MANITOBA **THE PUBLIC UTILITIES BOARD ACT** **THE MANITOBA HYDRO ACT** **THE CROWN CORPORATIONS PUBLIC REVIEW AND ACCOUNTABILITY ACT**	**Order No. 32/09** **March 30, 2009**

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

AN ORDER APPROVING APRIL 1, 2009 RATES FOR MANITOBA HYDRO

Contents

Executive Summary……………………………………………………………………………1

1.0 Background 4

2.0 Interveners' Submissions 6

2.1 City of Winnipeg 6

2.2 Consumers' Association of Canada (Manitoba) Inc., Manitoba Society of Seniors and Winnipeg Harvest (Coalition) 7

2.3 Manitoba Industrial Power Users Group (MIPUG) 9

2.4 Resource Conservation Manitoba/Time to Respect Earth's Ecosystems (RCM/TREE) 10

3.0 MH's Response 12

4.0 Board Findings 14

5.0 IT IS THEREFORE ORDERED THAT: 47

Executive Summary

By Order 116/08, the Public Utilities Board (Board) provided an April 1, 2009 conditional general rate increase of 4% (excepting for Area and Roadway Lighting customers) for Manitoba Hydro (MH, the Corporation or the Utility), subject to the Board's further review.

After a thorough and intense consideration of the evidence, and considerable contemplation, the Board will approve rate increases as of April 1, 2009 but will vary the level of the increases to 2.9%, to apply to all classes excepting for the Area and Roadway Lighting class.

By so doing, the Board balances MH's evidence of recent improvements in the Utility's financial situation and the pressures on its customers due to the recession with the Board's ongoing concern respecting the many risks faced by MH. Notwithstanding several years of contemplating and evaluating the risks, assisted by reports filed by MH and the views of Interveners, MH's risks still have not been sufficiently detailed and quantified for the Board.

Accordingly, the Board expects MH's construction program and export plans, and risks, and the implications for consumer rates to be fully defined and reviewed by the Board prior to MH's finalization of pending export agreements, and ahead of any further rate increase consideration by the Board. The Board notes that MH's current plans would have the Utility's undepreciated plant in-service increase from $12 billion (2009) to over $37 billion by the end of 2028, with a concurrent increase in long-term debt from almost $7.2 billion in 2009 to over $19.4 billion. These are "large numbers" and affect the Utility's risk profile, providing further support for the Board's expectation of a thorough review prior to finalizing pending export commitments.

That said, the Board shares MH's concern that, over time, the loss of an April 1, 2009 rate increase would compound into a material reduction of retained earnings, and, potentially, be damaging to the Corporation's future financial position and customer rate

stability. Even with the April 1 rate increase, MH's rates will remain amongst the lowest in North America, for residential, institutional, commercial and industrial customers.

In approving rate increases for April 1, 2009, and based on the evidence to date, the Board agrees with MH's assertion that the Utility's projected rate increases over the next several years, including the increase now approved for April 1, are not based on "pre-funding" major capital construction projects so as to provide a benefit to future rather than current ratepayers, but rather to ensure MH's equity levels are adequate to protect consumers and the Utility should one or more of the Utility's major risks actually occur.

While MH's latest long-term financial forecast reports a relatively attractive future outlook, the Board remains concerned that on an overall basis MH's 20-year forecasts may seriously overstate likely export revenues, particularly with respect to:

- Annual energy sales -- by assuming total energy sales at 115% of long-term average annual hydraulic generation in every year.
- A built-in supply shortfall of 10-13% of export sales, presumably to be met through financial settlement of non-delivered exports.
- The downside potential of periodic droughts.
- Possible U.S./MISO market constraints.
- The timing and magnitude of Green House Gas (GHG) control measures.
- Current and pending export contract prices and other contract conditions, which are unknown to the Board to this date.

Because the Utility's latest 20-Year integrated financial forecasts (IFF) are integral to its plans for advancing new Generation and Transmission projects, and are to be funded largely by debt, the Board continues to express substantial concerns about the potential for higher than projected domestic rate increases in the event that export revenues are lower than now forecast. Toward this end, MH will be directed to prepare a series of 20-year alternative scenarios (IFF/Power Resource Plan/Capital Plan) that reflect a number of variations to the currently published scenarios.

Accordingly, the Board will direct MH to file by September 30, 2009, for Board approval, a conceptual outline for an in-depth and independent study of all the operational and business risks facing the corporation. As well, the Board directs MH to file a 20-year capital expenditure forecast, together with draft terms of reference and timeline for a regulatory review of MH's planned capital program and its impact on consumer rates; this on or before December 1, 2009.

As to low-income consumers, and while the Board is encouraged by the commitments undertaken by MH with respect to developing a broader low-income bill assistance program, and understands that the Utility undertakes significant efforts to work-out reasonable payment plans for customers experiencing economic distress, it will expect the Utility to provide a further report well ahead of the next heating season. The report is to address options considered, provide details on the options and of the assessment made, and recommend a specific course of action that can be implemented by October 31, 2009.

Finally, the Board expects to receive all outstanding responses to past Board Directives (including those in Order 150/08), in such time so as to permit the Board to conduct a complete review of MH at the General Rate Application MH is to file by October 1, 2009, for the 2010 and 2011 fiscal test years.

1.0 Background

MH filed a 2008/09 General Rate Application (GRA) with the Board in 2008 seeking increases in electricity rates.

Following a public hearing process, which included the orderly exchange of written evidence by MH and Interveners, the Board held an oral public hearing and, subsequently, issued Order 90/08 containing preliminary findings and directives.

Included in Order 90/08 was Board approval of a 5% increase for all consumer classes (except for Area and Roadway Lighting customers) effective July 1, 2008. As well, the Board then-indicated that a further 4% increase may be granted as of April 1, 2009, with the April 1, 2009 rate increases expressly subject to reconsideration following receipt and review of additional information that the Board was requesting.

Subsequently, on July 29, 2008 the Board issued Order 116/08, which contained additional and detailed rationale for the rate changes and further direction on a number of other significant matters.

By Order 116/08, the Board again indicated that the April 1, 2009 conditional, across all rate classes, general rate increase of 4% (excepting for Area and Roadway Lighting customers) was expressly subject to the Board's further review, that, depending on developments, could result in the Board increasing or decreasing the 4% increase that had been conditionally approved. As well, Order 116/08 contained a series of directives for MH to address in fiscal 2009.

Following the issuance of the orders, MH sought to "Review and Vary" certain of the directives, which resulted in a restatement of the Board's directives, as now found in Order 150/08. (A more detailed understanding of the Board's reasons and directives may be gained through a review of Orders 90/08, 116/08 and 150/08, all to be found on the Board's website www.pub.gov.mb.ca.)

On February 2, 2009, MH filed a "Status Report" responding to the directives in Order 116/08, as amended by Order 150/08. MH also indicated in its filing that the materials it

was filing in response to the Board's directives were also being filed in support of MH's request for Board approval of the 4% April 1, 2009 conditional rate increase.

To assist the Board in its review of the material filed by MH, the Board instituted a process whereby Interveners from the 2008/09 GRA Hearing could provide submissions on both the material filed by MH and respecting the 4% conditional rate increase.

2.0 Interveners' Submissions

2.1 City of Winnipeg

The City of Winnipeg is MH's major customer in the Area and Roadway Lighting customer class.

In Orders 90/08 and 116/08, the Board indicated that there would be no rate increases for the Area and Roadway Lighting class in 2008 or 2009, a decision based on the Board's determinations following MH's GRA.

The City of Winnipeg's submission emphasized that the basis for not increasing the rates charged to Area and Roadway Lighting Customers, that being that the current rate for the class was in excess of what was required, continues to exist following the GRA, and that the additional information contained in MH's Status Report continues to support the City's position that there should be no increase in April 2009 to Area and Roadway Lighting rates.

The City of Winnipeg concluded that the Board's rulings have been based on the revenue to cost coverage (RCC) ratios for the Area and Roadway Lighting class, where, historically, the RCC for the Area and Roadway Lighting class has consistently been above the upper limit of the "zone of reasonableness" (i.e. a revenue to cost ratio falling between 95% and 105%), as well as being higher than the revenue to cost coverage ratios of other customer classes.

The City of Winnipeg submitted that as the circumstances that resulted in the Board's GRA decisions continue to exist, there is no reason for the Board to vary its decision and grant MH April 1, 2009 rate increases for Area and Roadway Lighting customers.

In further support of its position, the City of Winnipeg, after having reviewed MH's Status Reports, suggested that MH's economic conditions had generally improved since the 2008/09 GRA.

The City also brought to the Board's attention MH's 20-year electricity financial forecast, which, with three minor exceptions, projects net income higher for each year of the 10-

year period from 2009 to 2018 than was projected in MH's previous longer-term forecast, the Integrated Financial Forecast (IFF) 07-1, which was reviewed at the GRA.

The City further noted that, unlike the projections of IFF 07-1, MH's key debt to equity ratio is now projected, by the Utility, to meet the targeted goal of no more than 75% of debt from 2009 through to 2013, this according to MH's most recent 20-year financial forecast.

