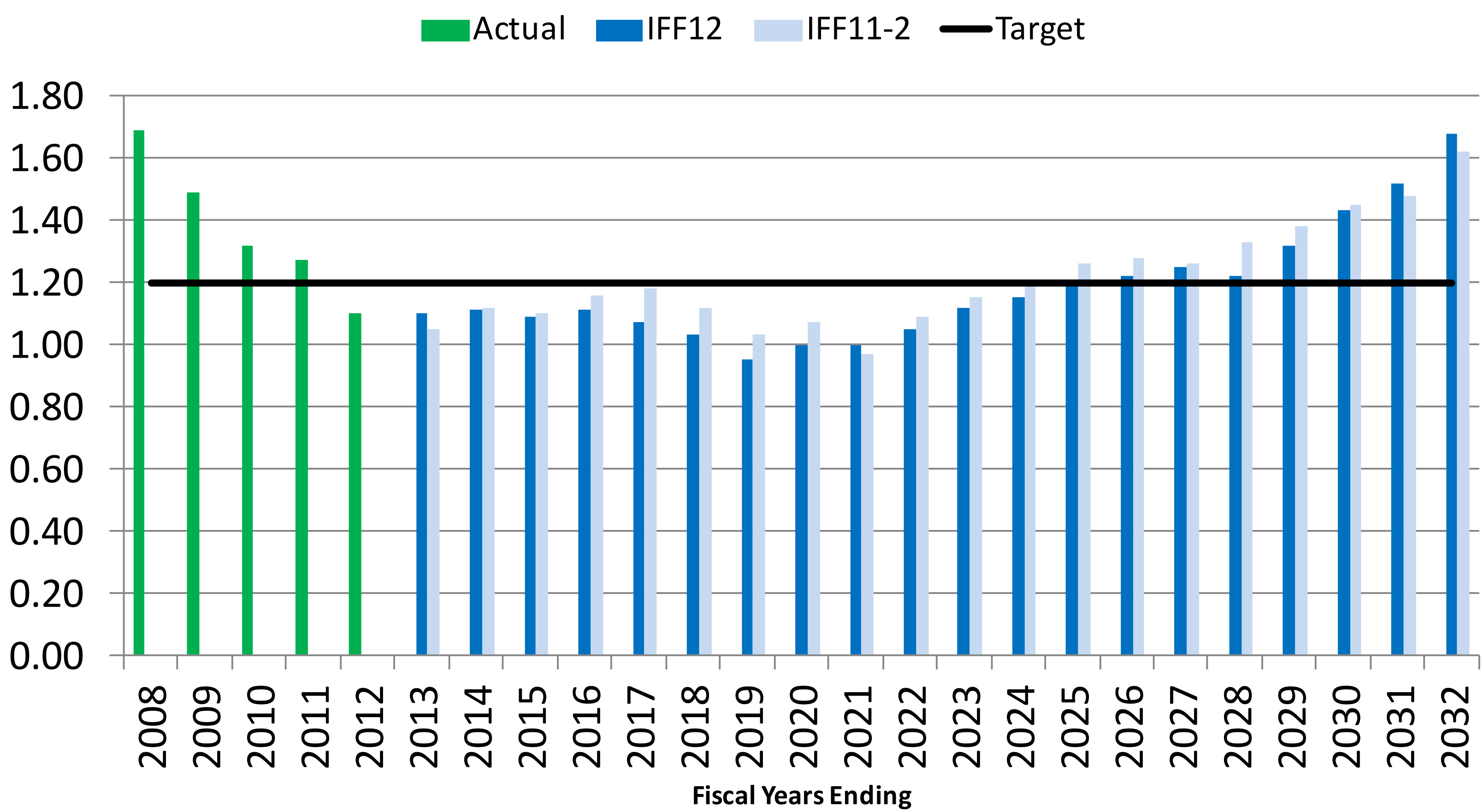
Maintain capital coverage ratio of > 1.20

Note: Financial targets may not be maintained during years of major investment in the generation and transmission system.

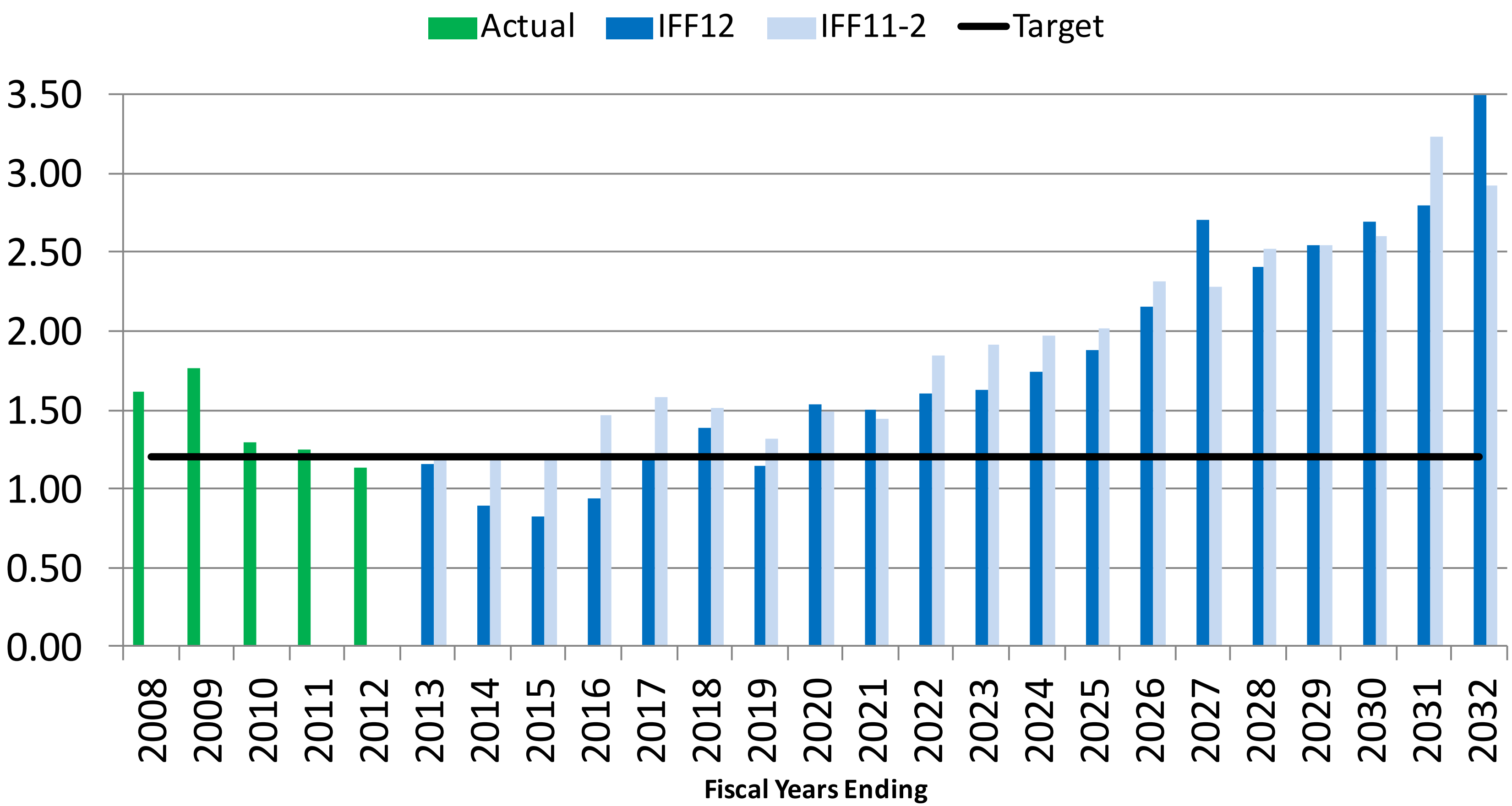
# Equity Ratio



# Interest Coverage Ratio



# Capital Coverage Ratio



# Tab 4

**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.<br><br>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**<br>.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]<br><br>.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:<br>(a) start-up activities (i.e., start-up costs),<br>(b) training activities.<br>(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**<br>.16 Examples of costs excluded from the cost of inventories and recognized as expenses in the period in which they are incurred are:<br>(a) abnormal amounts of wasted materials, labour or other production costs;<br>(b) storage costs, unless those costs are necessary in the production process before a further production stage;<br>(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:<br>• an annual increase in operating and administrative expense;<br>• reductions in plant asset values for amounts no longer capitalized; and<br>• reductions in depreciation expense as a result of reduced asset values. | **CGAAP – Section 3061 Property, plant & equipment:**<br>.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.<br>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:**<br>.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:<br>(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<br>(b) the interest rate inherent in the amount at which the accrued benefit obligation could be settled. [JAN. 2000]<br><br>.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. |

<table>
<tr><th>Reference</th><th>Description</th><th>Accounting Handbook Reference</th></tr>
<tr><td>5</td><td>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<ul><li>upon transition to IFRS, a one-time adjustment to retained earnings will be made for unamortized rate-regulated account balances;</li><li>future expenditures on these items will be expensed as incurred resulting in an annual increase to operating and administrative expense; and</li><li>a reduction to depreciation and amortization for previously deferred regulatory accounts.</li></ul></td><td>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.</td></tr>
<tr><td>6</td><td>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:<ul><li>upon transition, unamortized pension gains and losses will be adjusted to accumulated other comprehensive income;</li><li>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</li><li>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.</li></ul></td><td>IFRS – IAS 19 Employee Benefits:<br>.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:<br>(a) service cost in profit or loss;…,<br>(c) re-measurements of the net defined benefit liability (asset) in other comprehensive income.<br>.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.<br>.103 An entity shall recognise past service cost as an expense at the earlier of the following dates:<br>(a) when the plan amendment or curtailment occurs; and<br>(b) when the entity recognises related restructuring costs or termination benefits (see paragraph 165).</td></tr>
</table>

| | | |
|---|---|---|
| | **Employee benefits:**<br>The primary employee benefit related changes include:<br>• upon transition, unamortized past service adjustments will be adjusted to retained earnings; and<br>• 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:**<br>.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:<br>• an annual increase in operating and administrative expense;<br>• reductions in plant asset values for amounts no longer capitalized; and<br>• reductions in depreciation expense as a result of reduced asset values. | **IFRS - IAS 16 Property, plant & equipment:**<br>.19 Examples of costs that are not costs of an item of property, plant and equipment are:,…<br>(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**<br>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, …<br>(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:**<br>. 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:**<br>.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.<br>**.**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:**<br>The key IFRS reference supporting the move to the ELG method is:<br>.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.<br>.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** |

**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 |

# Tab 5

**MANITOBA HYDRO**

**2012/13 & 2013/14 ELECTRIC GENERAL RATE APPLICATION**

**UNDERTAKING PROVIDED BY: V. WARDEN**

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**Manitoba Hydro Undertaking #44**

Manitoba Hydro to inquire with its external auditors and to extent possible, provide copies of recommendations or advice received which show the strong indications made by them with respect to Manitoba Hydro's accounting practices.

