

MANITOBA HYDRO

DEBT MANAGEMENT STRATEGY

2012/13 AND 2013/14



Finance & Administration
Treasury Division
April 2012

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1.0 Purpose of this Document

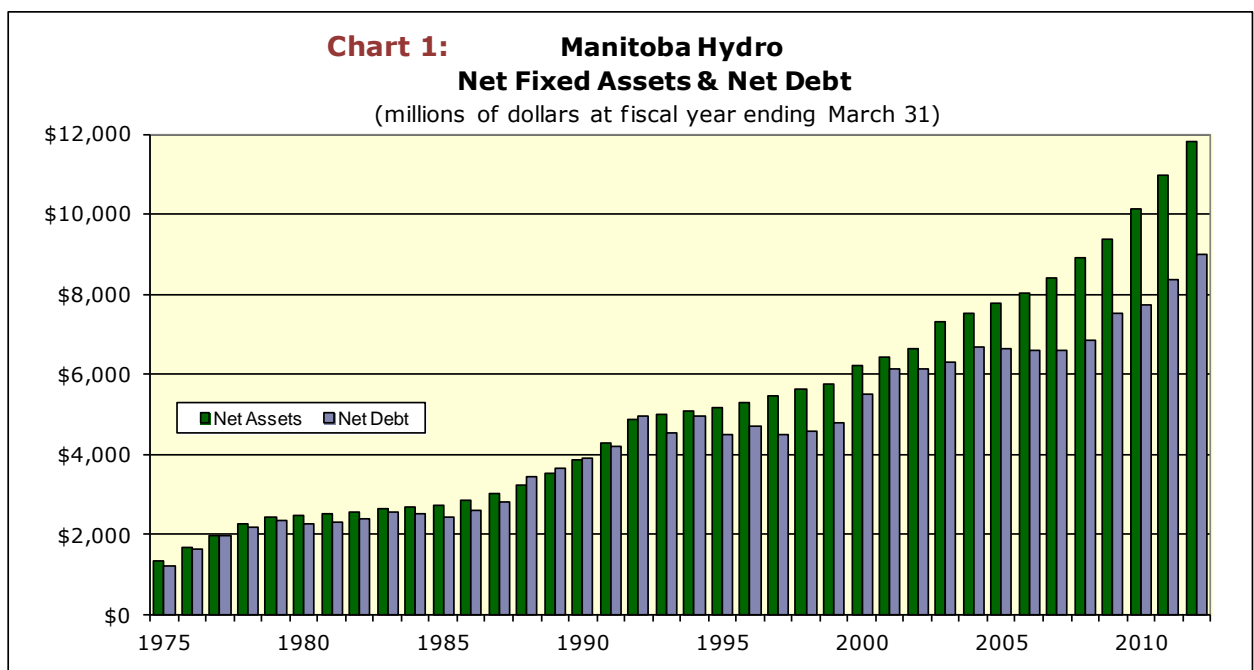
The *Debt Management Strategy* document provides information on the historical growth of the Corporation's investment in fixed assets and the corresponding increase in Manitoba Hydro's long term debt. The document also summarizes the statutes that govern the Corporation's financing programs, and outlines the debt management strategies that will address the Corporation's financing requirements for the 2012/13 and 2013/14 fiscal years.

2.0 Overview of Manitoba Hydro's Capital Financing Program

As with most energy utilities, debt is an essential component of Manitoba Hydro's corporate capital structure. As a Crown Corporation owned by the Province of Manitoba, Manitoba Hydro does not have access to share capital as a source of funds. Therefore, in order to adequately provide for the long term energy requirements of the province, Manitoba Hydro must rely on debt as its primary source of external financing.

Debt financing has been very beneficial for Manitoba Hydro and its ratepayers. It has fueled the growth of the Corporation from the early days of farm electrification and the development of the Winnipeg River generation system, through the years of development of the Nelson River generation and transmission system, right up to the current development and construction of the Wuskwatim Generating station in northern Manitoba. None of this would have been possible without debt financing.

Chart 1 illustrates the growth in net fixed assets and net long term debt that has occurred since 1975. While net debt has grown to approximately \$9.0 billion as at March 31, 2012, the corresponding investment in generation, transmission, distribution and other assets has grown at a much greater pace to a net book value of approximately \$11.8 billion at March 31, 2012. The current market or replacement value of Manitoba Hydro's assets is many multiples of the net book value.



The *Capital Expenditure Forecast* (CEF11) is a projection of Manitoba Hydro's capital expenditures for new and replacement facilities to meet the electricity and natural gas service requirements in the Province of Manitoba, as well as expenditures required to meet firm sale commitments outside the province. The CEF11 totals \$18.3 billion for the ten year period from 2012/13 to 2021/22. Expenditures for Major New Generation & Transmission total \$13.5 billion, with the balance of \$4.8 billion comprised of expenditures for infrastructure renewal, system safety and security, new and increasing load requirements, and ongoing efficiency improvements.