The City held that given MH's reports and forecasts of financial improvement, as set out in the Utility's Status Report, and the prolonged history of the revenue cost coverage ratio for the Area and Roadway Lighting customers being above the upper limit of the accepted zone of reasonableness, no increase should occur to rates charged to customers in the Area and Roadway Lighting class.

2.2 Consumers' Association of Canada (Manitoba) Inc., Manitoba Society of Seniors and Winnipeg Harvest (Coalition)

From the Coalition's perspective, a 4% rate increase is not justifiable, given the intervener's perception of a material improvement in MH's financial position, the Utility's perceived failure to control day-to-day expenditures, and the sharp deterioration in the global, Canadian and Manitoba economies. The Coalition recommended that the conditional rate increase either be rejected in its entirety, or that the rate increase be set significantly lower than 4%.

Furthermore, the Coalition renewed its call for an urgent inquiry into the projected impact of future export-related capital expenditures on consumer rates. The Coalition noted that the economic climate has changed profoundly since the conclusion of the 2008/09 MH GRA hearing, and that a global credit market crisis has intersected with a dramatic chill in global demand and output to result in forecasts of negative economic growth in 2009 (economic growth in the Province of Manitoba has been projected to be less than 1%, as compared with the 2.7% assumed in the April 2008 provincial budget).

While economic conditions for individuals and businesses have deteriorated, the Coalition noted that the financial circumstances of MH have, based on the Corporation's

published results and recent forecasts, shown marked improvement since the GRA. By way of example, Coalition noted that while MH was suggesting at the GRA that it wouldn't reach its debt to equity target until after 2018, its new projection has the Utility reaching the target in 2009.

Coalition also suggested that what it perceived as dramatic improvements in the revenue, net income and retained earnings perspective of the Utility have not been matched by progress in other areas, such as OM&A expenditures. Coalition noted that the OM&A costs for 2008/09 increased by 8%, and that the Corporation does not expect a decline in OM&A costs in 2009/10, notwithstanding the economic downturn.

The Coalition suggested that a compelling argument could be made that over the past four years MH has adopted an asymmetrical approach to improving its financial position, focussing on revenue improvements while neglecting expenditure control.

The Coalition opposed a rate increase that, if granted at 4%, would be "four times the expected rate of inflation", and would come at a time when consumers are hard-pressed by disproportionate increases in the cost of basic necessities. The Coalition also cited the global economic downturn, which has dissipated savings and made employment prospects uncertain.

The Coalition submitted that the Board should not approve a 4% increase, which is representative of $45 million in additional annual revenue for the Corporation, "out of the pockets of Manitoba consumers and businesses at this point in time", holding that such an increase would be counter-productive to local, national and international efforts to stimulate consumer spending and boost consumer and business confidence.

The Coalition recommended a rate increase no more than the projected rate of inflation, i.e. 1%, while preferring no increase. In the event the Board held an increase was required to better ensure the Corporation's financial targets are met, the Coalition suggested it be limited to 2%.

The Coalition held that MH's forecast revenue requirements going forward place increased pressure on consumer rates, and this pressure is due to planned future

capital development. The Coalition called for a separate regulatory process to consider the risks and rewards related to proposed and planned future generating station and transmission line developments, and that it be held no later than the winter of 2009/10.

2.3 Manitoba Industrial Power Users Group (MIPUG)

In its submission to the Board, MIPUG recommended:

(i) the Board should not approve a 4% rate increase as of April 1, 2009, and, at a minimum, the Board should reduce any rate increase to 2% or less; and

(ii) in considering any future rate increase applications, the Board should require MH to provide copies of current IFFs and/or 20-year financial forecasts that reflect (a) the impact of foregoing a rate increase and (b) adjusting sought-after and projected rate increases to no more than the general annual inflationary rate increase (i.e. 2%).

In its submission, MIPUG also indicated that, if the conditional 4% increase was granted, it would represent the third consecutive year of MH rate increases in excess of the Bank of Canada's annual inflation target of 2%, and would result in there having been rate increases in excess of the rate of general inflation in five of the last six years.

MIPUG included in its submissions references to Board Order 90/08, where the Board discussed the target of a debt to equity ratio of 75:25, and observed that the granting of a 4% rate increase would come during a time of a major economic downturn, which would exacerbate the impact of the rate increase on all consumers.

MIPUG Presenters at the December 2008 Energy Intensive Industry Rate Hearing indicated to the Board that MH's industrial customers are facing dire economic situations, with demand falling in local and world markets. MIPUG submitted that the current economic situation is unprecedented, and, noting the pace of recent electricity rate increases, suggested that the Board should very carefully consider the need for further rate increases at this time.

MIPUG's submission addressed the three primary reasons it perceived as being supportive of the Board awarding a higher rate increase than had been initially sought by the Utility in the GRA, those being;

- Support for the debt: equity ratio target of 75:25;
- MH's forecast capital expenditures, which could approximate $20 billion over the next 15 years, and
- Risks faced by the Utility, including the possibility of future below average water conditions, lower than expected export demand and prices, higher interest rates, further currency fluctuations, and the decisions required with the upcoming adoption of IFRS.

That said, MIPUG submitted that a higher than inflation rate increase, as sought by MH, would represent a "pre-funding" of capital projects anticipated to deliver benefits to future ratepayers. MIPUG noted that the future benefit element is reflected in the fact that MH's current forecast debt: equity ratio projects a quick decline in the ratio following the 2022/2023 projected in-service date of Conawapa

MIPUG questioned whether the 4% requested rate increase, taking into full consideration the current economic situation, represented a bid to unreasonably shift costs to current ratepayers for benefits expected for future ratepayers. MIPUG recommended the rate increase not exceed 2% on April1, 2009.

2.4 Resource Conservation Manitoba/Time to Respect Earth's Ecosystems (RCM/TREE)

RCM/TREE supported MH's application for a 4% rate increase, with observations pertaining to MH's revenue requirements, class allocations and rate design.

In examining MH's projected debt to equity ratio, estimated to be 74:26 in the current year, RCM/TREE recommended that the Board resist the temptation to reduce or eliminate the conditional 4% rate increase, rather the intervener recommended the Board proceed with and approve the 4% increase, this in recognition that the debt to

equity financial target is a long-run, not short-run, target. For RCM/TREE, with expected and considerable past annual variability in MH's revenues, the long term should remain the Board's focus. RCM/TREE noted that MH's forecast predict that after 2014 MH's projected debt to equity ratio will again fall below the long term target of 75:25.

RMC/TREE also reminded the Board that consumers pay bills not rates, and recommended that MH accelerate its DSM efforts to allow consumers to stabilize or lower their bills through reduced consumption. RCM/TREE also suggested that rate affordability measures for low-income consumers should be implemented as soon as possible, and prior to the next heating season.

RCM/TREE also recommended that the rate increase be structured so as to provide inclined rates for both residential and industrial customers; RCM/TREE considers the current second tier for residential customers as falling short of full marginal costs, and therefore a rate too low for presenting consumers with needed recognition of the full cost of electricity consumption.

Accordingly, RCM/TREE submitted that adjustments be made to the quantity of energy permitted in the first and lower-priced residential block, so that more residential customers will face second tier energy charges. RCM/TREE also prefers that the rates for the first and second tiers be designed on a revenue neutral basis.

3.0 MH's Response

In its response to Intervener submissions, MH held that there have been no material changes since the GRA that have either improved the long-term financial strength of the corporation or reduced its risks. Accordingly, MH submitted that fiscal prudence dictates that the conditional rate increase of 4%, effective April 1, 2009, be confirmed.

MH advised that attention should be paid to not only reaching but also maintaining the 75:25 debt:equity financial target, and that approval of the 4% rate increase effective April 1, 2009 will contribute towards that achievement. That said, MH submitted that even with a 4% rate increase as of April 1, 2009, long-term maintenance of the debt:equity target ratio may remain "elusive".

MH submitted that Coalition and MIPUG failed to recognize the role that the 4% rate increase would play in allowing MH to maintain its 75:25 debt:equity target. MH suggested that, over time, the loss of the April 1, 2009 4% rate increase would compound into a material reduction of retained earnings, and be highly damaging to its future financial position and customer rate stability.

MH advised that IFF-08 and the Utility's 20-year electricity financial forecast of January 2009 are based on expected or average conditions, and that the realization of certain significant risks, such as a prolonged drought, reduced export prices, or unforeseen infrastructure damage, could "derail" the corporation's planned build-up of equity.

MH disputed MIPUG's assertion that the Utility's projected rate increases over the next several years represent an attempt to "pre-fund" major capital construction projects (and provide a benefit to future rather than current ratepayers), and held that the need to build-up equity is not to pre-fund projects but to strengthen the Utility's ability to withstand risk.

In response to the critical submissions of the Coalition on the topic of OM&A costs, MH suggested that its OM&A cost levels are "proceeding exactly as represented" at the GRA (by MH), and reminded the Board of the Utility's evidence at the GRA that OM&A

costs were increasing due to various business factors that are in addition to the ongoing pressure of inflation, those being aging infrastructure, increasing maintenance, environmental monitoring requirements, increased staffing costs and domestic load growth.