**Response:**

Please refer to the attached email from Tanis L. Petreny, Partner, Ernst & Young, in which Ms. Petreny indicates that MH’s changed accounting methodologies for overhead capitalization “is more consistent with the approach most companies employ and those of other utilities.” Ms. Petreny also states that MH’s former full costing methodology was “at the extreme end of costing methodologies” and that “we fully supported the shift in methodology… and strongly encouraged a change in costing methodology either under CGAAP or definitely upon the adoption of IFRS.”

**Warden, Vince**

**From:** Tanis.L.Petreny@ca.ey.com
**Sent:** Tuesday, December 11, 2012 8:28 AM
**To:** Warden, Vince
**Subject:** Operating costs

Hi Vince

With respect to your question on operating costs, here are my thoughts:

Under Canadian GAAP, the measurement of cost of PP&E includes costs that are directly attributable to the construction. There was no further discussion of what comprised directly attributable costs and in practice this was a broad category. Companies applied different methodologies to determine directly attributable costs. In MH's situation, the approach captured all attributable costs under a full costing approach.

With the pending adoption of IFRS, companies took a closer look at what directly attributable costs should be included in the cost of an asset. IFRS is far more specific in its definition of directly attributable costs. Under IFRS, the distinction between directly attributable and general overhead costs is at a much lower level such that a full costing methodology as previously employed by MH would not be appropriate.

In preparation for the adoption of IFRS, MH re-evaluated its overhead capitalization methodology. While the accounting policy did not change, the methodology did similar to a change in estimate. As a result of this change in approach, MH's overhead capitalization methodology is more consistent with the approach most companies employ and those of other utilities. I also recall that PUB had noted in one of the Board orders that they felt the capitalization approach was aggressive and therefore the change was also meeting with their expectations.

Throughout our tenure as MH's auditors we assessed the capitalization methodology using a full costing methodology as acceptable but at the extreme end of costing methodologies. We fully supported the shift in the methodology as it is more consistent with what we see in practice and is better harmonized with existing accounting literature (IFRS). With the requirement to adopt IFRS, we did strongly encourage a change in the costing methodology either under CGAAP or definitely upon the adoption of IFRS.

I hope this helps craft your response for the PUB. Let me know if you need anything further or want to discuss any comments. You can call me on my cell at 204 471 7181 if you are unable to catch me in the office.

Regards,
Tanis

**Tanis L. Petreny** | Partner | Assurance and Advisory Business Services
Ernst & Young LLP
2700 - 360 Main Street, Winnipeg, MB R3C 4G9, Canada
Office: (204) 933-0251 | Tanis.L.Petreny@ca.ey.com
Website: www.ey.com
Assistant: Pat Gallagher | Phone: (204) 954-5565 | Pat.Gallagher@ca.ey.com
Thank you for considering the environmental impact of printing emails.

# Tab 6

# Operating, Maintenance & Administrative Costs

For the Years Ended March 31 ($ thousands)

| | 2010 | 2011 | 2012 | 2013 Forecast | 2014 Forecast | Average Annual Increase |
|---|---|---|---|---|---|---|
| Electric OM&A (per Annual Report) | $ 379,697 | $ 403,067 | $ 410,717 | $ 461,800 | $ 477,600 | |
| Less: | | | | | | |
| Subsidiaries | 2,146 | 6,121 | 7,414 | 6,491 | 6,946 | |
| Accounting Changes | 11,240 | 30,910 | 34,973 | 75,411 | 78,318 | |
| Wuskwatim | - | - | - | 5,589 | 10,797 | |
| **Electric OM&A after adjusting for subsidiaries, accounting changes and Wuskwatim** | **$ 366,311** | **$ 366,036** | **$ 368,330** | **$ 374,309** | **$ 381,539** | |
| % Increase | 4.28 % | - 0.08 % | 0.63 % | 1.62 % | 1.93 % | 1.68 % |
| Canadian CPI | 0.40 % | 2.00 % | 2.80 % | 1.80 % | 2.10 % | 1.82 % |

# Tab 7

*Indexed as:*
## Manitoba (Public Utilities Board) v. Manitoba (Attorney-General) (Man. C.A.)

**IN THE MATTER OF The Public Utilities Board Act, R.S.M. 1987, c. P280**
**AND IN THE MATTER OF The Crown Corporations Public Review and Accountability and Consequential Amendments Act, S.M. 1988, c. C336**
**AND IN THE MATTER OF The Manitoba Hydro Act, R.S.M. 1987, c. H190**
**AND IN THE MATTER OF Certain questions respecting the jurisdiction of The Public Utilities Board of Manitoba**
**Between**
**The Public Utilities Board, Applicant, and**
**The Attorney-General of Manitoba, Manitoba Hydro, Manitoba Society of Seniors, Consumers Association of Canada (Manitoba), and The City of Winnipeg, (Intervenors) Respondents**

[1989] M.J. No. 491

61 Man.R. (2d) 164

17 A.C.W.S. (3d) 952

Suit No. 257/89

Manitoba Court of Appeal

**Monnin C.J.M., O'Sullivan and Twaddle JJ.A.**

October 3, 1989

*Administrative law -- Judicial review -- Board having no power to approve, reject or vary capital projects of Hydro as part of its rate review jurisdiction as power not specifically stated in statute -- Crown Corporations Public Review and Accountability and Consequential Amendments Act, S.M. 1988, c. 23, s. 26(1) -- Public Utilities Board Act, R.S.M. 1987, c. P-280, s. 58.1.*

This was an application by way of a stated case for determination of the following question: whether the Public Utilities Board had jurisdiction to approve, reject or vary Manitoba Hydro project plans incidental to or as a condition of granting approval for changes in the prices charged for power. The Board was under a duty to review and approve all future rates charged for electricity. It was agreed by all counsel that the Act in question granted no such specific power to the Board. The legislation was silent on the issue. It was argued that the Court ought to imply such power in the Board.

HELD: The question was answered in the negative. The Board had no such jurisdiction. The Court was unable to imply such an intention in the legislation as it stood.

W.C. Gardner, Q.C., and P.L. Jensen, for Public Utilities Board.
R.A.L. Nugent, Q.C., and R.E. Roth, for Manitoba Hydro.
A. Peltz, for Manitoba Association of Seniors and Consumers Assoc. of Canada (Manitoba).

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Reasons for judgment delivered by Monnin C.J.M., answering the question in the negative; concurred in by O'Sullivan J.A. Separate reasons for judgment delivered by Twaddle J.A., declining to answer the question contained in the Stated Case.

**MONNIN C.J.M.** (orally):-- At the request of counsel for The Manitoba Society of Seniors and The Consumers Association of Canada (Manitoba), the Public Utilities Board has stated a case to the court pursuant to s. 58.1(1) of its Act.

The question for the court is the following:

> Does the Public Utilities Board have jurisdiction to approve, reject or vary Manitoba Hydro capital project plans such as plans to construct new generating stations, incidental to or as a condition of granting approval for changes in the prices charged for power?

Under The Crown Corporations Public Review and Accountability and Consequential Amendments Act, S.M. 1988, c. C336, the Public Utilities Board now has the duty to review and to approve all future rate charges for electricity, and no new rates and no changes in rates shall be introduced without the approval of the Board.

Mr. Peltz, counsel for the Manitoba Society of Seniors, contends that in fixing or reviewing rates the Board has jurisdiction to review the decisions of Manitoba Hydro with respect to its major capital projects such as the construction of new generating stations or new transmission lines.

It is agreed by all counsel that the Act in question grants no such specific power to the Board. In other words, the legislation is silent on that issue. However, Mr. Peltz alleges that the practical reality is that capital plans and expenditures cannot be ignored in any workable system of rate review and if specific legislation is not available, then the court should, of necessity, imply such power in the Board.

I am unable to imply such an intention in the legislation as it stands. To imply it would be to legislate which is not the function of this court. Since the legislation is defective in that the power is not specifically stated, the Board and/or the parties will have to knock at the Legislature's door in order to obtain that specific power if desirable.

On the basis of the legislation as it stands, the Board has no jurisdiction to approve, reject or vary Manitoba Hydro's major capital projects such as construction of new generating power stations or transmission lines.

The answer to the question is therefore in the negative.

This is not a case for an award of costs.

MONNIN C.J.M.
O'SULLIVAN J.A.:-- I agree.

The following is the judgment of

TWADDLE J.A. (orally):-- This matter comes before us by way of a case stated by The Public Utilities Board pursuant to s. 58.1 of The Public Utilities Board Act, R.S.M. 1987, c. P280 as amended by The Crown Corporations Public Review and Accountability and Consequential Amendments Act, S.M. 1988, c. 23. A preliminary objection to the proceedings is taken by Manitoba Hydro which contends that the question asked of the Court, in the Stated Case, is not properly before it as there is no proceeding before the Board in which the question arises.