While debt financing provides the majority of funding necessary for investment in long term assets, Manitoba Hydro also funds a significant portion of its capital requirements from cash generated from operations. Utilizing funds from operations reduces the amount that would otherwise need to be borrowed each year by the Corporation. The net cash flow from operations for the next 10 years is forecast to be in excess of \$5 billion, with an average during this timeframe of over \$500 million per fiscal year. Therefore, on average, Manitoba Hydro derives close to 30% of its financing for capital assets from internal sources.

3.0 Borrowing Authority of Manitoba Hydro

Manitoba Hydro's authority to issue debt is provided through The Manitoba Hydro Act, The Loan Act, and The Financial Administration Act. The following sections provide a synopsis of the authority received by Manitoba Hydro through this legislation.

3.1 The Manitoba Hydro Act

The Manitoba Hydro Act grants the following powers to the Corporation for issuing debt in the name of the Manitoba Hydro-Electric Board:

- 1. Temporary Borrowing Authority**
The principal amount of short term promissory notes outstanding at any one time shall not exceed in the aggregate the sum of \$500 million of principal outstanding at any one time, upon such terms, for such periods, and upon such other conditions, as the Corporation may determine.
- 2. Government Guarantee**
The Government may, on such terms as may be approved by the Lieutenant Governor in Council, guarantee the payment of the principal and interest on any borrowings of the Corporation under this section.
- 3. Power of the Corporation to Borrow and Issue Securities**
The Corporation may raise money by way of loan, notes, bonds, debentures or other securities in the name of The Manitoba Hydro-Electric Board subject to the approval of the Lieutenant Governor in Council for purposes provided in the Manitoba Hydro Act or to refund any loan or advance previously made by the Corporation.

Borrowing authority, under Section 35 of the Manitoba Hydro Act, will treat Canadian and US borrowings on a one for one par value basis. The borrowing authority will be abated for the Canadian dollar equivalent using the nominal rate of exchange when the loan is denominated in a currency other than Canadian or US dollars.

3.2 The Loan Act

The Loan Act is approved each year and grants Manitoba Hydro borrowing authority to meet the Corporation's projected financing requirements. Authority granted under the Loan Act is for purposes other than to refinance debt, including new investment requirements. Refunding authority to refinance maturing long term debt is provided through the Financial Administration Act.

3.3 The Financial Administration Act

The Financial Administration Act authorizes the Minister of Finance to borrow money for any purpose authorized by any Act of the Legislature or for the payment, refunding, refinancing or renewal, from time to time, of the whole or any part of any loan made or provincial securities issued under any Act.

4.0 Debt Management Objectives

Manitoba Hydro's fundamental debt management objective is to provide stable, low cost funding to meet the financial obligations and liquidity needs of the Corporation. Manitoba Hydro continually monitors the interest rate environment and acts to secure stable, low-cost financing with terms to maturity that meet investor appetite and fit the Corporation's debt maturity schedule.

Manitoba Hydro's debt is viewed to be self-supporting as evidenced by the investment grade credit ratings that the Corporation and Province receive on their short and long term debt from the various rating agencies such as Dominion Bond Rating Service, Moody's Investors Service, and Standard & Poor's.

In order to maintain the self-supporting nature of the Corporation's debt obligations and the attractive financing rates associated with the Corporation's debt, Manitoba Hydro places significant emphasis on the following financial targets:

Interest Coverage – Maintain an annual gross interest coverage ratio greater than 1.20. The interest coverage ratio indicates the extent to which net income is sufficient to pay gross interest on debt. It is calculated by dividing net income plus gross interest on debt by gross interest on debt.

Capital Coverage – Maintain a capital coverage ratio of greater than 1.20. The capital coverage ratio indicates the extent to which cash generated internally is sufficient to fund capital construction expenditures without additional external financing. It is calculated by dividing cash generated from operations by capital construction expenditures (excluding major new generation & transmission projects).

Debt/Equity – Maintain a minimum debt/equity ratio of 75:25. The debt to equity ratio indicates the relative percentage of assets financed through debt versus equity. It is calculated by dividing debt by debt plus equity.

Note: During the next several years of large capital investments in major new generation and transmission facilities, financial targets may not be met in all years. However, all ratios are projected to strongly recover following the in-service of Keeyask and Conawapa generating stations.