MH submitted that the increases in OM&A costs should be understood in light of the GRA evidence, where the difficulty of attracting qualified professionals and trade personnel was outlined, and that there were, at that time, approximately 200 unfilled staff positions (the latter a major factor in OM&A costs being $16 million less in 2007/08 than forecast, costs that MH expected would ultimately be annually expended once staffing levels meet Utility needs).

MH acknowledged the uncertainty of present economic times, but held that there is no consensus regarding expectations as to the quantum and duration of currently lower inflationary pressures. While MH conceded that the downturn provides important context to the Board's evaluation of the April 1, 2009 conditional rate increase, the Utility also submitted there are other factors that the Board should consider, including MH's continuing position of having the lowest overall rates in Canada.

In response to RCM/TREE's submission, and while acknowledging that intervener's general support for the implementation of a 4% rate increase, MH submitted that RCM/TREE's inverted rate design suggestion is premature, and that the Utility is currently reviewing options for the long term direction of residential inverted rates, with a view to recognizing the benefits of efficiency-inducing price signals while acknowledging the lack of energy choice available to many electric heat customers.

MH suggested that a long-term plan to provide meaningful second tier rates requires stakeholder review, and that the process of developing such rates would best be furthered through a subsequent GRA.

In respect to the City of Winnipeg's submission, MH conceded that it is unaware of any changes in circumstances that would justify the Board varying its decision not to increase the Area Roadway and Lighting class rates at this time.

4.0 Board Findings

In reviewing MH's February 2, 2009 "Status Report" filings, the submissions of Interveners, and the response by MH to those submissions, there are several major, compelling and, sometimes contradictory factors that the Board concludes it must take into account in deciding on whether the April 1, 2009 conditional rate increase should be approved. These factors include MH's stated and forecast financial position, the state of the economy, and the number, nature and evolving risks faced by the Corporation,

After a thorough and intense consideration of the evidence, and considerable contemplation, the Board will approve rate increases as of April 1, though vary and reduce the level of the average rate increases to 2.9%, to apply to all classes excepting for the Area and Roadway Lighting class.

By so doing, the Board balances MH's short-term financial situation and risks with the Board's ongoing concern respecting the many risks still faced by MH. Those risks still have not been sufficiently detailed and quantified and, accordingly, the Board will require substantive elaboration of MH's construction program, export plans and risks.

The resulting implications for consumer rates should be fully defined and reviewed by the Board prior to MH's finalization of pending export agreements.

Operating Results and Financial Projections

The Board notes the reported improvement in MH's actual and forecast debt:equity ratio, and understands the improvement is largely attributable to two factors, rate increases approved by the Board and recent favourable river flows bringing additional export revenues.

MH's decision to file the 2008/09 GRA was based on IFF MH 06-4, a forecast which projected net income for fiscal 2007/08 to be $244 million, with a further forecast of $156 million of net income for fiscal 2008/09. MH subsequently filed an updated forecast IFF MH 07-1, and revised its net income forecast for 2007/08 to $264 million.

During the 2008/09 GRA, MH provided a further and oral update to IFF MH 07-1, projecting that net income for fiscal 2008 would be higher by at least $36 million, bringing the expected net income for the year to approximately $300 million. As it turns out, actual net income for 2007/08 was $340 million, an increase of approximately $96 million from that initially forecast in IFF MH 06-4, and $76 million higher than forecast in IFF MH 07-1.

Since the 2008/09 GRA, MH's actual and forecast financial performance has improved or is expected to improve significantly from that projected in IFF07-1, as reflected in the following schedule:

Statement of Operations & Retained Earnings ($ Millions)	IFF07-1	Actual	IFF08-1	
Fiscal Year	**2008**	**2008**	**2009**	**2010**
Revenue				
Domestic	1,078	1,098	1,125	1,204
Conditional Rate Increase		-	-	45
Export	582	625	619	546
Total Revenue	1,660	1,723	1,744	1,756
Expenses				
Finance	404	407	399	425
Depreciation	332	325	351	374
Operations & Administrative	351	335	349	358
Water Rentals	121	124	121	112
Capital & Other Taxes	57	57	65	71
Fuel & Power Purchased	132	134	150	199
Total Expense	1,397	1,382	1,436	1,539
Net income Actual/ Forecast	264	340	308	217

MH's projected net income in IFF MH 08-1 for the three-year period of 2007/08 to 2009/10 is now expected to be $774 million higher than that the Utility forecast in IFF

MH 03-1, $359 million higher than in IFF 06-4, and $341 million higher than that forecast in IFF 07-1.

The latter forecast was presented at the 2008/09 GRA, as reflected in the following schedule:

Electric Operations: ($millions)

For years ending March 31:	2008 (Actual)	2009 (Forecast)	2010 (Forecast)
Net Income			
Actual/IFF08-1	340	308	217
GRA Update	300	155	105
IFF07-1	264	155	105
IFF06-4	244	156	106
IFF06-2	174	127	122
IFF04-1	99	94	124
IFF03-1	17	29	45
Difference IFF08-1 Vs. IFF07-1	**76**	**153**	**112**
Difference IFF08-1 Vs. IFF06-4	**96**	**152**	**111**
Difference IFF08-1 Vs. IFF03-1	**323**	**279**	**172**

MH's reported retained earnings and debt:equity ratio were $1.8 billion and 75:25 respectively in 2007/08, and the Utility has since forecast further gains, with retained earnings to reach $2.1 billion in 2008/09 and $2.27 billion by the end of fiscal 2009/10, as reflected in the following schedule (to result in debt:equity ratios of 74:26, 75:25, respectively):

Electric Operations: ($millions)

For years ending March 31:	2008 (Actual)	2009 (Forecast)	2010 (Forecast)
Retained Earnings			
Actual/IFF08-1	1,795	2,102	2,270
GRA Update	1,771	1,927	2,032
IFF07-1	1,735	1,891	1,996
IFF06-4	1,651	1,807	1,914
IFF06-2	1,572	1,699	1,821
IFF04-1	1,271	1,365	1,489
IFF03-1	877	906	950
Difference IFF08-1 Vs. IFF07-1	**60**	**211**	**274**
Difference IFF08-1 Vs. IFF06-4	**144**	**295**	**356**
Difference IFF08-1 Vs. IFF03-1	**918**	**1,196**	**1,320**

Third Quarter Financial Report

During the week of February 23, 2009, MH released its 3rd Quarter 2008/09 Financial Report for the nine months ending December 31, 2009. MH's electricity operations were reported as having developed domestic revenues of $796 million and $532 million of export revenues. For domestic revenue, this represents an increase of $36 million (or 5%) from the same nine-month period of the prior year.

As noted by the Coalition, the expenses attributed to electricity operations were reported to have increased $70 million, or 7%, from the same period of the previous year, with $32 million attributable to increased power purchase costs and $23 million due to increased operating and administrative expenses. MH attributed the increase in operating and administrative expenses to higher maintenance requirements for its generation, transmission and distribution systems.

Despite continuing criticism by the Coalition and concerns expressed by the Board, MH has yet to demonstrate recognition that there is a need for implementing more control

over OM&A expense increases. As in past Orders, the Board continues to seek more concise and effective benchmarking of MH's OM&A expenses against those of other Crown owned Canadian hydro-electric based utilities. Overall, MH forecast that its net income for the last quarter of the fiscal year 2009/10 will be sufficient to, with the first three quarter results already known, generate 2008/09 net income in excess of $300 million, this to compare with the $346 million of net income reported for the 2008/09 fiscal year. Though there has been no indication from the Utility that this most recent forecast is unachievable, the Board notes recent SEP and NEB data suggest that despite a significant decline in the value of the Canadian dollar vis a vis the American dollar, there has been a softening of export prices.

Accordingly, and while not a determining factor in the Board's rate decision for April 1, the Board wonders whether the softening of export opportunity sale pricing may result net income for 2009/10 not reaching the $300 million forecast of the Utility.

Unrealized Foreign Exchange Loss

MH's results are tied in part to currency levels, with MH selling and buying power to and from American utilities and relying on almost $2 billion of debt denominated in American dollars (borrowed to fund previous capital expenditures). MH advances the view that because export sales to American utilities are priced in U.S. dollars, and that a significant amount of those sales are through long-term contracts, the Utility has a "natural hedge" against the currency risk associated with U.S. dollar denominated debt.

Accordingly, currency swings in the Canadian dollar value of U.S. denominated debt are not immediately reflected in the Utility's annual net income reports, rather the vast majority of such fluctuations are captured in a "balance sheet" account denoted as Accumulated Other Comprehensive Income (AOCI), with the amount to be recognized within MH's annual net income reports over lengthy periods of time.

For the nine months ended December 31, 2008, U.S. foreign exchange rates increased from $1.03 CAD/USD at March 31, 2008 to $1.22 CAD/USD at December 31, 2008. This major and unexpected currency shift, largely the result of the credit crisis, the

collapse in commodity prices and the world-wide recession, resulted in a $366 million unrealized foreign exchange loss on debt in cash flow hedges on the translation of approximately $1.9 billion of net U.S. denominated debt.