> Section 58.1 of The Public Utilities Board Act provides:
>
> "58.1(1) The [Public Utilities] Board may, of its own motion or on the application of any party to proceedings before the board, state a case in writing for the opinion of the Court of Appeal upon any question of law or jurisdiction.
>
> 58.1(2) The Court of Appeal shall hear and determine the stated case and remit it to the board with its opinion.
>
> 58.1(3) A case stated pursuant to this section does not stay or suspend any proceedings of the board or stay or suspend the operation of any decision or order of the board."

The case stated by the Board, purportedly under that section, arose out of proceedings before the Board pursuant to subsection 26(1) of The Crown Corporations Public Review and Accountability and Consequential Amendments Act, which provides:

> "26(1) Notwithstanding any other Act or law, rates for services provided by The Manitoba Telephone System, Manitoba Hydro and the Manitoba Public Insurance Corporation shall be reviewed by The Public Utilities Board under The Public Utilities Board Act and no change in rates for services shall be made and no new rates for services shall be introduced without the approval of The Public Utilities Board."

In the course of those proceedings, Manitoba Hydro acknowledged that

> ". . . [M]ajor plant additions, particularly in the post-Limestone period will be a significant variable affecting rates. Accordingly, Manitoba Hydro proposes that at a future hearing, intervenors and the public have an opportunity to review

> Manitoba Hydro's long-term capital plans and strategic alternatives for meeting load growth in the late 1990's and beyond. The future review would take place prior to commitment to the recommended option."

It was Manitoba Hydro's position that the Board might make recommendations as to the plans of Hydro involving capital commitments for future projects, but that the Board had neither direct jurisdiction, nor jurisdiction incidental to its rate fixing power, to approve, reject or vary any of those plans.

The Manitoba Society of Seniors and the Consumers Association of Canada (Manitoba) (hereinafter referred to together as "the objectors") gave notice, through counsel, that the objectors reserved the right to move that the matter of the Board's powers or jurisdiction to review decisions on major capital projects be submitted to this Court by way of stated case. Later in the proceedings, before there arose any issue on which the Board might be invited to decide the scope of its powers, the objectors asked the Board to state a case.

Although no issue requiring an answer to the question had actually arisen in the proceedings then before it, the Board did refer the following question to this Court for its opinion:

> "25. Pursuant to the provisions of Part IV of The Crown Corporations Public Review and Accountability and Consequential Amendments Act, does the Public Utilities Board have jurisdiction to approve, reject or vary Manitoba Hydro capital project plans such as plans to construct new generating stations, incidental to or as a condition of granting approval for changes in the prices charged for power?"

The Board dealt with the rate approval application then before it without reference to the issues raised by the question now asked of this Court.

The purpose of a statutory provision enabling an adjudicative tribunal, such as the Board, to state a case for the consideration of this Court is to enable the Board to ascertain the scope of its jurisdiction, or the proper law on a question before it, prior to it making a decision. Although an appeal might be taken from a decision made without a stated case, the appeal may not be decided until too late to avoid adverse affects on the public interest.

In my opinion, the statutory power to state a case is limited to stating a case on an issue which actually arises before the Board and which must be decided in order that a decision can be made. Otherwise, the Board may ask the Court's opinion on a matter which is not based on a real factual situation, but on assumptions or on speculation. Moreover, the question must be sufficiently specific that the one answer covers all possible factual situations that may arise. Abstract questions, interesting as they may be, should not be answered by a court.

The Board, in the matter before us, has anticipated an issue as to its jurisdiction. Although in a general way, I am inclined to the view expressed by my Lord, I am not prepared to say whether the Board lacks jurisdiction, in every possible circumstance, to disapprove a future project of Hydro by disallowing a current expense item. Nor am I prepared to say, on the material before us, whether the Board may review Hydro's plans for the future, but not indicate, in a rate adjustment, that it rejects a particular plan. It would be speculation on my part to foresee how that issue might arise and what I then might find the jurisdiction to be.

I am mindful of the language used, albeit in other circumstances, by the Lord Chancellor, Lord Halsbury, in advising His Majesty on behalf of the Privy Council in Attorney-General Ontario v. Hamilton Street Rlwy. Co., [1903] A.C. 524 at p. 529:

> ". . . [I]t would be inexpedient and contrary to the established practice of this Board to attempt to give any judicial opinion upon those questions. They are questions proper to be considered in concrete cases only; and opinions expressed upon the operation of the sections referred to, and the extent to which they are applicable, would be worthless for many reasons. They would be worthless as being speculative opinions on hypothetical questions. It would be contrary to principle, inconvenient, and inexpedient that opinions should be given upon such questions at all. When they arise, they must arise in concrete cases, involving private rights; and it would be extremely unwise for any judicial tribunal to attempt beforehand to exhaust all possible cases and facts which might occur to qualify, cut down, and override the operation of particular words when the concrete case is not before it."

For these reasons, I would decline to answer the question contained in the Stated Case.

TWADDLE J.A.

# Tab 8

| 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<br>August 25, 2008<br>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

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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 prior 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

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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

## 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

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| 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

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# 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.

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*

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# Tab 9

# MIPUG Undertaking #1

Update PUB/MIPUG-I-11 to show all 3 Manitoba Hydro financial ratios - CONSOLIDATED

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| **Interest Coverage - CONSOLIDATED** | | | | | |
| Net Income per IFF12 | 60 | 72 | 66 | 90 | 70 |
| *change per PUB/MIPUG-I-11* | *89* | *68* | *65* | *63* | *62* |
| Revised Net Income | 149 | 140 | 131 | 153 | 132 |
| Finance Expense plus Capitalized Interest | 628 | 640 | 720 | 812 | 943 |
| *change per PUB/MIPUG-I-11* | *1* | *2* | *4* | *7* | *9* |
| Revised Finance Expense | 629 | 642 | 724 | 819 | 952 |
| Ratio per MH Ex #68 | 1.10 | 1.11 | 1.09 | 1.11 | 1.07 |
| *Ratio Revised per PUB/MH-I-11* | 1.24 | 1.22 | 1.18 | 1.19 | 1.14 |
| **Cash Flow - CONSOLIDATED** | | | | | |
| ***Cash Receipts*** | | | | | |
| per IFF12 | 2,093 | 2,173 | 2,290 | 2,395 | 2,498 |
| *rate change per PUB/MIPUG-I-11* | *-26* | *-48* | *-48* | *-49* | *-49* |
| Revised Cash Rceipts | 2,067 | 2,125 | 2,242 | 2,346 | 2,449 |
| Interest Paid | -482 | -492 | -526 | -574 | -627 |
| *interest expense change* | *-1* | *-2* | *-4* | *-7* | *-9* |
| Revised Funds From Operations | -483 | -494 | -530 | -581 | -636 |
| **Total Change to Cash Flow** | **-27** | **-50** | **-52** | **-56** | **-58** |
| **Capital Coverage - CONSOLIDATED** | | | | | |
| ***Consolidated Capital Expenditures*** | | | | | |
| per MH Ex #38 | 470 | 581 | 607 | 566 | 454 |
| note: calculated per CEF12 | | | | | |
| all capital | 1379.1 | 1894.7 | 2041.5 | 2112.2 | 2258.5 |
| less: MNGT | 909.3 | 1351.6 | 1434.6 | 1535.3 | 1781.0 |
| consolidated capital expenditures | 469.8 | ***543.1*** | 606.9 | ***576.9*** | ***477.5*** |
| *diff from MH Ex #48* | *0.2* | *37.9* | *0.1* | *-10.9* | *-23.5* |
| Reported in IFF12 Cash Flow | 1420.0 | 1962.0 | 2061.0 | 2121.0 | 2254.0 |
| *diff from CEF12* | *-40.9* | *-67.3* | *-19.5* | *-8.8* | *4.5* |

# Tab 10

**MIPUG/MH I-36 (Revised based on IFF12)**

**Subject: PUB/MH I-150(a) from 2010 GRA: Drought Risk**

**a) Please update the schedules provided in PUB/MH I-150(a) from the 2010 GRA regarding the five year and seven year drought impacts.**

**ANSWER:**

The following drought impact summary is consistent with assumptions utilized in IFF12. With an onset of the 5-year drought beginning in fiscal year 2014/15, the impact on revenues and volumes is provided in the tables below as the difference between the average condition and the 5-year and 7-year droughts.

| | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | Total |
|---|---|---|---|---|---|---|
| **Impact of 5-Year Drought on Revenues (millions of $ CDN)** | | | | | | |
| **Revenue** | | | | | | |
| Extra-Provincial Sales | -140 | -146 | -148 | -155 | -179 | -767 |
| **Expense** | | | | | | |
| Water Rental | -24 | -33 | -16 | -18 | -14 | -105 |
| Fuel & Power Purchase | 124 | 371 | 36 | 124 | 24 | 680 |
| **Net Revenue (Excluding Finance Expense)** | -241 | -484 | -168 | -261 | -188 | -1341 |
| **Impact of 5-Year Drought on Energy (GWh/yr)** | | | | | | |
| Extra-Provincial Sales | -3816 | -3604 | -3499 | -3291 | -3521 | -17731 |
| Hydro Generation | -7535 | -10310 | -5108 | -5881 | -4786 | -33619 |
| Fuel & Power Purchase | 2487 | 2523 | 1395 | 2120 | 1100 | 9624 |

| | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | Total |
|---|---|---|---|---|---|---|---|---|
| **Impact of 7-Year Drought on Revenues (millions of $ CDN)** | | | | | | | | |
| **Revenue** | | | | | | | | |
| Extra-Provincial Sales | -59 | -63 | -149 | -178 | -209 | -235 | -28 | -921 |
| **Expense** | | | | | | | | |
| Water Rental | -10 | -9 | -16 | -27 | -33 | -30 | -5 | -131 |
| Fuel & Power Purchase | 13 | 2 | 36 | 279 | 451 | 391 | -17 | 1155 |
| **Net Revenue (Excluding Finance Expense)** | -62 | -56 | -169 | -429 | -626 | -596 | -6 | -1945 |
| **Impact of 7-Year Drought on Energy (GWh/yr)** | | | | | | | | |
| Extra-Provincial Sales | -2166 | -2220 | -3516 | -3587 | -3804 | -3913 | -1303 | -20509 |
| Hydro Generation | -3280 | -3038 | -5127 | -8526 | -10371 | -9409 | -1943 | -41693 |
| Fuel & Power Purchase | 1038 | 770 | 1396 | 2448 | 2409 | 2409 | 676 | 11144 |

**<u>MIPUG/MH I-36 (Revised based on IFF12)</u>**

**Subject: PUB/MH I-150(a) from 2010 GRA: Drought Risk**

**b) Please provide an IFF 20 year Electric Operations scenario (Operating Statement, Balance Sheet and Cash Flow) for the 5 year drought Risk Analysis cited at page 16 of IFF11-2 ($1.570 billion reduction in Retained Earnings by 2017/18). Please include the annual financial targets for each year of the scenario.**

**<u>ANSWER</u>:**

The attached schedules have been revised to reflect IFF12 assumptions for the 5-year drought sensitivity.