5.0 Analysis and Commentary

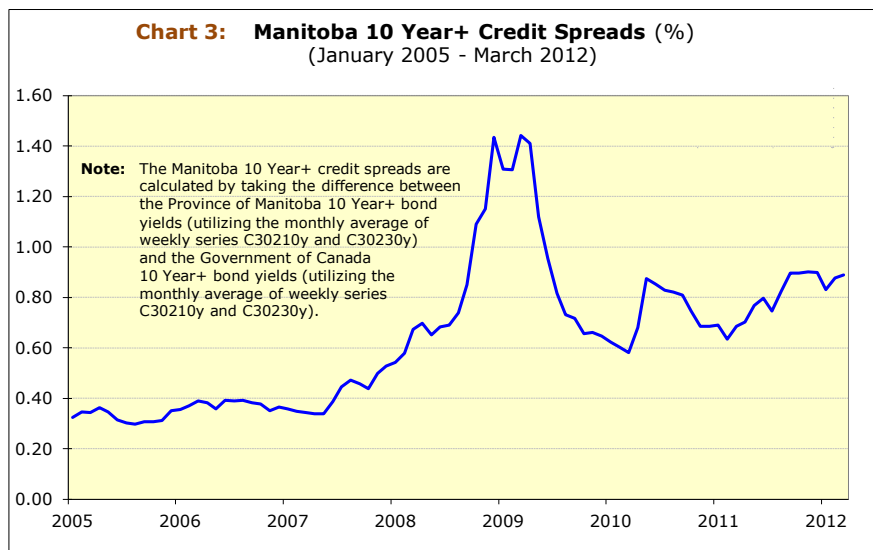
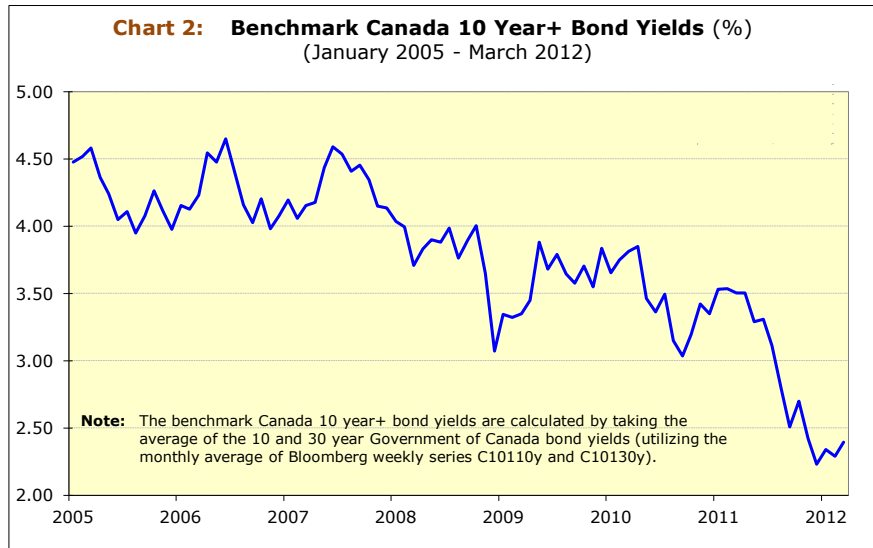
The extended period of financial market uncertainty continues to impact the debt capital markets and investor decision-making.

Investor appetite within the capital markets will have a significant effect on the cost, availability and timing of Manitoba Hydro's financing. Investor appetite is affected by a variety of factors including their views of the macroeconomy. As noted by the Bank of Canada in April 2012, "The heightened uncertainty around the global outlook has eased from very high levels, but volatility can be expected to persist."¹

In response to these economic challenges, many investors have continued to seek safety in liquid, high quality, government financial instruments. As a result, **benchmark bond yields** for Government of Canada long bonds have experienced ongoing downward pressure since 2008 (Chart 2).

Partially counterbalancing this reduction in the benchmark interest rates, the **credit spreads** between benchmark Government of Canada bonds and the all-in cost to the Province of Manitoba have remained elevated as compared to pre-2008 levels (Chart 3).