The $366 million of unrealized foreign exchange losses resulted in a reported deficit of $92 million at December 31, 2008, this compares to a $305 million surplus reported as at March 31, 2008 in AOCI. MH has further reported that, based on a February 28, 2009 revaluation, the unrealized foreign exchange loss on debt in cash flow hedges has increased to $456 million (based on an exchange rate of $1.27 CAD/USD). If the Canadian dollar has not increased in value in relation to the American dollar by March 31, 2009, a further increase in the AOCI deficit is likely.

MH has indicated that the recognition of hedged export revenues during 2008/09 will contribute an estimated $11.4 million foreign exchange gain (initially accumulated in AOCI) to 2008/09's reported net income. Changes in USD debt and U.S./Canada foreign exchange rates from February 28, 2009 to March 31, 2009 could alter this appreciably.

The recent currency reversal bringing about the large level of unrealized losses currently in AOCI will, if the Canadian dollar does not appreciate materially, eventually be recognized in net income in subsequent reporting periods, as U.S. export revenue in a designated hedging relationship is realized.

The Board is concerned that the higher Canadian dollar debt levels (American debt represented in Canadian dollars) and concurrently higher interest charges may not be offset by export price increases in a recession-driven export market. That said, given the state of the world economy and the startling and abrupt movements in currency values recently experienced the implications for the Utility's 2010 and beyond fiscal years cannot be confidently forecast. There is some potential that these losses will have to be recognized in net income in the next few years.

In addition, there is a further complication, that being the upcoming implementation of IFRS. MH will have to review its hedge accounting to ensure that its current hedge

relationships continue to remain effective upon transition to IFRS. The status of this accounting policy, among others, is of considerable interest to the Board, due to the potential and material financial impact upon reported and/or forecast finances of the corporation.

Economy

Given the risks and uncertainty now present, absent the economic downturn and its impact on all domestic consumers, (residential, commercial, industrial and institutional), the Board would not have varied the conditional increase and would have approved 4% for April 1.

The compelling factor in the Board's decision to vary its initial direction and reduce the April 1 increase to 2.9% is the slow-down in the economy, which to this point does not appear to have impacted the Manitoba economy to the degree it has elsewhere, excepting for the notable exception of the decline of worth in investment portfolios held by individuals, companies and pension plans.

These factors lie at the root of the Board's decision to reduce the conditional rate increase effective April 1, 2009, and recognize the reality of material changes since the GRA evidence. When the Board held MH's 2008/09 GRA Hearing in mid-2008, the pending deterioration of the general economy was unknown.

Subsequently, the Board heard from MIPUG Presenters at the December 2008 hearing in respect of the proposed Energy Intensive Industrial Rate, that the economic downturn was impacting Manitoba's industrial customers. While commercial enterprises have the ability to deduct energy costs from taxable income, a benefit not available to consumers and not-for-profit institutions and agencies, there needs to be net income before there is taxable income; in the absence of taxable income, the impact on private enterprise of higher energy costs is similar to that on households, a decrease in net worth.

In short, the negative economic situation facing innumerable consumers supports the Board's variance of the April 1, 2009 planned conditional rate increase.

As well, and of particular note, the Board, though pleased with the Utility's intentions and efforts made to-date with respect to assisting low-income consumers, is not satisfied with MH's progress to-date with specific respect to developing a low-income bill assistance plan.

Risks

While there are factors that speak to reducing the proposed 4% increase there remain other factors that support a continuation of building up the financial strength of MH to meet the business risks the corporation faces. In its decision the Board has not lost sight of the importance of reaching and maintaining the long-term financial targets for MH, and the risks the Utility faces.

In Orders 143/04, 20/07, 90/08 and 116/08 the Board had raised concerns on the many risks faced by MH. In Order 90/08, the Board noted that MH's plans for capital expenditures may involve $18 billion or more of capital expenditures over the next 15 years; expenditures predicated in part on what appears to the Board, based on the evidence available to-date to the Board, to be overly optimistic export prices.

In Order 90/08, the Board noted that the planned level of capital expenditures will result in significantly increased debt levels, export commitments and, as a result, increased general business risks. The Board then-questioned whether the export revenue stream from new generation and transmission projects will be sufficient to cover the financial obligations related to these projects, taking into account known inherent risks, both those now present and those that may lie ahead.

In Orders 116/08 and 150/08, the Board reaffirmed the aforementioned concerns, and continued to seek additional information so as to better inform itself. MH has yet to fully comply with the Board's directives related both to export pricing and capital expenditures. Compliance with the directives, and a subsequent Board review of the implications for consumers' rates, is, in the Board's view, needed prior to MH finalizing pending export agreements.

The Board has sought, and continues to seek, assurances from MH that new export contracts are priced such as to allow MH's forecasts of future revenues from exports to be realized. The Board's concerns have been exacerbated by recent average export price history and the slowing North American economy.

In Order 116/08, the Board further indicated that it had not been provided with MH's specific export contract prices and terms and expressed concerns because of recent average export price history. MH's forecasts assumed an USD/CDN exchange rate of 1.16 and in-place carbon dioxide emissions legislation working together to positively affect export pricing, so as to achieve the Utility's forecast of average export prices of 10¢/kW.h by 2018.

If that level of export pricing is not realized, MH could be faced with an extended period of time where average export prices will not cover incremental costs associated with Bipole III, Keeyask G.S., and Conawapa G.S. If this did occur, while it would drive up the debt component of the debt:equity ratio, and reduce net income, it would represent a similar situation to that of the early experience with Limestone G.S. (in-service in1992), where costs exceeded revenue from Limestone for several years following its in-service date. This is also the expected outcome for several years following Wuskwatim G.S. coming into service.

The Board has noted in previous orders that with high construction costs, ongoing inflation and the reasonable risk that, interest rates (now being at historic lows) will rise, particularly for government-backed debt, it is in the public interest to test and ascertain whether sufficient prices will be secured on the export market to meet costs and continue to assist in holding down domestic rates.

The Board still holds that any material shortfall from required export pricing and supply/demand may well have the effect of reducing future annual net income significantly after 2018, which would place further pressure on domestic rates, assuming the debt::equity target remains at 75:25.

At the 2008/09, GRA MH then-testified to a condition of hyper-inflation with respect to construction and commodity costs, which were then-having the effect of increasing MH's projected costs for new generation and transmission projects. MH had also then-indicated that this escalation in costs had lowered the Corporation's estimate of the return to be expected from its new generation projects (Wuskwatim), a project likely to be followed by further major construction projects such as Pointe de Bois, Bipole III, Keeyask and Conawapa.

MH's concern as to construction costs was reflected in the increased cost estimates for Keeyask, an estimate that escalated by $900 million while Conawapa's estimate increased by $1.3 billion since CEF08-1. Whether the current economic downturn, which has led to job losses in the oil sands and elsewhere in occupations highly sought-after by MH, will be prolonged and lead to a reduction in currently forecast construction costs is highly speculative.

Also, it is reasonably suggested that interest rates will likely increase at some point during MH's expansion phase, placing increased pressure on the cost of operation. It is difficult to imagine that government debt rates currently in vogue can be sustained in a recovered economy.

In addition, the Board has repeatedly raised concerns with respect to the risk of drought, noting that MH has benefited from 12 of the last 16 years being of above-median water flows. Statistically, poorer water conditions can be expected to occur at some point in the future and, if prolonged and/or significant, could well have a devastating impact on MH's financial situation, as was the case in fiscal 2003/04.

MH has suggested that a drought of 2003/04's severity can be expected to re-occur once every 15 years, on average. The Board noted in Order 116/08 that longer droughts of potentially greater consequence have occurred at least three times in MH's history, and that history is very short in climatic and historical terms.

While MH has defined the potential impacts of various drought events, it has not provided a frequency-based in-depth analysis; such an analysis is required to

demonstrate the full range of economic consequence of the risk. In Order 116/08 the Board directed MH to provide such an analysis.

The Board is interested in reviewing not just the "likely" favourable outcome of various year's results, but scenarios ranging from best case to worst-case. Over the next fifteen or so years, MH's investment in fixed assets may rise, in historical cost terms, three-fold; the implications of drought rise as the value at risk rises.

The Board has also noted and reiterated concerns with the continued high level of capitalization of OM&A expenditures, which has allowed for higher than would otherwise be net income levels, both actual and projected. The Board anticipates, as does MH, though to a lesser extent, that MH's current capitalization approach will change with the adoption of IFRS.

The Board has noted that the adoption of IFRS will likely result in a higher level of OM&A expense. Such a development would impact negatively on MH's now-forecast future profitability, and could well lead to a reduction of MH's net income forecasts going out to 2017/18 and beyond.