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED OPERATING STATEMENT**
**(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 | 204 | 235 | 258 | 280 | 262 | 464 | 711 | 839 |
| Other | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 |
| | 1,702 | 1,768 | 1,696 | 1,804 | 1,906 | 2,017 | 2,096 | 2,390 | 2,743 | 2,981 |
| **EXPENSES** | | | | | | | | | | |
| Operating and Administrative | 455 | 471 | 544 | 556 | 567 | 590 | 601 | 617 | 639 | 653 |
| Finance Expense | 452 | 444 | 495 | 545 | 631 | 717 | 848 | 873 | 1,099 | 1,202 |
| Depreciation and Amortization | 399 | 430 | 372 | 391 | 410 | 447 | 494 | 508 | 580 | 619 |
| Water Rentals and Assessments | 117 | 116 | 86 | 77 | 95 | 92 | 96 | 113 | 121 | 126 |
| Fuel and Power Purchased | 143 | 166 | 305 | 563 | 244 | 346 | 255 | 231 | 253 | 264 |
| Capital and Other Taxes | 88 | 96 | 101 | 110 | 119 | 129 | 136 | 143 | 149 | 158 |
| Corporate Allocation | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 1,664 | 1,732 | 1,912 | 2,251 | 2,074 | 2,329 | 2,438 | 2,494 | 2,851 | 3,031 |
| Non-controlling Interest | 14 | 24 | 21 | 16 | 13 | 10 | 6 | 3 | 4 | (3) |
| **Net Income** | 53 | 60 | (194) | (432) | (156) | (302) | (336) | (101) | (105) | (53) |
| * Additional General Consumers Revenue | | | | | | | | | | |
| Percent Increase | 0.00% | 3.50% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% |
| Cumulative Percent Increase | 0.00% | 3.50% | 7.59% | 11.84% | 16.26% | 20.85% | 25.62% | 30.58% | 35.74% | 41.10% |
| **Financial Ratios** | | | | | | | | | | |
| Equity | 25% | 22% | 15% | 11% | 9% | 7% | 5% | 4% | 3% | 3% |
| Interest Coverage | 1.09 | 1.10 | 0.72 | 0.46 | 0.84 | 0.71 | 0.71 | 0.92 | 0.92 | 0.96 |
| Capital Coverage | 1.09 | 0.89 | 0.35 | (0.05) | 0.71 | 0.49 | 0.46 | 1.29 | 1.24 | 1.38 |

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED OPERATING STATEMENT**
**(In Millions of Dollars)**

| *For the year ended March 31* | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---|---|---|---|---|---|---|---|---|---|
| **REVENUES** | | | | | | | | | | |
| General Consumers | | | | | | | | | | |
| at approved rates | 1,529 | 1,552 | 1,575 | 1,598 | 1,621 | 1,644 | 1,669 | 1,693 | 1,717 | 1,741 |
| additional* | 713 | 814 | 921 | 1,035 | 1,155 | 1,283 | 1,419 | 1,564 | 1,716 | 1,878 |
| Extraprovincial | 873 | 863 | 851 | 937 | 1,209 | 1,288 | 1,304 | 1,312 | 1,331 | 1,341 |
| Other | 17 | 18 | 18 | 18 | 19 | 19 | 19 | 20 | 20 | 21 |
| | 3,133 | 3,246 | 3,366 | 3,588 | 4,003 | 4,234 | 4,411 | 4,588 | 4,784 | 4,980 |
| **EXPENSES** | | | | | | | | | | |
| Operating and Administrative | 667 | 681 | 696 | 727 | 741 | 757 | 775 | 789 | 805 | 823 |
| Finance Expense | 1,199 | 1,205 | 1,204 | 1,330 | 1,585 | 1,776 | 1,751 | 1,719 | 1,734 | 1,677 |
| Depreciation and Amortization | 630 | 637 | 645 | 690 | 770 | 828 | 837 | 849 | 880 | 893 |
| Water Rentals and Assessments | 128 | 127 | 126 | 134 | 147 | 151 | 151 | 151 | 152 | 153 |
| Fuel and Power Purchased | 278 | 292 | 318 | 281 | 277 | 291 | 304 | 318 | 328 | 341 |
| Capital and Other Taxes | 167 | 176 | 183 | 188 | 192 | 193 | 196 | 198 | 203 | 202 |
| Corporate Allocation | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 |
| | 3,076 | 3,127 | 3,180 | 3,358 | 3,720 | 4,004 | 4,022 | 4,031 | 4,109 | 4,096 |
| Non-controlling Interest | (5) | (10) | (13) | (9) | (11) | (14) | (16) | (20) | (22) | (25) |
| **Net Income** | 51 | 109 | 173 | 221 | 273 | 216 | 372 | 537 | 653 | 859 |
| * Additional General Consumers Revenue | | | | | | | | | | |
| Percent Increase | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% | 3.95% |
| Cumulative Percent Increase | 46.68% | 52.47% | 58.49% | 64.75% | 71.26% | 78.03% | 85.06% | 92.37% | 99.97% | 107.86% |
| **Financial Ratios** | | | | | | | | | | |
| Equity | 3% | 3% | 4% | 4% | 5% | 6% | 7% | 9% | 11% | 13% |
| Interest Coverage | 1.03 | 1.07 | 1.10 | 1.12 | 1.15 | 1.12 | 1.21 | 1.30 | 1.37 | 1.50 |
| Capital Coverage | 1.43 | 1.53 | 1.68 | 1.95 | 2.48 | 2.17 | 2.32 | 2.48 | 2.59 | 3.45 |

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED BALANCE SHEET**
**(In Millions of Dollars)**

| ***For the year ended March 31*** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|---|---|---|---|---|
| **ASSETS** | | | | | | | | | | |
| Plant in Service | 15,374 | 16,435 | 17,104 | 18,255 | 18,807 | 22,348 | 22,781 | 25,825 | 29,899 | 30,432 |
| Accumulated Depreciation | (5,173) | (5,536) | (5,856) | (6,223) | (6,622) | (7,064) | (7,553) | (8,057) | (8,632) | (9,248) |
| Net Plant in Service | 10,201 | 10,899 | 11,248 | 12,032 | 12,185 | 15,285 | 15,228 | 17,769 | 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 | 1,391 | 1,578 | 1,798 | 2,027 | 1,857 | 1,990 | 2,067 | 1,728 |
| Goodwill and Intangible Assets | 180 | 165 | 150 | 134 | 123 | 113 | 105 | 98 | 92 | 88 |
| Regulated Assets | 231 | 225 | - | - | - | - | - | - | - | - |
| | 14,590 | 15,902 | 16,988 | 18,873 | 20,900 | 22,864 | 24,068 | 25,278 | 26,463 | 27,820 |
| **LIABILITIES AND EQUITY** | | | | | | | | | | |
| Long-Term Debt | 9,428 | 11,199 | 12,941 | 15,214 | 17,305 | 19,278 | 21,373 | 22,339 | 23,662 | 25,213 |
| Current and Other Liabilities | 2,086 | 1,569 | 1,787 | 1,875 | 2,001 | 2,317 | 1,774 | 2,133 | 2,115 | 1,996 |
| Contributions in Aid of Construction | 336 | 345 | 350 | 355 | 359 | 369 | 375 | 382 | 389 | 396 |
| Retained Earnings | 2,442 | 2,502 | 2,051 | 1,619 | 1,463 | 1,161 | 825 | 723 | 619 | 566 |
| Accumulated Other Comprehensive Income | 299 | 287 | (142) | (189) | (229) | (260) | (279) | (299) | (322) | (350) |
| | 14,590 | 15,902 | 16,988 | 18,873 | 20,900 | 22,864 | 24,068 | 25,278 | 26,463 | 27,820 |
| Equity Ratio | 25% | 22% | 15% | 11% | 9% | 7% | 5% | 4% | 3% | 3% |