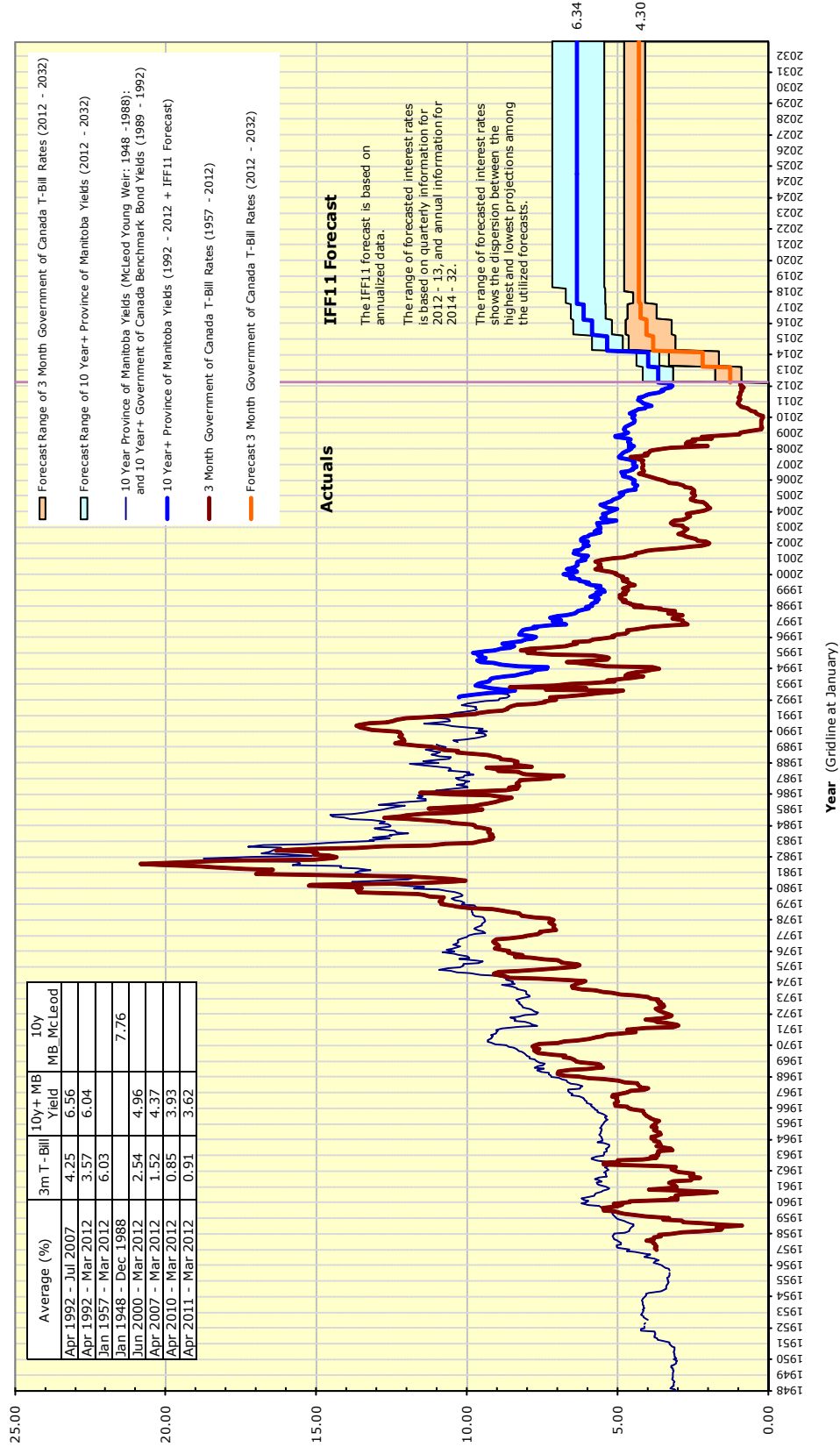
The net impact of these movements is that Manitoba Hydro's current interest rate environment continues to exhibit **exceptionally low rates** across the entire spectrum of the yield curve. This situation is demonstrated on the interest rate chart on page 7 that depicts historical interest rates dating back to January 1948, as well as a range of forecasted interest rates to 2032 (Chart 4).



¹ Bank of Canada, *Monetary Policy Report*, April 2012, page 3.

Chart 4: Short Term and Long Term Interest Rates (%)

Actuals January 1948 - March 2012; Forecast to 2032
(excluding PGF and transaction costs)



Note 1: The 10 Year Province of Manitoba (McLeod Young Weir) data is per Bank of Canada. The 3 Month Government of Canada T-Bill data is per Bank of Canada. The 10 Year+ Province of Manitoba data is calculated as the average of the Bloomberg 10 Year Manitoba yields and the Bloomberg 30 Year Manitoba yields.
Note 2: The 10 Year+ Government of Canada Benchmark Bond Yields have been used as an indicative proxy for the data gap for period Jan 1989 - Feb 1992 where no data was available for the Province of Manitoba bond yields.
Note 3: The forecasted long term debt credit spreads between the Government of Canada and the Province of Manitoba has been added to each of the forecasters' Government of Canada long term debt forecasts, so that all of the long interest rate projections illustrate Province of Manitoba yields.
Note 4: The forecasted long term interest rates exclude the Provincial Debt Guarantee Fee and transaction costs (the estimated transaction cost for Manitoba Hydro's long term borrowing is 6 basis points or 0.06%).