In Order 90/08, the Board indicated that in granting a 5% increase effective July 1, 2008 and a conditional 4% increase for April 1, 2009, that:

> *"MH is of great importance to the provincial economy, its residents and businesses, and clearly it is not in the public interest to allow MH's financial condition and service capabilities to decline. Given the plans for massive new generation and transmission capital expenditures, the possibility of future poorer water flow conditions, the risk of lower than forecast export prices and higher interest rates, and the upcoming adoption of IFRS, as well as the other risks identified by the Board in Order 143/04, MH will require additional revenues going forward."*

The Board further advised that it remained focused on the risks that lie ahead and was determined to ensure, as reasonably as possible, that MH has the financial strength to meet the risks. To better understand the risks faced by the Corporation, the Board in Order 116/08 directed MH to undertake:

> *"a thorough and quantified Risk Analysis, including probabilities of all identified operational and business risks. This report should consider the implications of planned capital spending taking into account revenue growth, variable interest rates, drought, inflation experience and risk, and potential currency fluctuation"*

The Board also directed:

> *"MH to file by September 30, 2008, for Board approval, a conceptual outline for an in-depth and independent study of all the operational and business risks facing the corporation …."*

In Order 150/08, which dealt with MH's request to review and vary Orders 90/08 and 116/08, the Board reconsidered its direction that MH file a conceptual outline for an in-depth and independent study of all the operational and business risks facing the corporation, and was advised that MH would file an updated Corporate Risk Management Report. MH then-indicated that the Report would identify and quantify all the major operational and business risks facing the corporation. In Order 150/08 the Board advised that it would reassess whether an independent risk study is still needed, based on its review of information to be filed in January 2009.

Current Risk Assessment

Despite requests/directives from the PUB since the 2003/04 drought, MH has yet to provide a post-mortem on the energy supply and demand scenarios that led to the reported $436 million net loss. Nor has MH provided a forward-looking quantification of the potential supply and demand events that the corporation faces as it embarks on preparing for major new demand commitments.

The high-risk components of the 20-year IFF appear to be:

- Overly optimistic export price forecasts, forecasts of prices higher than what MH's contract rates for firm 5x16 power have to date, been able to achieve.
- Overselling hydraulic generation on an annual basis. Since fiscal 2000, MH has typically sold about 115% of its actual hydraulic generation, and relied on above average hydraulic generation (high river flows) and economically

priced imports to meet demand requirements. MH's natural gas thermal generation have not (at least to-date) been price competitive with imports.

- A presumption that, nine years out of ten, a combination of higher than forecast hydraulic generation and low cost imports will allow MH to avoid a net loss situation; and that nine years of positive results will more than offset one "bad" year.
- The presumption that any additional export revenue is positive, even if the price is below the average (or blended) cost of Generation &Transmission, let alone the Marginal Cost (MC) of new Generation &Transmission.
- The presumption that domestic rates are available to absorb losses related to droughts, infrastructure failure and/or under-performing export markets.

The ability to store hydroelectric energy provides MH considerable scope to shape energy supply to meet domestic and export demand. While the storage ability is an undeniable strength of the Corporation, the approach appears to be viewed as an unlimited and almost free attribute of MH's hydraulic system. This ability to store energy supports 5x16 peak export contracts, provides shaping for the variably available wind energy, and allows for an enhanced value for Wuskwatim run-of-the-river energy for export. Yet, it is not readily apparent to the Board whether the major components of the hydraulic generation system are being optimized.

While MH's storage capability is generally adequate to shift energy seasonally, this is not always the case on a year-to-year basis. On an annual basis, excess flow must typically be utilized within a six-month period, and depleting storage risks subsequent energy shortages (e.g. 2003-04 and 2006-07).

The loss that was incurred in the 2003-04 drought was unprecedented, and it became apparent to the Board that export operations could result in substantially increased costs for ratepayers under certain negative circumstances.

In 2004, MH suggested that while the actual event was not fully anticipated, the consequence, that being the large loss that was recorded, was largely unavoidable.

Going forward, MH advised that it would look to measures to reduce the consequences of future similar or greater droughts.

Dependable hydraulic generation for the year 2003/04 was 18,500 GWh, that being a level significantly below the 21,000 GWh on which MH bases its potential for firm export contracts (after fulfilling the domestic requirement). Yet, MH has not lowered the dependable resource level to 18,500 GWh; rather MH now defines the dependable resource as a multi-year historical event (not a one-year event). This effectively means that once every fifteen years (the deemed frequency of the 2003/04 drought event), MH will be faced with dependable energy shortfalls comparable to 2003/04; though perhaps in an environment of much higher import prices. MH has not adequately demonstrated that the Corporation's mean energy forecast adequately reflects this self-imposed additional risk.

The 2003/04 drought highlighted the increased risk that arose out of MH's strategic decision to increase exports beyond the level of surplus hydraulic generation (after fulfilling domestic need). Conversion of the Selkirk coal thermal generation to natural gas exacerbated the price-supply situation when natural gas prices soared. With MH honouring its export commitments (to preserve future opportunities) and meeting domestic need, the total energy supplied equalled 140% of actual hydraulic generation (up from the 115% contemplated in the preceding IFF's).

Following the 2003/04 drought, it was anticipated that MH would either reduce total export sales relative to hydraulic generation or ensure favourably priced imports were arranged to backstop a larger portion of the additional sales. The experience during the drought conditions of the fall of 2006-07 raised doubts about whether either change had occurred.

The 20-year IFF 08-1 confirms that MH continues to project total sales at about 115% (even as high as 120% at times) of hydraulic generation. Import projections have been increased, but not enough to be able to cover a supply shortfall equal to about 10% of forecast export sales.

The supply shortfall could be lower if it reflects the re-sale of non-delivered contract energy (significant in 2006/07 and 2007/08). This shortfall has been projected to reach the 1,000 GWh± level by 2016-17, and the shortfall apparently is not backed up by either specific budgeted imports or natural gas generated energy; this represents a substantive and distinct risk, potentially realizable in low flow years.

Future Export Prices/Revenues

As referenced in Order 116/08, MH has presented future export price scenarios to support the Corporation's revenue forecasts, including:

- GHG premiums in the U.S. would significantly increase coal generation costs by about 2011/12, and the assumption is in that case that Mid-Continent Area Power Pool (MAPP) and Midwest Independent System Operator (MISO) electricity prices would then track natural gas prices.
- Unrestricted access into the MAPP/MISO region for MH during peak and off-peak periods; and that MH's surplus energy would largely achieve peak market prices equivalent to natural gas generated electricity.
- MH's clean energy would be afforded environmental price premiums in the export market.

MH still forecasts that same scenario, although the forecast realization of it has been moved back by four to five years. MH's longer-term forecasts have average electricity export prices doubling by 2019, when Keeyask G.S. is assumed to be fully on-line. With off-peak prices likely to be substantially lower than peak prices at any time, peak prices will have to be significantly higher than the average price that includes off-peak.

MH's longer-term price forecasts have a common theme, that being that MH's clean electricity will displace coal generation, and that new clean coal generation will be considerably more expensive when it comes on-line. However, the time horizon for the technology implementation with respect to "clean" coal, is, in the Board's view, illusive,

and the economic downturn, accompanied by forecasts of massive levels of U.S. and Canadian government deficits, may distract legislators from environmental matters.

Cap and trade proposals may delay the closure of older and "dirty" coal generation in the MISO market. Even with the assumption that substantial CO_2 charges will be applied to the average cost of all existing coal generation, the average cost of coal generation could remain considerably lower than MH's short-term and long-term price forecasts. This again raises questions about the Utility's long-term export price forecasts.

Without greater access to the MISO base load, the Board currently anticipates that MH will continue to primarily serve summer peak period loads with its exports, and play a backup role to state and federal mandated wind generation.

The Board understands most of MH's long-term export contracts (existing and pending) focus on 5x16 peak energy, and it would appear that these contracts command prices generally below peak market prices, and, also, do not involve off-peak sales at above market prices. The Board anticipates the risk that in high flow years MH may still end up selling off-peak energy at 2-3¢/kW.h. If this assumption proves out, MH will have difficulty achieving near peak prices on a long-term average basis.

MISO market demand is also variable; up during cold winters and hot summers; down during warm winters and cool summers. Energy demand tends to rise and fall with seasonal weather variations. Consequently, while MH is unlikely to always realize the benefit of above average flows, it is likely to always experience the disadvantages of below average flows.

In summary, the Board is concerned that on an overall basis, MH's 20-year IFF may be seriously overstating likely export revenues with respect to:

- Annual energy sales -- by assuming total energy sales at 115% of long-term average annual hydraulic generation in every year.
- A built-in supply shortfall of 10-13% of export sales, presumably met through financial settlement of non-deliveries.

- Downside potential of periodic droughts.
- Possible U.S./MISO market constraints.
- The timing and magnitude of GHG control measures.
- Current and pending export contract prices and other contract conditions, which are unknown to the Board to this date.

Because the 20-Year IFF is integral to the plans for advancing new Generation and Transmission projects, the Board has substantial concerns about the potential for higher than projected domestic rate increases in the event that export revenues are lower than those now forecast. Toward this end, MH will be directed to prepare a series of alternative 20-year scenarios (IFF/Power Resource Plan/Capital Plan).