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED BALANCE SHEET**
**(In Millions of Dollars)**

| *For the year ended March 31* | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---|---|---|---|---|---|---|---|---|---|
| **ASSETS** | | | | | | | | | | |
| Plant in Service | 30,962 | 31,525 | 32,212 | 37,906 | 43,040 | 44,544 | 45,284 | 45,838 | 47,824 | 48,551 |
| Accumulated Depreciation | (9,876) | (10,512) | (11,157) | (11,848) | (12,618) | (13,446) | (14,284) | (15,135) | (16,016) | (16,911) |
| Net Plant in Service | 21,086 | 21,013 | 21,055 | 26,059 | 30,422 | 31,098 | 31,000 | 30,703 | 31,808 | 31,640 |
| Construction in Progress | 6,576 | 8,048 | 9,200 | 5,077 | 1,364 | 737 | 1,070 | 1,513 | 464 | 539 |
| Current and Other Assets | 1,820 | 2,169 | 2,423 | 2,291 | 2,605 | 2,934 | 3,388 | 3,745 | 3,850 | 5,006 |
| Goodwill and Intangible Assets | 85 | 83 | 82 | 82 | 81 | 80 | 79 | 78 | 77 | 76 |
| Regulated Assets | - | - | - | - | - | - | - | - | - | - |
| | 29,567 | 31,313 | 32,760 | 33,508 | 34,472 | 34,848 | 35,537 | 36,040 | 36,199 | 37,261 |
| **LIABILITIES AND EQUITY** | | | | | | | | | | |
| Long-Term Debt | 27,415 | 29,217 | 29,971 | 30,973 | 31,575 | 31,715 | 31,866 | 31,369 | 31,559 | 31,332 |
| Current and Other Liabilities | 1,497 | 1,325 | 1,838 | 1,355 | 1,437 | 1,448 | 1,605 | 2,060 | 1,368 | 1,789 |
| Contributions in Aid of Construction | 403 | 411 | 418 | 426 | 433 | 441 | 449 | 457 | 466 | 474 |
| Retained Earnings | 617 | 726 | 900 | 1,120 | 1,393 | 1,609 | 1,982 | 2,519 | 3,172 | 4,031 |
| Accumulated Other Comprehensive Income | (366) | (366) | (366) | (366) | (366) | (366) | (366) | (366) | (366) | (366) |
| | 29,567 | 31,313 | 32,760 | 33,508 | 34,472 | 34,848 | 35,537 | 36,040 | 36,199 | 37,261 |
| Equity Ratio | 3% | 3% | 4% | 4% | 5% | 6% | 7% | 9% | 11% | 13% |

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED CASH FLOW STATEMENT**
**(In Millions of Dollars)**

| *For the year ended March 31* | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|
| **OPERATING ACTIVITIES** | | | | | | | | | | |
| Cash Receipts from Customers | 1,692 | 1,768 | 1,696 | 1,804 | 1,906 | 2,017 | 2,096 | 2,390 | 2,743 | 2,981 |
| Cash Paid to Suppliers and Employees | (782) | (822) | (1,010) | (1,279) | (996) | (1,126) | (1,055) | (1,069) | (1,126) | (1,162) |
| Interest Paid | (466) | (476) | (510) | (575) | (647) | (755) | (895) | (910) | (1,152) | (1,246) |
| Interest Received | 28 | 17 | 24 | 26 | 31 | 39 | 41 | 39 | 35 | 33 |
| | 472 | 486 | 200 | (24) | 294 | 175 | 187 | 450 | 500 | 606 |
| **FINANCING ACTIVITIES** | | | | | | | | | | |
| Proceeds from Long-Term Debt | 1,036 | 1,970 | 1,960 | 2,590 | 2,580 | 2,780 | 2,390 | 1,590 | 1,980 | 1,990 |
| Sinking Fund Withdrawals | 129 | 393 | 102 | 26 | - | 23 | 416 | 200 | 285 | 679 |
| Retirement of Long-Term Debt | (180) | (808) | (176) | (312) | (347) | (530) | (829) | (306) | (635) | (679) |
| Other | (42) | (7) | (17) | (19) | (17) | (13) | (24) | (13) | (34) | (9) |
| | 943 | 1,548 | 1,870 | 2,286 | 2,217 | 2,260 | 1,953 | 1,471 | 1,596 | 1,981 |
| **INVESTING ACTIVITIES** | | | | | | | | | | |
| Property, Plant and Equipment, net of contributions | (1,381) | (1,922) | (2,028) | (2,083) | (2,214) | (2,174) | (1,863) | (1,666) | (1,799) | (2,299) |
| Sinking Fund Payment | (107) | (208) | (124) | (188) | (173) | (227) | (232) | (240) | (255) | (343) |
| Other | (21) | (20) | (21) | (20) | (32) | (42) | (28) | (28) | (33) | (38) |
| | (1,509) | (2,151) | (2,173) | (2,291) | (2,420) | (2,443) | (2,123) | (1,935) | (2,087) | (2,679) |
| **Net Increase (Decrease) in Cash** | (94) | (117) | (104) | (30) | 91 | (8) | 17 | (14) | 9 | (93) |
| **Cash at Beginning of Year** | 43 | (51) | (168) | (272) | (301) | (210) | (218) | (201) | (215) | (206) |
| **Cash at End of Year** | (51) | (168) | (272) | (301) | (210) | (218) | (201) | (215) | (206) | (299) |

**ELECTRIC OPERATIONS - MH12 5-YEAR DROUGHT BEGINNING 2014/15**
**PROJECTED CASH FLOW STATEMENT**
**(In Millions of Dollars)**

| *For the year ended March 31* | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---|---|---|---|---|---|---|---|---|---|---|
| **OPERATING ACTIVITIES** | | | | | | | | | | |
| Cash Receipts from Customers | 3,133 | 3,246 | 3,366 | 3,588 | 4,003 | 4,234 | 4,411 | 4,588 | 4,784 | 4,980 |
| Cash Paid to Suppliers and Employees | (1,198) | (1,233) | (1,276) | (1,280) | (1,304) | (1,336) | (1,368) | (1,394) | (1,422) | (1,450) |
| Interest Paid | (1,222) | (1,220) | (1,233) | (1,370) | (1,635) | (1,849) | (1,834) | (1,818) | (1,854) | (1,771) |
| Interest Received | 18 | 20 | 31 | 36 | 46 | 63 | 81 | 90 | 103 | 86 |
| | 731 | 813 | 888 | 974 | 1,110 | 1,112 | 1,290 | 1,467 | 1,611 | 1,846 |
| **FINANCING ACTIVITIES** | | | | | | | | | | |
| Proceeds from Long-Term Debt | 2,170 | 1,780 | 1,190 | 990 | 590 | 190 | 390 | 150 | 190 | 190 |
| Sinking Fund Withdrawals | 160 | - | - | 450 | - | - | 60 | 250 | 700 | 13 |
| Retirement of Long-Term Debt | (432) | - | - | (450) | - | - | (60) | (220) | (700) | (13) |
| Other | (1) | (0) | (1) | (1) | (0) | 0 | 2 | 2 | 3 | (16) |
| | 1,897 | 1,780 | 1,189 | 989 | 590 | 190 | 392 | 182 | 193 | 174 |
| **INVESTING ACTIVITIES** | | | | | | | | | | |
| Property, Plant and Equipment, net of contributions | (2,268) | (2,018) | (1,822) | (1,553) | (1,403) | (858) | (1,054) | (977) | (918) | (781) |
| Sinking Fund Payment | (268) | (289) | (317) | (342) | (343) | (364) | (380) | (394) | (400) | (383) |
| Other | (29) | (32) | (25) | (25) | (28) | (26) | (26) | (26) | (26) | (26) |
| | (2,565) | (2,339) | (2,164) | (1,921) | (1,773) | (1,247) | (1,460) | (1,397) | (1,343) | (1,190) |
| **Net Increase (Decrease) in Cash** | 63 | 254 | (87) | 42 | (73) | 55 | 222 | 251 | 460 | 830 |
| **Cash at Beginning of Year** | (299) | (236) | 18 | (69) | (27) | (101) | (46) | 176 | 428 | 888 |
| **Cash at End of Year** | (236) | 18 | (69) | (27) | (101) | (46) | 176 | 428 | 888 | 1,718 |

**MIPUG/MH II-2 (Revised based on IFF12)**

**Subject:** **MIPUG/MH I-2(a), IFF12**

**d) Please indicate if IFF12 is expected to include different assumptions regarding the April 1, 2013 rate increase? If so, is it expected that this would further change Hydro's requested approvals in the current application?**

**ANSWER:**

The table below summarizes the key assumptions included in IFF12 with a comparison to IFF11-2. IFF12 reflects the same 3.5% rate increase effective April 1, 2013 that was presented in IFF11-2. Because Hydro's requested approvals reflect the appropriate balance between fiscal responsibility and customer sensitivity, the change in assumptions would not change Hydro's requested approvals in the current application.

| | 2013/14 ($Millions) | |
|---|---|---|
| | **IFF12** | **IFF11-2** |
| Electricity Rate Increase | 3.50% | 3.50% |
| Manitoba Consumers Price Index | 1.80% | 2.00% |
| Canadian Short-Term Debt Rate[1] | 1.30% | 2.20% |
| Canadian Long-Term Debt Rate[1] | 3.30% | 4.05% |
| Domestic Load Growth | 3.10% | 3.00% |
| General Consumers Sales (GW.h) | 22,330 | 22,261 |
| Hydraulic Generation (GW.h) | 35,414 | 30,744 |
| Average Unit Export Sales ($/MW.h) | $32.61 | $42.50 |
| Net Extraprovincial Revenues | $62 | $93 |
| Capital Expenditures | $1,859 | $1,518 |
| IFRS Impacts - Net Income | - | ($14) |
| IFRS Impacts - Retained Earnings | - | ($361) |
| | | |
| Electric Net Income (before non-controlling interest) | $36 | $69 |
| Debt/Equity Ratio | 78:22 | 82:18 |
| Interest Coverage Ratio | 1.11 | 1.12 |
| Capital Coverage Ratio | 0.89 | 1.18 |
| Electric Retained Earnings | $2,502 | $2,203 |

[1] Excludes the Provincial guarantee fee.