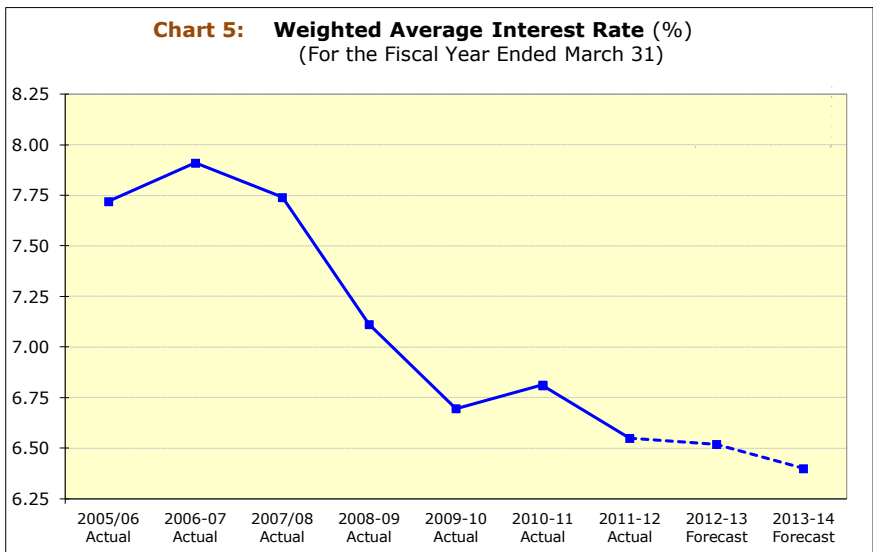
Chart 4 illustrates that for a prolonged period of time from the mid-1970's to the early 1990's, the long term interest rates for the Province of Manitoba were in excess of 10%, and in 1981 the long term interest rate exceeded 18%. The average 10 year long term fixed debt rate from 1948 – 1988 was 7.76%, and the average 10 year+ rate from April 1992 – July 2007 was 6.56%. In contrast, the average interest rate for 10 year+ debt from April 2007 to March 2012 was 4.37%. Looking forward, by 2017/18 the long term fixed interest rates are forecast to return to higher levels (average consensus forecast of 6.34% with emerging projections suggesting rates of ~5.85%), although remaining lower than the 15 year average experience prior to the economic downturn (1992 - 2007 = 6.56%).

With respect to the interest rate environment for Manitoba Hydro's Canadian long term floating rate debt, historically there has been significant volatility in interest reset rates. The average 3 month Canadian T-Bill interest rate (as a proxy for the variable interest reset rates on Manitoba Hydro's portfolio of Canadian long term floating rate debt) from January 1957 – March 2012 was 6.03%; and during 1974 - 1992 the 3 month T-Bill interest rate averaged over 10% with a high of over 20% in 1981.² Over the past two years, short term interest rates have risen from their historical lows in 2009/10. Looking forward, by 2017/18 the 3 month T-Bill rates (average consensus forecast of 4.30%) are projected to return to levels that existed prior to the economic downturn (1992 – 2007 = 4.25%).

When comparing the short and long term interest rates, it is evident that Manitoba's **yield curve has flattened** since early 2010 as the interest rate differential between the short and long term rates has narrowed. Moving forward, interest rates are forecast to rise for the entire yield curve. Therefore, a debt management strategy favouring fixed long term debt versus floating rate debt or shorter dated debt maturities will reduce the risk that the Corporation's future gross interest expense will be higher upon refinancing the debt stream.

The low interest rate environment over the past few years has also provided the opportunity for Manitoba Hydro to **reduce the debt portfolio's weighted average interest rates** (Chart 5). This opportunity to secure *low cost* financing is balanced alongside the debt management objective to provide *stability*.

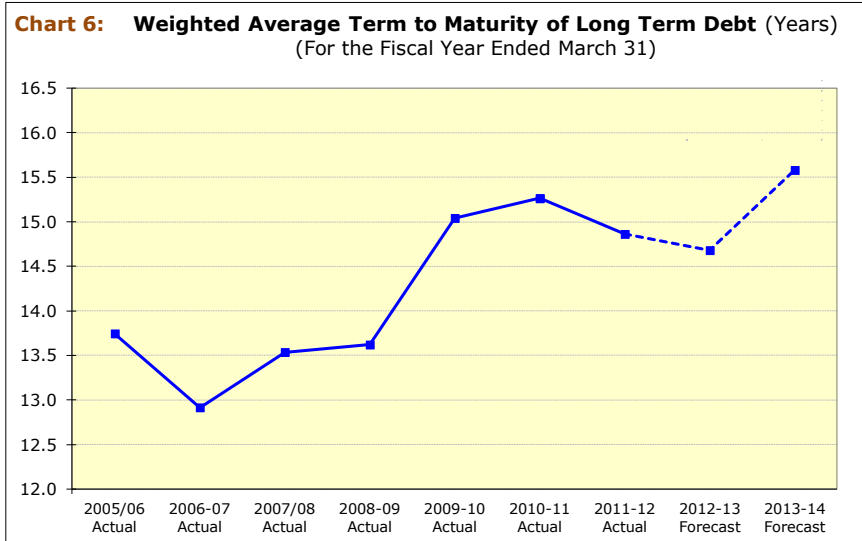
The importance of stability was recently underscored by Moody's Investors Service when they observed in their special commentary on provincial financings