These should reflect a number of variations to the currently published scenarios, which appear to reflect a best case or highly favourable outlook, and include:

a) A pessimistic view of export prices (one assuming minimal U.S. - CO_2 pricing levels).

b) A periodic one-year drought (e.g., of the magnitude experienced in 2003-04).

c) A periodic multi-year drought (e.g., of the magnitude of the multi-year droughts of the 1940’s or 1980’s).

d) Zero long-term contract commitments.

e) A strong movement to domestic electric heating.

f) Existing transmission tie-line constraints.

g) Potential carbon tax on imports and a doubling of water rental rates.

Having reviewed the information filed, the Board remains of the view that the Utility has yet to adequately address the Board’s concerns as to the risks faced by the Corporation. The Board believes a more detailed and independent risk analysis is required to assess the need and magnitude for, and of, future rate increases.

Accordingly, the Board will direct MH to file by September 30, 2009, for Board approval, a conceptual outline for an in-depth and independent study of all the operational and business risks facing the corporation. The study is to be a thorough and quantified Risk Analysis, including probabilities of all identified operational and business risks. This report is to consider the implications of planned capital spending, taking into account export revenue growth, variable interest rates, drought, inflation experience and risk, and potential further and continuing currency fluctuation.

To facilitate the Board's review of MH's risks, and in addition to the above Report, MH is to file all internally and externally prepared reports, since the 2003-04 drought, that have addressed any of MH's energy supply and other risks.

Financial Targets

While MH's current financial forecast has MH meeting its debt:equity ratio target in the short term, a deterioration of that ratio is expected as the construction of new Generation and Transmission projects is undertaken.

Since borrowing is required for new construction to proceed and a reasonable debt:equity ratio has been a concern of rating agencies, and presumably lenders, there remains a concern for all Stakeholders that a 75:25 debt:equity capital structure target may not be sufficient in this "new world" of heightened credit risk awareness.

IFRS (International Financial Reporting Standards)

In IFF 08-1, MH projects for the years 2011/12 and onward, accounting policy changes related to the conversion to IFRS. To-date, MH anticipates additional period expenses in the amount of $25 million, less offsets due to the concurrent and corresponding reductions in depreciation and amortization expense

MH has projected a provision in IFF 08-1 of approximately $10 million annually for the expensing of research related expenditures associated with intangible assets. MH anticipates that such expenditures will no longer be eligible for deferral in accordance with Canadian Accounting Standards effective for MH April 1, 2009. This provision is at this point an estimate that needs finalization.

Additionally, MH provides approximately $15 million annually, in IFF 08-1, for additional general and administrative costs and amortization of rate-regulated assets that may no longer be eligible for deferral upon the conversion to IFRS. These general provisions are also under review by MH, with a final assessment of the implications of IFRS on forecast results not expected to be available until approximately January 2010.

Adjustments to Retained Earnings in 2010 and 2012

In addition, MH assumes retained earnings write-offs of intangible and rate regulated assets of $50 million in 2010. These write-offs would be related to research related expenditures associated with intangible assets. In addition, MH projects $59 million of further write-offs for 2012, related to rate regulated assets. The write off of rate-regulated assets is consistent with MH's initial assessment of the implications of IFRS provided by MH at the last GRA.

The Board is of the view, particularly given the Utility's recognition of write-offs within the 20-year forecast period, that financial conservatism should dictate that MH reflect known financial impacts through an early adoption of IFRS standards. This would better reflect the financial reality faced by the Corporation. If such policies were adopted earlier, the Board questions whether MH would still forecast a 75:25 debt: equity ratio as early as 2009.

Frankly, the Board is concerned that the adoption of IFRS will have a more significant financial and operational impact on MH than now quantified by the Corporation. For example, the Board understands that IFRS transition rules allow for the reset of any actuarial gains and losses on the Employee Pension Plan (EPP) against opening retained earnings. MH indicated at the 2008/09 GRA that the EPP had an unamortized balance of approximately $30 million that would likely be written off against retained earnings with the adoption of IFRS. Given the recent downturn in the stock markets, the Board is concerned that pension investments may have been negatively impacted, and that this may result in additional actuarial experience losses that will further impact MH's retained earnings when written off.

The Board notes that MH and its consultant are currently engaged in developing a detailed review of the potential differences between the corporation's current accounting policies and IFRS requirements. The review is expected to also provide an assessment of the impact of those differences on net income, customer rates, and key business and information technology processes.

MH has indicated that it is unable to quantify the impact of IFRS conversion at this time.

With the implementation of IFRS there is a wide range of possible accounting policy changes and transitional elections that could have a significant impact on the financial results and forecasts of MH.

The Board understands that a quantification of potential impacts and choices in accounting policies may be available in January 2010, and the Board expects to be apprised of IFRS developments.

Accordingly, the Board will direct MH to file with the Board by February 28, 2010 an IFRS status update detailing expected changes and support for changes in proposed accounting policies. The report should include the accounting policy options that were considered, transitional elections to be made, and the potential financial impact of such policies and elections on net income, customer rates, and key business and information technology processes.

The Board will also require an updated 20-year IFF, reflecting a projection of the financial impact of the proposed changes.

Finance Expense

Comparing IFF 07-1 to MH's 20-year forecast filed in January 2009, it is apparent that the projected higher net income and lower interest rates of the early years of the Utility's forecast, and a projected strengthening of the Canadian dollar, are expected to reduce finance expense. Yet, higher capital spending begins to offset the projected and earlier reductions to finance expense in the later years of the ten-year time period analyzed.

It appears that adjustments to its forecasts made by MH have finance expense for the ten-year comparative period of fiscal 2008/09 through 2017/18 declining by $260 million to $4.9 billion in MH08-1, from the $5.2 billion forecast in MH07-1. However, on closer analysis the reduction is the result of projected higher levels of capitalized interest. (Capitalized interest is interest that is incurred but which is not charged against net income, but deferred for later amortization, that to take place over the expected life-time of the related asset.)

Projected finance expense and the relative percentage capitalized in IFF08-1 are as follows:

Finance Expense ($ millions)	**IFF08-1 (20-Year Forecast- January 2009)**										
For the years ended March 31:	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Total**
Gross Finance Expense	$ 479	$ 544	$ 597	$ 638	$ 654	$ 667	$ 748	$ 840	$ 977	$ 1,067	$ 7,211
(Less) Capitalized Interest	(79)	(119)	(165)	(160)	(111)	(148)	(214)	(333)	(457)	(469)	(2,255)
Total Finance Expense	$ 400	$ 425	$ 432	$ 478	$ 543	$ 519	$ 534	$ 507	$ 520	$ 598	$ 4,956
% Capitalized	16%	22%	28%	25%	17%	22%	29%	40%	47%	44%	31%

This compares with that forecast in IFF07-1, as follows:

Finance Expense ($ millions)	IFF MH07-1										
For the years ended March 31:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Gross Finance Expense	$ 515	$ 572	$ 609	$ 640	$ 657	$ 695	$ 756	$ 803	$ 864	$ 906	$ 7,017
(Less) Capitalized Interest	(89)	(126)	(158)	(141)	(104)	(152)	(209)	(247)	(285)	(290)	-$ 1,801
Total Finance Expense	$ 426	$ 446	$ 451	$ 499	$ 553	$ 543	$ 547	$ 556	$ 579	$ 616	$ 5,216
% Capitalized	17%	22%	26%	22%	16%	22%	28%	31%	33%	32%	26%

As reflected in the above schedules, the percentage of capitalized interest over the comparative 10-year forecast period has increased to 31% in IFF08-1, up from 26% in IFF07-1. A higher proportion of capitalized interest is forecast to begin in fiscal year 2011, with the increase over past capitalization levels becoming more pronounced from fiscal 2016.

Over the eleven-year period 2008/09 to 2018/19, MH is currently forecasting to capitalize $2.7 billion of interest, representing 37% of incurred interest costs. The projections of higher levels of capitalization of interest remains a concern of the Board, as the practice results in a forecast of a lower debt to equity ratio and, as well, of higher annual net income, but only as long as the period of deferral continues (in short, the cost burden is shifted from the present to the future).

Operating, Maintenance & Administrative Expense

In Order 116/08 MH's OM&A pressures were described as follows:

> *"MH indicated that over the last few years the Corporation has experienced cost and operating program pressures relating to: increased maintenance requirements (due to ageing infrastructure); wage and benefit settlements that exceed inflation; additional overtime and increased staffing levels (to meet extra-provincial requirements); the expansion of programs (to meet higher customer numbers) and needs; and the meeting of environmental and other stakeholder expectations. These pressures were reported to be continuing and being compounded by a looming shortage of skilled labour, manifesting itself in higher training and labour costs."*

In Order 116/08 the Board stated:

> *"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."*

And, 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 by the Board and/or interveners related to MH achieving a reduction of OM&A expenses have not been met. In support of, and despite the variance of the April 1, 2009 rate increase to 2.9% rather than 4%, the Board expects MH to lower actual OM&A expense levels below those now forecast to assist in the Utility meeting its financial targets.