# Tab 11

Manitoba Hydro

PO Box 815 • Winnipeg, Manitoba Canada • R3C 2P4
Street Location for DELIVERY: 22nd floor 360 Portage Ave
Telephone / N° de téléphone : (204) 360-3946 • Fax / N° de télécopieur : (204) 360-6147
pjramage@hydro.mb.ca

August 31, 2012

Mr. H. Singh
Executive Director
Public Utilities Board
400-330 Portage Avenue
Winnipeg, Manitoba
R3C 0C4

Dear Mr. Singh:

**RE: Manitoba Hydro 2012/13 & 2013/14 General Rate Application- Rate Schedules to be Effective September 1, 2012**

On August 29, 2012, the Public Utilities Board of Manitoba ("PUB") issued Order 116/12 approving, on an interim basis, Manitoba Hydro's request for a 2.5% across-the-board rate increase for all customer classes effective September 1, 2012, and a 6.5% rate increase on the full cost portion of the rate applicable to General Service and Government customers in four remote communities served by diesel generation.

In accordance with Board Order 116/12, Manitoba Hydro filed rate schedules with the PUB on August 29, 2012. The rate schedules filed August 29, 2012 were based on the narrative description of "Proposed Rate Changes By Customer Class" located at Tab 10, Section 10.2 of Manitoba Hydro's 2012/13 & 2013/14 General Rate Application and were in accordance with the rate schedules located in Appendix 10.2 of the Application. Subsequently, Manitoba Hydro received direction from PUB counsel regarding the interpretation of Order 116/12:

- No change in the basic charge for all rate classes;
- A maximum increase of 2.5% in the energy charge for all rate classes; and,
- The remaining revenue to be recovered from increases to demand charges up to a maximum of 2.5%.

Manitoba Hydro is therefore enclosing revised Proof of Revenue schedules, Rate Schedules and Bill Comparisons for rates effective September 1, 2012, reflecting the PUB's direction as outlined above. The Proof of Revenue schedules demonstrate the difference in revenue by rate class between the rate schedules filed in Tab 10 of the Application, and the rates schedules enclosed, due to the changes directed by the PUB.

Manitoba Hydro notes that the PUB's directed changes will result in rates that produce approximately $0.7 million less revenue on an annualized basis than was originally applied for, which amounts to a 2.4% general revenue increase.

Due to the revisions directed by the Board to the Rate Schedules effective September 1, 2012, Manitoba Hydro will not be in a position to file Rate Schedules for the proposed April 1, 2013 rate increase until later in September 2012. Should you have any questions with respect to the foregoing, please do not hesitate to contact the writer at 360-3946.

Yours truly,

**MANITOBA HYDRO LAW DEPARTMENT**
Per:

M Boyd

f **PATRICIA J. RAMAGE**
Barrister and Solicitor

PJR/
encl.

Tab 12

**MANITOBA HYDRO**

**2012/13 & 2013/14 ELECTRIC GENERAL RATE APPLICATION**

**UNDERTAKING PROVIDED BY: V.WARDEN**

**Manitoba Hydro Undertaking # 47**

Manitoba Hydro to provide an explanation of the escalation in construction costs for Wuskwatim from the initial estimate to the final actual costs.

**Response:**

Wuskwatim capital costs (including transmission) increased from the initial estimate of $988 million in CEF03 to $1.771 billion in CEF12. Overall, the response to CAC/MH I-73(c) indicated that the Wuskwatim project experienced cost increases which were driven to a large degree by the impact of massive international investment in infrastructure which placed increased demand on commodities such as steel, copper, fuel and cement, as well as on heavy machinery and equipment manufacturers, engineering consultants, construction contractors and construction workers. In addition, the in-service date was deferred 3 years from September 2009 to June 2012 resulting in increased costs associated with the extended regulatory and studies and investigation and construction periods as well as increased interest and escalation.

The following table provides a cost breakdown of the increases to the Wuskwatim project:

| Cost Breakdown | Increase | Explanation for change |
|---|---|---|
| Pre-construction 2003 to 2006 | $224 million | *Extended duration of federal and provincial approvals as well as PDA and NCN ratification resulting in the deferral of the construction start date, extended duration of construction, and the 3-year in-service date deferral.* |
| General civil contract | $178 million | *Lower trade labour productivity, higher* |

| | | |
|---|---|---|
| | | *labour rates, increased bedrock overbreak, and increased engineering.* |
| Turbines & generators | $19 million | *Higher labor rates, extra work, claims due to schedule delays.* |
| Site preparation | $32 million | *Increased quantities (primarily rock) due to unknown site conditions, increased camp accommodations and operation and maintenance costs.* |
| Catering | $22 million | *Higher camp occupancy and higher offsets required for work performed through a direct negotiated contract.* |
| Electrical & Mechanical | $38 million | *Additions to scope of work and engineering, and contractor cost claims due to schedule and access delays.* |
| Gates, Guides & Hoists | $20 million | *Extra work and contractor cost claims due to schedule delays.* |
| Staffhouse | $30 million | *Addition of staffhouse to meet staffing requirements* |
| Transmission | $109 million | *Increases in market costs experienced for labour, materials and contracts partially offset by reductions in contingency, project management and contract costs nearing construction completion.* |
| Other | $47 million | *Actual escalation in excess of original estimated inflation and other cost increases* |
| Interest allocated to construction capital | $64 million | *Due to increases in costs and deferral of in-service date partially offset by lower interest rates* |
| Total increase | $783 million | |

Further descriptions of the increases or decreases from forecast-to-forecast can be found in the responses to CAC/MH I-51(d), MIPUG/MH I- 28(b), and PUB/MH II-66 from the current GRA, as well as PUB/MH I-65 from the 2010 GRA.

Manitoba Hydro undertook regular process reviews during the pre-construction and construction phases of the Wuskwatim Project. The outcomes from these reviews were used to adapt the planning and construction processes for the Wuskwatim Project to control project scope, schedule and budget. The process reviews continue to be applied to the Keeyask and Conawapa Projects' planning, construction and cost estimating processes to realize the same type of benefits.

a. Pre-Construction Phase

Two of the most significant differences from the period in which the last hydro project was developed (Limestone Generating Station) to the period in which the Wuskwatim Generating Station was developed were:

- the Wuskwatim Project is the first project in which Manitoba Hydro has engaged in a partnership framework, and
- The significant increase in the degree of rigour required environmentally as compared to the past, under *The Canadian Environmental Assessment Act* and *The Environment Act* (Manitoba) both of which came into existence after the Limestone Generating Station. A related effect was that, as new legislation, there was no experience by the federal and provincial regulators in Manitoba, which added another dimension to project scheduling.

The new broad tasks related to pre-construction and the partnership framework were integrated into Manitoba Hydro's previous planning/regulatory approval/construction process so that the project could be implemented successfully. Manitoba Hydro adapted its organizational structure to fit the new requirements and applied best project management practices where possible.

Some of the notable observations from the pre-construction project review processes are as follows:

- Significantly more engineering and environmental information is required earlier in the pre-construction process in order to support process and informational needs for both the partnership framework and for the pre-construction activities.
- Early inputs from and engagement with stakeholders (regulators and affected communities) is critical to ensure the project scope is well defined, understood and agreed to by the relevant parties.
- Preparation and endorsement of agreements to define development arrangements and adverse effects are time consuming and difficult to schedule, taking much longer than anticipated. Timing needs to be managed carefully with engineering, regulatory and procurement processes.
- Moving supporting infrastructure design and construction activities (such as those for access roads and camps) out of the generation project and into separate earlier projects. The primary reason for doing this was to avoid difficulties experienced on the Wuskwatim Project with a First Nation joint venture partner. Advancing infrastructure work ahead of the generating station provides benefits to First Nations, such as increased and advanced employment, training and capacity-building opportunities, as well as reducing financial risks to the First Nation joint venture partners. In addition there are benefits to the generation project by advancing the in-service date and reducing construction delay risks.
- The complexity of the pre-construction work, including the partnership framework, requires many of the project management processes and mechanisms utilized as standard practice for the construction phase of large hydro projects.

b. Construction Phase

Experience gained from the construction phase of the Wuskwatim project are also being implemented for the benefit of the Keeyask and Conawapa projects:

- Craft labour and heavy construction market research is undertaken. The findings are utilized in improving the recruitment and retention of craft labour workers to major northern project sites and in customizing contracting strategies for particular work packages associated with the projects,
- New approaches to contract frameworks (for example, “target price” contracts) are utilized to improve alignment with prevailing market

conditions, and to manage risks associated with certain aspects of the major projects, attract contractor interest, and provide incentives for contractor performance,

- The design and construction of camps have evolved significantly to provide craft workers with remote site living conditions that are on par with those of other major project sites across Canada, improving craft labour recruitment, retention and productivity.
- Strategies for management of final designs include early input from contractors to maximize opportunities for optimization of design cost-effectiveness and constructability.
- Key staff from the Wuskwatim project continue to be transitioned to leadership and other roles on other major projects, including Keeyask and Conawapa.

c. Keeyask & Conawapa Estimates

It was recognized that several of the underlying drivers for the increase in the estimate for the Wuskwatim project during construction may continue throughout much of the period during which Keeyask and Conawapa will be constructed, and that the rate of construction cost escalation will likely exceed the rate of increase in the CPI.

The recent updates to the Keeyask & Conawapa total project costs are the result of re-estimates that incorporate experiences from the Wuskwatim project. This includes updates to labour, material and equipment rates as well as updates to the assumed labour productivity.

Additionally, management reserve funds have been included in the current estimates for Keeyask and Conawapa. Management reserve is intended to address major risk items not addressed through the normal scope of contingency. In the case of Keeyask and Conawapa the increased risks related to labour productivity and escalation are addressed through use of management reserve funds due to the magnitude of the cost variation they may cause. The labour reserve represents potential additional costs associated with labour productivity and cumulative impacts. The escalation reserve represents potential additional costs to the project associated with cost escalation greater than Canadian CPI.

# Tab 13

**PUB/MH I-141**

**Reference: Curtailable Rates Program (CRP)/2011/12 PRP**

**a) Program Limits**

**Please provide details on MH’s CRP limit of 180MW including:**

**? ___MW spinning reserve**
**? ___MW non-spinning reserve**
**? ___MW planning reserve**

**ANSWER:**

Manitoba Hydro currently relies on up to 50 MW of Option ‘R’ Curtailable Load to provide non-spinning reserve.