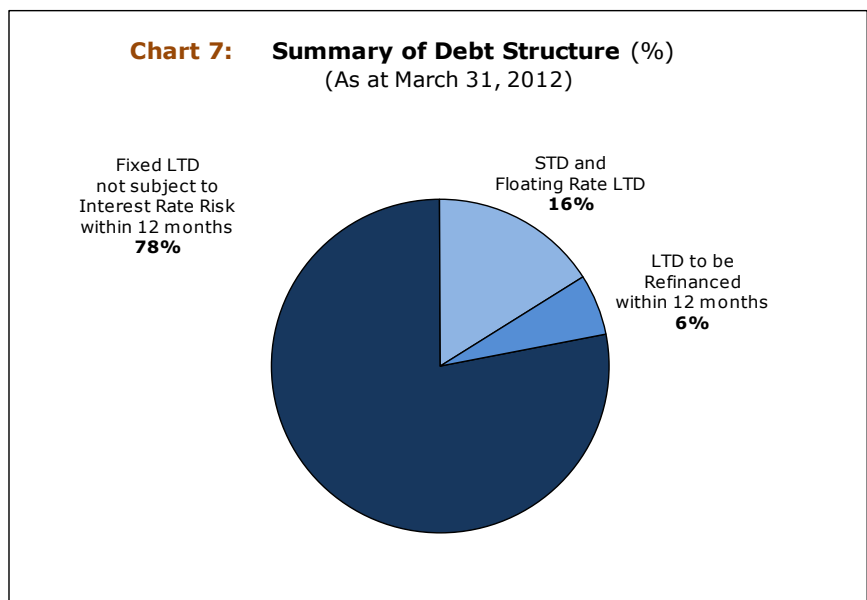
² The interest reset rate for Manitoba Hydro's portfolio of Canadian long term floating rate debt is typically the 3 month Bloomberg Bankers' Acceptance rate (CDOR03). In addition, the pricing for these long term floating rate debt issues have a fixed rate margin that is added to the variable bankers' acceptance (BA) component. For example, on May 4, 2010, Manitoba Hydro secured long term debt series C115 for CAD \$50 million and a May 4, 2015 maturity date. C115 bears a floating coupon rate of CDOR03 + 23 basis points. The coupon payment rate is reset on a quarterly basis to add the variable BA component to the 23 basis point fixed rate margin. Over the past 10 years, the CDOR03 rate has been higher than the 3 month Canadian T-Bill rate (C1033M) by an average of nearly 30 basis points (with an average of ~15 basis points prior to the financial crisis, peaking at over 250 basis points at the apex of the crisis in 2008, and currently at ~35 basis points in April 2012).

that “debt affordability has remained manageable, owing to the persistently low interest rate environment and the demand for Canadian government debt. ... As the global economy recovers, we expect interest rates and government funding costs will rise. ... Those provinces with higher debt burdens and greater reliance on short-term or variable rate debt financing will be particularly vulnerable.”³

During the past number of years, Manitoba Hydro’s actual long term financing has included issuance in various terms throughout the curve, including the issuance of floating rate notes. When selecting terms for its new borrowings, Manitoba Hydro gives careful consideration to the debt maturity schedule and the total level of annual financing requirements. In order to mitigate refinancing risk, to maintain financing flexibility during the upcoming decade, and in keeping with the concept of matching the Corporation’s long-lived assets with long term debt, Manitoba Hydro will continue to favour long term financings with maturities of 10 years+, while maintaining floating rate debt within policy limits. To further enhance the stability of the debt portfolio, Manitoba Hydro has **increased the weighted average term to maturity** of its long term debt portfolio by over one year since 2008/09 (Chart 6).



Stability is also reinforced by carefully managing the aggregate level of refinancing and interest rate reset risk within the debt portfolio. Manitoba Hydro’s **interest rate policy** on its existing debt portfolio is to limit the aggregate of short term debt and floating rate long term debt to a maximum of 30% of the total debt portfolio, and to maintain a target range between 15 - 25%. A graphical depiction of Manitoba Hydro’s debt structure as at March 31, 2012 is as shown in Chart 7.



³ Moody’s Investors Service, *Special Comment: Canadian Provinces Consolidating Finances in 2012*, March 8, 2012, page 5.