The Board's concerns are magnified given the forecast escalation in capital spending and increasing debt levels, and the concurrent forecast of a weakening financial structure as MH moves forward on major Generation & Transmission projects.

In IFF MH08-1 and the 20-year forecast, MH has removed OM&A expenses related to subsidiaries which, until this time, were reflected in the Utility's forecast of consolidated operations. The Board remains concerned with the level of growth in OM&A expenditures, with OM&A forecast to increase to $349 million in fiscal 2009, that an increase from $323 million (excluding subsidiaries), and an increase of over $26 million or 8% from the prior year.

Annual OM&A expense is forecast to grow from $400 million in 2009 to over $785 million in 2028, representing a compounded annual growth rate (CAGR) of 2.5% over the 20-year forecast. This rate of forecasted growth is inconsistent with recent historical experience, as OM&A has grown by a CAGR of 3.3% for the years 2004 to 2008, with

the annual cost increasing from $283.4 million annually to $323 million (excluding subsidiaries), and with the level of further growth projected for fiscal 2009.

MH's justification of recent and forecast OM&A escalation does not necessarily stand as valid for years beyond the next 10 years. Completion of Keeyask G.S., Conawapa G.S. and other new infrastructure should lead to a reduction in maintenance requirements and other related costs. In the Board's view, MH's recently reduced long-term domestic load growth forecast (plus or minus 1%%) does not support a continuation of annual and compounding 2.5% OM&A growth.

Furthermore, MH has indicated that synergies will be realized from the move to the Utility's under-construction new corporate head office. The realization of such synergies will be tested after the move has occurred, and the Utility should, if at all possible, rein in the annual rate of growth in OM&A expenses.

Low Income Bill Assistance Program

In Order 116/08, the Board reported that the low-income, high-energy burden problem is extensive in Manitoba, with a significant percentage of households being low-income. To assist low-income consumers, MH has relied on its Power Smart programs (problems exist in that many low-income families are unable to meet the co-funding or pre-funding requirements) to allow energy efficiency to hold down bills, efforts to work out reasonable payment schedules for households experiencing financial distress, and a voluntary program, *Neighbours Helping Neighbours,* administered by the Salvation Army. Under this voluntary program, MH customers donate to a fund that assists low-income families and seniors who are unable to pay their natural gas and/or electricity bills, MH matches the private donations and advertises the program to all of its customers.

The Board noted that while the voluntary program is beneficial, the needs are such that the program as it now operates is not sufficient to meet the need. A low-income bill assistance program should assist in reducing the energy burden faced by low-income households, and could lead to significant non-energy benefits such as increased

comfort, reduced health costs, lower bad debt write-offs, etc. Manitoba's climate is such that heat is a necessity in at least nine of each twelve months.

The Board further stated that energy affordability for low-income families is very much an issue that requires immediate attention in Manitoba. In Order 116/08 and subsequently revised in Order 150/08 the Board directed:

> *"MH to propose for Board approval (by a date to be requested by MH in its November 30, 2008 update and approved by the Board) a low-income bill assistance program, where such a program would occur in conjunction with and complimentary to an expanded low-income DSM program*."

In Order 116/08 the Board further stated:

> "MH should address the issues of: how such a rate affordability assistance program should be funded, how eligibility criteria should be determined and how levels of assistance should be determined. Consultation with the Coalition and RCM/TREE may be of assistance to MH."

In response, MH filed a report on Low income bill assistance on March 4, 2009. In that report, MH discussed possible bill assistance program expansion, and indicated it will investigate the viability of potential program expansion. MH has cited many variables that will need to be investigated, including;

- Determining Program eligibility;
- Determining Program costs;
- Determining and Quantifying program benefits;
- Determination of program funding;
- Program cost allocation;
- Customer feedback;
- Administration and implementation of the program; and
- Evaluation criteria.

The Board accepts MH's indication that implementation of a specific low-income bill assistance program will require the addressing of issues that are complex and far reaching. The Board also accepts that MH has committed to looking at all options for

some form of bill assistance, and that the Utility may consider enhancements to existing programs. The Board is particularly pleased that MH has further indicated that it will consult with stakeholders and that, after these consultations, will put forward a recommendation to MH's Board with options, implications and a process on how and if to move forward, with a report to be made to the Public Utilities Board as to MH's plans.

While the Board is encouraged by the commitments and steps made and currently being undertaken by MH with respect to a low-income bill assistance program the Board expects MH to provide a report well ahead of the next heating season, and will direct MH to provide such a report by July 31, 2009.

The report list options, provide details and implications related to the options, assess the merits of each, and recommend a specific and implementable course of action that can be put in place no later than October 31, 2009.

In its research, the Board urges MH to look to programs in other jurisdictions, and assess their potential applicability in Manitoba.

Particularly, given the current economic downturn it is vitally important to put in place protection for low-income customers with an effective bill assistance program. MH is embarking on a capital program that is predicated on consistent future rate increases, while too often low-income families do not benefit from annual increases in household income. The Board is cognizant of the impact on low-income consumers of rate increases, and expects MH to put forward its preferred low-income bill assistance program with an indication as to how many households it expects may be assisted in the near future.

Capital Expenditures & Long Term Debt

At the last GRA the Board expressed concern with the level of increased capital spending and the risks such spending has on rates.

In Order 116/08 the Board stated:

"The Board recognizes its statutory jurisdiction does not extend to the approval of Capital expenditures. Yet, it is clear MH's anticipated capital spending and associated increased debt levels is and will place upward pressure on rates. The Board has, as interveners have noted, expressed concern with MH's debt growth in previous orders. In Order 143/04, the Board noted:

"The Board continues to be concerned with the progressive substantial growth in capital expenditures and accompanying debt. The Board accepts that many of the capital expenditures are related to reliability and safety, and therefore are may [sic] be prudent to incur. The Board also recognizes that many of the forecast capital expenditures are related to or the equivalent of generation expansion, such as supply side enhancements, Wuskwatim, Gull, Conawapa, and may be justified individually when considering each project's purposes and forecast results over the long term. However, collectively these projects negatively impact MH's debt to equity ratio and net income in the initial years, placing increased strain on the financial stability of MH and adding additional risk for existing ratepayers. The Board is concerned that MH has not developed a threshold for capital expenditures and associated debt growth that considers all projects, together with the health and financial stability of the Company."

The Board reiterates prior concerns, and notes that with planned major capital expansion, such concerns are now graver.

MH's forecast of future capital spending has increased significantly since Order 116/08, and the Board reiterates its perspective that MH's planned capital expenditures are of an unprecedented scale in the Utility's history, with implications for borrowing, staffing, exports, First Nation relationships, risks and, possibly, rates.

In a Status Update filing, MH included an updated integrated financial forecast IFF 08-1, and capital expenditure forecast CEF08-1 ; an update to that provided to the Board at the last GRA (which incorporated IFF 07-1 and CEF 07-1). For the next ten years MH is now forecasting to spend an additional $3.4 billion over what it had previously planned to expend over the ten-years 2008/09 and 2017/18, details as follows:

Capital Spending- Electric Operations: CEF08 Vs. CEF07 ($millions)

	2009	2010	2011	2012	2013	2014	2015-18	10 Year Total
CEF08	1,073	1,201	1,086	851	818	1,159	7,953	14,141
CEF07	1,120	1,010	933	818	805	1,212	4,797	10,898
Increase (Decrease)	(47)	191	153	33	13	(52)	3,156	3,447

The Capital Expenditure Forecast (CEF08-1) for electric operations for the ten-year period to 2017/18 totals $14. 1 billion, compared to $10.8 billion for the same ten-year period included in CEF07-1 provided at last years GRA, an increase of over $3.4 billion. MH is now forecasting to spend over $10.0 billion on major Generation and Transmission projects for the next ten-year period, an increase from the $7.1 billion forecast in CEF07-1.

MH's forecast increased Capital spending in CEF08-1 is primarily due to an updated forecast of $2.9 billion for Major Generation & Transmission projects, of which $2.7 billion relates to an update in the forecasted capital cost for the Keeyask generating station and a further $200 million for a new Dorsey to U.S. border transmission.

Major revisions have been made to the budget for the Keeyask G.S., which has now been forecast at $3.7 billion in CEF08-1. In addition, MH has included a general provision for anticipated capital cost escalations of $236 million. MH has also indicated that the January 2009 updated estimates are still under review, this due to "uncertain" economic conditions.

The updated CEF08-1 projects that from 2008/09 to 2018/19, the Corporation plans to spend $16.0 billion, of which $11.6 billion is for new major generation and transmission assets and $4.4 billion for other power supply requirements.

Capital Expenditure Forecast 2009 to 2028

Though requested to do so by the Board, MH did not provide a 20-year Capital Expenditure Forecast to 2028, but did provide some indication of anticipated increases in Capital spending to that date.

Based on the status update filings, the Statement of Cash Flow in MH's 20-year IFF forecasts over $455 million in additional planned capital spending over the 11-year period 2009 to 2019, from that forecast in CEF08-1.