Option ‘A’ Load is relied upon to re-establish contingency reserves and to respond to emergencies. Manitoba Hydro is proposing a limit of 180 MW Option ‘A’ load, assuming Option ‘C’ Load converts to Option ’A’. If not, the proposed limit on Option ‘A’ load is 150 MW.

The Mid-Continent Area Power Pool Generation Reserve Sharing Pool retired on January 1, 2010. As a result, MH’s Option ‘A’ load was no longer necessary to fulfill obligations to meeting after-the-fact reporting of capacity. However, MH anticipates that there will be a capacity market developing in the MISO Market. At that time, Option ‘A’ Load will be used to support term capacity sale obligations.

In fulfilling Manitoba Hydro planning reserves, Manitoba Hydro does not rely on any curtailable load in its long-term resource adequacy plans because CRP customers are not obligated to make long-term commitments. However, CRP load is considered available to protect firm load in the mid-term planning horizon.

Manitoba Hydro does not rely on curtailable load to provide spinning reserves; however the CRP does provide reliability and economic benefits to Manitoba Hydro.

Please also see Manitoba Hydro’s response to CAC/MH I-84(e).

**CAC/MH I-84**

**Subject:** **Proposed Rates and Customer Impacts**
**Reference:** **Tab 10, pages 6 – 7**
**Tab 10, Appendix 10.4**

**c) Why is Manitoba Hydro reducing the maximum amount of curtailable load under Option "A" and Option "R"?**

**ANSWER:**

As of January 1, 2010 Manitoba Hydro entered into the MISO – MH Contingency Reserve Sharing Group Agreement which reduced Manitoba Hydro's need to carry contingency reserves. In addition, with the demise of the MAPP Generation Reserve Sharing Pool, there is no longer a short term summer capacity market into which Manitoba Hydro could sell its Option A load. As a result of these changes, the full amount of curtailable load required under Options A and R is no longer required.

At some time in the future there may be a requirement to increase the amount of curtailable load again. In order to avoid alienating the existing customers by reducing the credit and potentially losing them as subscribers, Manitoba Hydro chose instead to reduce the amount of curtailable load required.

**PUB/MH II-99**

**Reference: PUB/MH I-141 (a),(b),(c),& (d) Curtailable Rate Program**

**b) Please explain why MH sees a reduced value in the CRP.**

**ANSWER:**

The reduced value in the CRP is due to the following reasons:

**Greater Certainty in Contingency Reserve Requirements**

The CRP Option 'R' Curtailable Load can be used to supply supplemental contingency reserves. As of January 1st, 2010, Manitoba Hydro's supplemental contingency reserve obligation (90 MW) is defined by the MH-MISO Contingency Reserve Sharing Group (CRSG) Agreement with MISO.

Given that this agreement has no sunset date, and that reserve sharing is mutually beneficial, MH is confident that its reserve obligation will not increase in the foreseeable future. Prior to the MH-MISO CRSG, there was greater uncertainty about MH's long-term contingency reserve requirements (beyond a year) because of: the dissolving of the Mid-Continent Area Power Pool (MAPP) Generation Reserve Sharing Pool, movements of some former MAPP GRSP members to other contingency reserve sharing groups, significant changes in the MISO region with the development of the MISO Ancillary Services Market, and a sunset date to the predecessor contingency reserve sharing group. For these reasons, prior to January 1, 2010 there was greater value in having additional Option 'R' reserve in place, should MH's reserve requirement increase significantly.

Please also see Manitoba Hydro's response to MIPUG/MH I-44(h) for reference to the MH-MISO CRSG.

**Retirement of the MAPP GRSP**

As discussed above and in PUB/MH I-141(a), the MAPP GRSP retired on January 1, 2010. Prior to this Option 'A' and Option 'C' loads could be used to manage Manitoba Hydro's capacity obligations. An imbalance would have subjected Manitoba Hydro to significant financial penalties. With the MAPP GRSP retiring, this benefit from curtailable load ended.

**Near-term Capacity Surplus in Export Market**

The value of Option ‘A’ Load in the near term is reduced due to less export demand for capacity. Industrial load reductions and reduced load growth projections related to the continued economic downturn have resulted in near-term capacity surplus in MH’s export market regions. As a result, the value of capacity in the near-term has diminished which has added downward pressure on the value of Option ‘A’ load to MH.

**Notification Timing Requirements**

The value of Option ‘C’ load is less relative to Option ‘R’ and Option ‘A’ due to its longer notification timing requirements. There is greater reliability value to having shorter notification requirements for curtailable load. Option ‘C’ load requires one hour notice vs. Option ‘R’ and Option ‘A’ load which only requires five minute notice.

MH will typically achieve its overall hourly supply and demand balance using the export markets. MH can adjust for *anticipated* deficiencies using the MISO real-time market, where the bid window closes 30 minutes prior to the time of delivery. After this bid window closes, deficiencies must be addressed using reliability measures, such as calling upon uneconomic generation or exercising curtailable load. However, Option ‘C’ load is of limited value because the notification window is longer.

# Tab 14

generation resources results in a persistent shortfall starting in 2011/12 as shown in the table provided in Manitoba Hydro's response to MIPUG/MH II-16(b). These shortfalls would be filled by the Wuskwatim G.S.

## 7.0 RATE OPTIONS

The purpose of this section is to address Mr. Bowman's evidence with respect to the Curtailable Rate Program (CRP).

### 7.1 Curtailable Rate Program

Mr. Bowman recommends that the PUB reject Manitoba Hydro's proposed reductions to caps on CRP Option 'A' or 'R' load.

Manitoba Hydro asserts that there is ample evidence that the CRP industrial customers have benefited from the program and existing participants will continue to do so within the proposed caps. Manitoba Hydro explained in PUB/MH II-99(b) why the proposed reductions to Option 'A' and 'R' caps are justified. The following sections expand on Manitoba Hydro's justification for reducing these caps. The following sections also respond to statements provided in Mr. Bowman's written evidence and IR responses.

#### 7.1.1 Low Capacity Prices in Neighbouring Markets due to Capacity Surpluses

Current export market capacity prices continue to be soft due to installed capacity surpluses. MISO's recent Voluntary Capacity Auction (VCA) prices, expressed in $USD/kW/month are provided in table (Figure 11) below. These prices are only a very small fraction of the discount afforded to Option 'A' and Option 'R' load. For 2010/11 period, the VCA cleared at an average price below $0.001/kW month. This is less than 0.1% of the marginal value of capacity used to establish CRP rates. Under these conditions, conversion of additional Firm Service industrial load to the CRP rates would result in a net loss to Manitoba Hydro.

Figure 11

| MISO Voluntary Capacity Auction clearing prices for 2009/10 and 2010/11 expressed in $US/kW/month. | | |
|---|---|---|
| | **2009/10** | **2010/11** |
| April | $0.00035 | $0.00025 |
| May | $0.00035 | $0.00025 |
| June | $0.00500 | $0.00035 |
| July | $0.01000 | $0.00050 |
| August | $0.01000 | $0.00028 |
| September | $0.00300 | $0.00025 |
| October | $0.00025 | $0.00001 |
| November | $0.00025 | $0.00002 |
| December | $0.00100 | $0.00010 |
| January | $0.00250 | $0.00020 |
| February | $0.00094 | $0.00019 |
| March | $0.00050 | $0.00010 |
| **Average ($US/kW/month)** | $0.00285 | $0.00021 |

### 7.1.2 No Long-term Commitment to Provide Curtailment Service

Manitoba Hydro does not rely on curtailable load in its long-term resource adequacy plans because CRP customers are not obligated to make long-term commitments. Despite this fact, participants in the CRP program benefit from rates that are discounted based on Manitoba Hydro's *long-term* value of capacity. The CRP applies a stable discount to Option 'A' and Option 'R' customers equivalent to 70% of the Reference Discount, which represents Manitoba Hydro's long-term marginal value of capacity[5]. The Reference Discount for 2012/13 is $3.21/kW/month which is orders of magnitude above the current capacity market prices provided in Figure 11.

Manitoba Hydro asserts that the practice of applying a discount based on its long-term value of capacity is already consistent with Mr. Bowman's statement, "it is appropriate to consider future price forecast in the assessment of the CRP value."[6] Manitoba Hydro is not proposing to reduce the discount to CRP customers, rather it recognizes the long-term

[5] The value of CRP capacity is based on 42% of the annualized carrying cost of a simple cycle combustion turbine.

[6] Pre-filed Testimony of P. Bowman for the 2012/13 and 2013/14 GRA submitted on behalf of MIPUG, November 16, 2012, p.5-5.

value CRP load provides and the investments existing CRP customers may have made to be capable of providing this service, and plans to continue the program at the current subscription levels. Manitoba Hydro asserts that, contrary to the cautionary statements expressed by Mr. Bowman[7], continuance of the discount offered to CRP load and maintenance of caps consistent with current subscription levels indicates that Manitoba Hydro does in fact "place value on the long-term or relationships aspects of the program." Manitoba Hydro notes that no new customers have signed on to the program for a number of years.

### 7.1.3 Manitoba Hydro has decided that additional CRP load is not required to respond to a MISO Maximum Generation Event[8]

As recent as 2011[9], Manitoba Hydro indicated that it was in the process of reviewing the CRP option caps as changes were occurring within the MISO jurisdiction. If a Maximum Generation Event were to occur in the MISO region, MISO may call upon the capacity associated with Manitoba Hydro's capacity backed export sales. In 2011, Manitoba Hydro was considering increasing the Option 'A' curtailable load cap to 400 MW to backstop Manitoba Hydro's Brandon combustion turbines and its gas-fired steam turbines at Selkirk G.S. Manitoba Hydro could use the Option 'A' curtailable load to bridge the period required to start its gas-fired generation.