Liquidity risk refers to the risk that Manitoba Hydro will not have sufficient cash or cash equivalents to meet its financial obligations as they come due. Manitoba Hydro will meet its financial obligations when due through cash generated from operations, short term borrowings, long term borrowings advanced from the Province of Manitoba, and where applicable, sinking fund withdrawals. Overall financing requirements of Manitoba Hydro and its subsidiaries are managed on a consolidated basis. The Corporation closely monitors its cash receipts and disbursements on a daily basis as part of regular cash balancing activities. The Corporation also monitors short term debt balances and forecasted cash requirements to ensure that it has sufficient cash to meet near term financial obligations as they come due. During periods of elevated liquidity risk, the Corporation may increase its available liquidity and maintain positive cash and/or investment balances.

The Manitoba Hydro Act grants the Corporation the power to issue short term borrowings in the name of the Manitoba Hydro-Electric Board up to a limit of \$500 million and to have this debt unconditionally guaranteed as to principal and interest by the Province of Manitoba. Short term borrowings are considered to have terms to maturity of less than one year. The short term borrowing program is a credit facility with a primary objective to safeguard the Corporation from liquidity risk by providing sufficient liquidity for the Corporation's temporary cash requirements. Manitoba Hydro uses its short term debt line to fund its working capital requirements and to bridge the timing between long term debt issues. As Manitoba Hydro can issue promissory notes payable within its Commercial Paper Program at rates lower than the Prime or Base Rates, Manitoba Hydro typically issues promissory notes instead of relying on bank overdrafts to meet its temporary cash requirements.

Manitoba Hydro is legislated under the Manitoba Hydro Act to make sinking fund payments to the Province of Manitoba of not less than 1% of the principal amount of the outstanding debt on the preceding March 31, and 4% of the balance in the sinking fund at such date. Sinking funds are invested in government bonds and the bonds of highly rated corporations and financial institutions. Sinking fund withdrawals are applied towards the repayment of advances made to, and moneys borrowed by, the Corporation.

Manitoba Hydro has significant export revenues denominated in US dollars. As part of the Corporation's **foreign exchange exposure management program**, in order to mitigate the foreign currency exchange risk on these revenues, Manitoba Hydro maintains a natural hedge with US dollar cash flows, including outflows from US denominated debt. At March 31, 2012 the portion of Manitoba Hydro's debt portfolio that was made up of US denominated debt was 22%. The US debt portfolio may occasionally be rebalanced in accordance with US dollar cash flows. In addition to the mitigation of foreign exchange risk, Manitoba Hydro considers a number of factors when determining whether it will seek US dollar versus Canadian dollar debt, including the cost effectiveness of executing a US dollar versus a Canadian dollar issuance for available terms, and the liquidity and interest rate benefits associated with broadened access to capital within a diversified investor base. Although provincial borrowers frequently issue long bonds in the Canadian capital markets, due to financial market conditions, provincial issuance of US dollar debt with terms greater than 10 years is unusual because the long end of the US curve has not been cost effective compared to Canada for many years.

6.0 Debt Management Activities for 2012/13 and 2013/14

The following section provides an overview of Manitoba Hydro's forecasted financing requirements for 2012/13 and 2013/14.

Actual financings will vary from forecast. Actual financings will consider the timing, dollar value, denomination, and fixed versus floating nature of the issue depending on a number of factors including: the cash and liquidity requirements in existence at the time of financing; refinancing requirements on maturing debt and interest rate swaps; the term dependent on the current maturity schedule and forecasted borrowing requirements; interest rate expectations and the mitigation of interest rate risk; the management of foreign exchange risk; and the market appetite and economic environment.

2012/13

During 2012/13, the forecasted financing requirement is \$1,513 million composed of the following:

- \$947 million of long term debt for new cash requirements.
- \$557 million to refinance \$53 million of maturing debt and \$504 million to refinance maturing underlying debt issues which have associated interest rate swaps in place.
- \$9 million of short term debt at fiscal year end to provide temporary bridge financing of new cash requirements.

The long term debt financings forecasted for this fiscal year are as follows:

Quarter 1 It is forecasted that \$200 million of long term debt will be issued during this quarter for new cash requirements.

Quarter 2 It is forecasted that \$200 million of long term debt will be issued during this quarter for new cash requirements.

Quarter 3 It is forecasted that \$357 million of long term debt will be issued during this quarter for new cash requirements. In addition, the following refinancings are forecasted to occur in this quarter: a \$200 million refinancing of ER-1 (an underlying debt issue maturing December 3, 2012 which has an associated interest rate swap maturing September 3, 2017); a \$41.8 million residual refinancing of ER-2 (maturing December 3, 2012); and a \$1.2 million cumulative refinancing of 5B (maturing December 31, 2012).