In addition, given the 20-year IFF forecast provided through 2028, the Board is aware that to serve potential new long-term export contracts to Wisconsin and Minnesota, MH will require additional generation and transmission from Keeyask, by 2018, and Conawapa, by 2022.

MH indicated that capital spending on major Generation and Transmission projects had increased by an additional $3 billion from that forecast in CEF08, as follows:

Major Generation & Transmission 20 Year Forecast Update January 2009 ($ millions)	20 Year Forecast	CEF08-1	Change
Keeyask Generating Station	4,600	3,700	900
Conawapa Generating Station	6,300	4,978	1,322
Unidentified GS improvements and upgrade projects			-
Project 1: In service 2019/20	245	-	245
Project 2: In service 2022/23	281	-	281
North - south transmission requirement [In-service 2022/23]	344	-	344
	11,770	8,679	3,091

MH provided a further update on the in-service cost estimate for Keeyask G.S. of $4.6 billion, this is an increase of over $900 million from that forecast in CEF08-1. MH also

projected capital expenditures of $6.3 billion for Conawapa G.S., an increase of $1.3 billion from CEF08-1. MH indicated the current updated estimates remain under review.

In addition MH made a general provision for capital expenditures related to two unidentified generating station improvement and upgrade projects. One project is anticipated to be in service in 2019/20 at an approximate cost of $254 million, the second unidentified project represents provision of $281 million for in service in 2024/25. MH has also identified in additional north-south transmission requirement to be in service in 2022/23.

At the recent GRA, MH indicated that there may be a need for a natural gas fired generating station, which could be required to deal with any delays in bringing Keeyask and Conawapa online. Yet, it is not clear from the most recent filings whether such a requirement and plan has been contemplated in MH's updated forecast.

In addition to the major Generation and Transmission increases, MH's projection also includes an increase of 5% per year for escalation in base capital spending, and 2% escalation per year in DSM spending, both commencing in 2019/20.

Based on the most recent information filed by MH, it appears that the Utility presently plans to expend on capital projects, from 2009 through 2028, in the area of $26 billion, of which approximately $17 billion relates to major Generation and Transmission projects and $9 billion on other capital spending. The majority of future spending on major Generation and Transmission projects is expected by 2025.

Given this occurs as currently planned, MH's undepreciated plant in-service would increase from $12 billion (2009) to $37.3 billion by the end of 2028, and, concurrently, long term debt will increase from $7.2 billion in 2009 to over $19.4 billion by the same end date, representing an increase of $12.2 billion in the next 20 years. The forecast growth in long-term debt is quite substantial, particularly when compared to the current provincial debt of approximately $11 billion, which includes MH's current long-term debt.

Borrowings of this magnitude will involve very high interest costs, with annual payments likely to increase to in excess of $1 billion annually. If the forecast interest rates on new

debt are actualized and the anticipated export demand and pricing also occurs, this level of interest may prove manageable. Though, and presently, the Board does not share MH's optimistic view on future export prices.

The Board expects MH to file a full and revised 20-year capital expenditure forecast, and, as well, the terms of reference and timeline for a regulatory review of MH's planned capital program and the implications for consumer rates.

Pre-funding of Capital Expenditures

While MH has denied MIPUG's contention that recent and proposed rate increases in excess of inflation amount to pre-funding of Generation & Transmission system expansion for export, it is true that a stronger financial structure with a higher level of retained earnings do support the viability of these ventures.

MH has acknowledged that both Keeyask G.S. and Conawapa G.S. are being built earlier than required for domestic load. As such, they are to provide the dependable energy required to meet export requirements. The dependable output of Keeyask and Conawapa, estimated at about 7,500 GWh (2,000 MW), is only about 20% greater than the contractual export commitments for energy.

In the absence of any of the three pending export contracts, neither Keeyask G.S. nor Conawapa G.S. would be required until at least 2030-31. This suggests that the two Lower Nelson River plants are being advanced by 10-15 years to service these export contracts.

MH advises that Bipole III is being built for primarily domestic system reliability purposes, though in advance of meeting new export commitments. MH holds that there should be no new transmission costs attributable to the new generation facilities. This implies that there are no HVDC transmission reliability issues for the current export loads and suggests that exports are served from southern generation and Upper Nelson River generation, with only domestic load being served by Lower Nelson stations.

If the scenario were reversed, it could be argued that in the absence of export contracts MH might well look to addressing its domestic reliability concerns by adding natural gas generation and/or import purchase agreements. In the early 1990's, MH chose not to proceed with Bipole III when a 500 MW sale to Ontario was cancelled and related plans to build Conawapa G.S. were shelved. Apparently domestic reliability was not a sufficient justification at that time.

Capital projects such as Bipole III, Keeyask G.S. and Conawapa G.S. will generate considerable economic activity in Manitoba. The benefits of this level of economic activity will be realized in part by the current residents of the province, who are also rate payers who will be required to pay higher "real" energy bills if rates rise faster than inflation. And, new skilled labour may move into Manitoba expanding the tax base and customer base.

Some of the early costs of new Generation & Transmission relate to First Nations involvement. The immediate financial gains for these communities do benefit overall tax payers in the short-term, and a better trained workforce leads to long-term gains for Manitoba industry in the longer term.

MH's approach to the capitalization of all interest charges during the project construction period, defers project costs until in-service when there is a revenue stream (from exports) to cover the annual costs. As such, current ratepayers are not assessed the rate increases that would be required to hold to the financial targets if interest costs were expensed during the planning and construction phase of new capital projects. Because Generation & Transmission plants frequently operate at a loss in the early years, but with the real probability of large excess revenues 10 to 15 years in the future, there will always be some question of the balancing of benefits between customer generations, but hopefully, and taking into account the overall impact on the economy and ratepayers, all generations will benefit in the end.

As an example, Limestone G.S. did not generate a positive cash flow during the first six to eight years of operation, but has provided large excess annual revenue after 12

years. Current ratepayers are benefiting from the rate increases in the early years and from export revenues in the last five or six years. The expectation is that this experience will repeat itself with the new generation and transmission expenditures, and affect the Corporation's financial strength, thus risking significant domestic rate increases if a major risk such as a multi-year drought were to occur.

Intergenerational cost shifting is almost inevitable. In the context of protecting a power supply resource, a level of pre-funding as an offset to cost deferral would seem to have merit and in the Board's view be in the public interest.

Note: Board decisions may be appealed in accordance with the provisions of Section 58 of *The Public Utilities Board Act*, or reviewed in accordance with section 36 of the Board's Rules of Practice and Procedure. The Rules are available at www.pub.gov.mb.ca.

5.0 IT IS THEREFORE ORDERED THAT:

1. MH's Application for approval of a 4% rate increase, effective April 1, 2009 BE AND IS HEREBY VARIED.
2. MH is to immediately file, for Board approval, revised rate schedules, to take effect April 1, 2009 and demonstrate and recover a 2.9% increase in revenues derived from energy rates (consistent with the methodology as contained in Appendix 9, Attachment 'D' to the February 2, 2009 Status Report) from all customer classes, except for Area and Roadway Lighting.
3. MH to prepare a series of alternative 20-year scenarios (IFF/Power Resource Plan/Capital Plan), to reflect:
   a) A pessimistic view of export prices (minimal U.S. - CO_2 pricing levels).
   b) A periodic one-year drought (e.g. 2003-04).
   c) A periodic multi-year drought (e.g. 1940's or 1980's).
   d) Zero long-term contract commitments.
   e) A strong movement to domestic electric heating.
   f) Existing transmission tie-line constraints.
   g) Potential carbon tax on MH's imports and a doubling of water rental rates.
4. MH to file by September 30, 2009, for Board approval, a conceptual outline for an in-depth and independent study of all the operational and business risks facing the corporation. The study to be a thorough and quantified Risk Analysis, including probabilities of all identified operational and business risks. This report should consider the implications of planned capital spending taking into account export revenue growth, variable interest rates, drought, inflation experience and risk, and potential currency fluctuation.

5. In conjunction with the outline requested in Directive 4, MH is to file all internally and externally prepared reports, since the 2003-04 drought, that address any of and all of the energy supply and other risks faced by MH.
6. MH to file with the Board by February 28, 2010 an IFRS status update report detailing the support for changes in proposed accounting policies, including accounting policy options considered, transitional elections to be made, and the potential financial impact of such policies and elections on net income, retained earnings, customer rates, and key business and information technology processes as well as providing an updated 20-year IFF reflecting the financial impact of the proposed changes.
7. MH file, on or before December 1, 2009, a full 20-year capital expenditure forecast, together with draft terms of reference and timeline for a regulatory review of MH's planned capital program and its impact on consumer rates;
8. MH file, ahead of the 2009/10 heating season, an update of its plans for a low-income bill assistance program; and
9. MH file its next General Rate Application, including any rate adjustment requests for both 2010 and 2011, by October 1, 2009.

THE PUBLIC UTILITIES BOARD

"GRAHAM LANE, CA"
Chairman

"H. M. SINGH"
Acting Secretary

Certified a true copy of Order No. 32/09 issued by The Public Utilities Board

Acting Secretary