However, the likelihood of MISO experiencing a Maximum Generation Event is highest in the summer when it experiences its peak load. During this period the Manitoba load is over one-thousand mega-Watts less than its winter peak load and thermal generation is not required to support capacity backed export sales even during a Maximum Generation Event. As a result a decision was made not to increase the CRP Option 'A' cap at this time. Manitoba Hydro made this assessment after the 2011 CRP report was issued.

The current subscription levels of Option 'A' and Option 'R' Curtailable Load are consistent with Manitoba Hydro's needs in the near term and our long term commitment to existing customers. Moving forward, Manitoba Hydro expects to participate in the MISO Annual Capacity Auction. Manitoba Hydro will assess the applicability and economic benefit of using curtailable load to support term capacity sale obligations in this auction or

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[7] PUB/MIPUG-I-22(a) and (b), p.2 line 13-23.
[8] An event triggered by an emergency in the MISO jurisdiction.
[9] Manitoba Hydro, Report to the Public Utilities Board on the Curtailable Rate Program, October, 2011, p. 8.

through bilateral contracts. If there is merit to using curtailable load in this manner, Manitoba Hydro may increase limits to Option 'A' CRP load in the future.

## 8.0 OTHER

This section addresses the written evidence of Mr. Chernick on behalf of GAC with respect to comments regarding the reviewability of Manitoba Hydro's proposals and analysis.

### 8.2 Reviewability of Manitoba Hydro's Application

At page 4 of his evidence, Mr. Chernick states that Manitoba Hydro "filed its 2012/2013 rate design proposals, including a time-of-use rate for large general service customers, on October 3, 2012." Manitoba Hydro notes that it filed rate schedules for rates to be effective in the 2012/13 fiscal year on July 6, 2012, in its filing of Volume II Application materials. Manitoba Hydro filed rate schedules for the 2013/14 fiscal year on October 3, 2012, including a proposal to implement TOU rates and customer-class differentiated rate increases, following approval by the Manitoba Hydro-Electric Board. By letter dated November 6, 2012, the PUB confirmed that Manitoba Hydro's request for TOU Rates and class-differentiated rate increases would be reviewed separately from the GRA, as part of the Cost of Service Study Review process expected to take place in the spring of 2013. As such, Manitoba Hydro filed revised rate schedules on November 7, 2012 on an across-the-board basis, consistent with Manitoba Hydro's past rate design practices, a practice that is familiar to all parties to this proceeding. All parties will have the opportunity to examine Manitoba Hydro's TOU rate proposal in the process expected to take place in the spring of 2013.

Also on page 4 of his evidence, Mr. Chernick states that "The fuel-switching report was filed…, two months after the initial GRA filing and three years late." The fuel switching report was filed with the PUB in response to directive 17 from Orders 116/08 & 150/08, but does not form part of Manitoba Hydro's General Rate Application. While this report contains future policy implications, it does not have a direct impact on the revenue requirement for the two Test Years in this Application.

At page 31 of his evidence, Mr. Chernick recommends that "the Board should request comments from Hydro and intervenors on the additional documents that should be in the GRA filing requirements", and recommends that "the Board should require that Hydro file

# Tab 15

**MANITOBA HYDRO**

**2012/13 & 2013/14 ELECTRIC GENERAL RATE APPLICATION**

**PROVIDED BY: V. WARDEN**

**Transcript Page #5064**

MH to file a schedule isolating the IFRS impacts on Net Income.

**Response:**

Please see the following schedule which isolates the IFRS impacts on Net Income, as extracted from the information filed in MH Exhibit #55.

## IFRS Net Income Impacts

| | Increase (Decrease) in forecast Net Income | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| **OM&A** | | | | | | | | | | |
| DSM | - | - | (23) | (22) | (21) | (20) | (19) | (18) | (17) | (17) |
| Site Remediation | - | - | (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) |
| Regulatory Costs | - | - | (1) | (1) | (2) | (1) | (1) | (1) | (1) | (1) |
| Pension | - | - | - | (2) | (4) | (5) | (7) | (9) | (11) | (12) |
| Employee Benefits (amortization of RHSA) | - | - | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| Admin & General | - | - | (37) | (38) | (38) | (39) | (40) | (41) | (41) | (42) |
| | - | - | (62) | (66) | (69) | (69) | (71) | (73) | (75) | (77) |
| **DEPRECIATION EXPENSE** | | | | | | | | | | |
| Administrative & General Overhead Capitalized | - | - | 0 | 1 | 2 | 3 | 3 | 4 | 5 | 6 |
| Reduction in Rate Regulated Assets | - | - | 38 | 38 | 37 | 35 | 33 | 31 | 30 | 28 |
| Change to Equal Life Group Depreciatin Method | - | - | (36) | (38) | (39) | (40) | (41) | (43) | (52) | (58) |
| Removal of Net Salvage from depreciation rates | - | - | 63 | 66 | 68 | 73 | 77 | 81 | 97 | 107 |
| | - | - | 65 | 67 | 69 | 71 | 72 | 74 | 80 | 84 |
| **FINANCE EXPENSE** | | | | | | | | | | |
| IFRS Impacts | - | - | (2) | (2) | (3) | (3) | (3) | (3) | (4) | (4) |
| | - | - | (2) | (2) | (3) | (3) | (3) | (3) | (4) | (4) |
| **CAPITAL TAX EXPENSE** | | | | | | | | | | |
| IFRS Impacts | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |
| | - | - | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |
| **Total Impact on Forecast Net Income Increase (Decrease)** | - | - | 4 | 2 | 0 | 2 | 0 | 0 | 3 | 5 |

# Tab 16

| PUB Interim and *Ex Parte* Orders | | |
|---|---|---|
| **Order No.** | **Date** | **Curtailable Rates Program** |
| 52/12 | April 26, 2012 | Approval of the Curtailable Rate Program Reference Discount Effective April 1, 2012 |

| **Order No.** | **Date** | **General Consumer Rates** |
|---|---|---|
| 32/12 | March 31, 2012 | Approval for a General Rate Increase April 1, 2012 |
| 34/12 | April 4, 2012 | Approval for a General Rate Increases April 1, 2012 Pursuant to BO 32/12 |
| 116/12 | August 29, 2012 | Approval for a General Rate Increase September 1, 2012 |
| 117/12 | August 31, 2012 | Approval for a General Rate Increase September 1, 2012 Pursuant to BO 116/12 |

| **Order No.** | **Date** | **Remote Communities Served by Diesel Generation** |
|---|---|---|
| 17/04 | February 6, 2004 | Increase in Electric Rates in Remote Communities Served by Diesel Generation |
| 46/04 | March 25, 2004 | Increases in Electric Rates in Remote Communities Served by Diesel Generation resulting from Board Order 17/04 |
| 159/04 | December 22, 2004 | New Electricity Rates in Remote Communities Served by Diesel Generation |
| 176/06 | December 21, 2006 | New Electricity Rates in Remote Communities Served by Diesel Generation |
| 1/10 | January 5, 2010 | Review of Issues Related to Current Electricity Rates Charged in Remote Communities Served by Diesel Generation |
| 134/10 | December 22, 2010 | Increase in Electric Rates in Remote Communities Served by Diesel Generation |
| 1/11 | January 4, 2011 | New Electricity Rates in Remote Communities Served by Diesel Generation Effective January 1, 2011 to December 31, 2011 flowing from BO 134/10 |
| 148/11 | October 20, 2011 | Removal of the Residential Tail Block Effective November 1, 2011 |
| 116/12 | August 29, 2012 | Approval for an Increase to the Full Cost Portion of the Rates in Remote Communities Served by Diesel Generation September 1, 2012 |
| 117/12 | August 31, 2012 | Approval for an Increase to the Full Cost Portion of the Rates in Remote Communities Served by Diesel Generation September 1, 2012 Pursuant to BO 116/12 |

| Order No. | Date | Surplus Energy Program |
|---|---|---|
| 6/12 | January 18, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 11/12 | January 25, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 15/12 | February 1, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 16/12 | February 8, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 17/12 | February 15, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 20/12 | February 22, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 24/12 | February 29, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 25/12 | March 7, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 28/12 | March 14, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 29/12 | March 21, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 31/12 | March 28, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 33/12 | April 4, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 44/12 | April 11, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |

| Order No. | Date | Surplus Energy Program |
|---|---|---|
| 48/12 | April 18, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 50/12 | April 25, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 55/12 | May 2, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 58/12 | May 9, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 63/12 | May 16, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 65/12 | May 23, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 68/12 | May 30, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 73/12 | June 6, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 74/12 | June 13, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 75/12 | June 20, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 76/12 | June 27, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 77/12 | July 4, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP-1 |
| 86/12 | July 11, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 87/12 | July 18, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 90/12 | July 25, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 96/12 | August 1, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 102/12 | August 8, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 107/12 | August 15, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 110/12 | August 22, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 111/12 | August 22,2012 | Approval for Extension of SEP to March 31, 2014 |
| 115/12 | August 29, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |

| | | |
|---|---|---|
| 119/12 | September 5, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 120/12 | September 12, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 122/12 | September 19, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 126/12 | September 26, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 130/12 | October 3, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 132/12 | October 10, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 135/12 | October 17, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 140/12 | October 24, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 147/12 | October 31, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 148/12 | November 7, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 150/12 | November 14, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 153/12 | November 21, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 155/12 | November 28, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 159/12 | December 5, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 162/12 | December 12, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 164/12 | December 19, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 165/12 | December 27, 2012 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 1/13 | January 2, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 3/13 | January 9, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 6/13 | January 16, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 8/13 | January 23, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 12/13 | January 30, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 15/13 | February 6, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 17/13 | February 13, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 18/13 | February 20, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |
| 19/13 | February 27, 2013 | Approval for Surplus Energy Program Rates, Schedule SEP |