Quarter 4 It is forecasted that \$190 million of long term debt will be issued during this quarter for new cash requirements. In addition, the following refinancings are forecasted to occur in this quarter: a \$104 million refinancing for C125 (an underlying debt issue maturing February 1, 2013 which has an associated interest rate swap maturing November 1, 2038); a \$10 million refinancing of 4I (maturing February 11, 2013); and a \$200 million refinancing of C112-1 &

C112-2 (underlying debt issues maturing March 15, 2013 which have associated interest rate swaps maturing September 16, 2013).

Sinking fund contributions for the 2012/13 fiscal year will be equal to the legislated minimum requirement of 1% of the long term debt outstanding at the end of the previous year plus 4% of the balance in the sinking fund at that date. For 2012/13, this amount is forecasted to be \$117 million. Manitoba Hydro has the equivalent of \$128.9 million CAD maturities during 2012/13 that are forecast to be fully retired through sinking fund withdrawals as follows:

Debt Series	Principal	Maturity Date
Hydro Bond, Series 10	CAD \$ 20.7 million	June 15, 2012
C107	CAD \$ 100.0 million	September 4, 2012
ER-2 (partial)	CAD \$ 8.2 million	December 3, 2012

2013/14

During 2013/14, the forecasted financing requirement is \$2,219 million composed of the following:

- \$1,236.5 million of long term debt for new cash requirements.
- \$909.5 million to refinance \$413.5 million of maturing debt and \$496 million to refinance maturing underlying debt issues which have associated interest rate swaps in place.
- \$73 million of short term debt at fiscal year end to provide temporary bridge financing of new cash requirements.

The long term debt financings forecasted for this fiscal year are as follows:

Quarter 1 It is forecasted that \$400 million of long term debt will be issued during this quarter for new cash requirements. In addition, the following USD refinancings (totaling a CAD equivalent value of \$396 million) are forecasted to occur in this quarter: a USD \$400 million refinancing of FO-1, FO-2 & FO-3 (underlying debt issues maturing April 22, 2013 which have associated interest rate swaps maturing March 15, 2020 for FO-1 and October 2, 2020 for FO-2 & FO-3).

Quarter 2 It is forecasted that \$269.3 million of long term debt will be issued during this quarter for new cash requirements. In addition, a \$180.7 million residual refinancing of C112-1 & C112-2 (maturing September 16, 2013) is forecasted to occur in this quarter.

Quarter 3 It is forecasted that \$382.2 million of long term debt will be issued during this quarter for new cash requirements. In addition, the following refinancing are forecasted to occur in this quarter: a \$217.8 million refinancing of EZ-3 & EZ-4 (maturing December 3, 2013); and a \$100 million refinancing of EZ-2 & EZ-5 (underlying debt issues maturing December 3, 2013 which have associated interest rate swaps maturing December 3, 2035).

Quarter 4 It is forecasted that \$185 million of long term debt will be issued during this quarter for new cash requirements. In addition, a \$15 million refinancing of 4J (maturing January 20, 2014) is forecasted to occur in this quarter.

Sinking fund contributions for the 2013/14 fiscal year is forecasted to be \$208.0 million. Manitoba Hydro has the equivalent of \$395.0 million CAD maturities during 2013/14 that are forecast to be fully retired through sinking fund withdrawals as follows:

Debt Series	Principal	Maturity Date
DE	USD \$ 188.4 million	July 22, 2013
EZ	USD \$ 150.0 million	January 21, 2014
5A	CAD \$ 40.0 million	June 30, 2013
5B	CAD \$.7 million	June 30, 2013
C112-1 (partial)	CAD \$ 19.3 million	September 16, 2013

7.0 2012 Loan Act Authority

The Loan Act is approved each year by the Province of Manitoba and grants Manitoba Hydro borrowing authority to meet the Corporation's projected new financing requirements. The Province of Manitoba secures long term debt on behalf of Manitoba Hydro and advances long term borrowings to the Corporation. Manitoba Hydro's long term debt is guaranteed by the Province of Manitoba, with the exception of Manitoba Hydro-Electric Board Bonds issued for mitigation purposes. The incremental Loan Act Authority of \$1,490 million to December 31, 2013 is as follows:

	(millions)
Projected Capital Expenditures in 2012/13	\$1,195
Sinking Fund Requirement in 2012/13	117
Bridge Financing Requirements to December 31, 2013 (net)	<u>929</u>
	<u>\$2,241</u>
Deduct: 2011 Loan Act Authority Available at March 31, 2012	\$420
Projected Internally Generated Funds in 2012/13 (net)	<u>331</u>
	<u>\$751</u>
New Incremental Loan Act Authority Required	<u>\$1,490</u>