20 YEAR FINANCIAL OUTLOOK

2009/10 – 2028/29

FINANCIAL PLANNING
CONTROLLER DIVISION
FINANCE & ADMINISTRATION

January, 2010

OVERVIEW

The 20 Year Financial Outlook is an extension to the Integrated Financial Forecast IFF09-1 which was approved by the Manitoba Hydro-Electric Board on November 19, 2009. The 20 Year Financial Outlook depicts the long-term financial direction of Manitoba Hydro based on current assumptions of future events.

The first decade of the 20 Year Financial Outlook (the decade of investment) shows the financial impacts of major investments in new generation and transmission. Financial ratios are projected to weaken slightly in the first decade but rebound strongly in the second decade (the decade of returns). Domestic rate increases are projected to range from 2.9% to 3.5% per year in the first decade, then drop to 2.0% per year for the entire second decade. Equity (retained earnings) is projected to remain strong throughout the period, rising from $2.2 billion at March 31, 2010 to $11.2 billion at the end of 20 years. Drought remains one of the major risks with a repeat of the worst 5 year drought on record projected to cost $2.4 billion (assuming drought commencing in 2011/12).

KEY ASSUMPTIONS

The key assumptions included in the 20 Year Financial Outlook reflect similar assumption as the 11 year IFF and include the following:

1) Domestic Load Growth

   Domestic electricity load will grow at an average of 1.5% per year for net firm energy to 2019/20 and then 1.3% per year to 2028/29. Net total peak demand grows at an average of 1.3% per year over the 20 Year Financial Outlook to 2028/29.

   Natural gas volumes are projected to decline approximately 0.2% per year over the 20 Year Financial Outlook to 2028/29.

2) Domestic Rate Increases

   Average electricity rate increases of 2.9% per year are projected in 2010/11 and 2011/12 followed by 3.5% per year to 2019/20. Average electricity rate increases then drop to 2%, consistent with long-term projected inflation, for the last 9 years of the 20 Year Financial Outlook.

   Natural gas rate increases are projected to be only the rates necessary to generate net income of approximately $3 to $6 million per year (rate increases average less than 1% per year).

3) Inflation

   The Manitoba Consumers Price Index is projected to increase at an average 2% per year commencing in 2011/12.

4) Interest Rates

   The very low current short and long-term interest rates are projected to rise over the next 12 to 18 months with long-term rates reaching 6.10% by 2013/14 (excluding the debt guarantee fee of 1.0%) and then remain constant to 2028/29.

5) Foreign Exchange Rates

   The US-Canadian exchange rate is projected to rise from the current level of 1.03 ($1.00 US = $0.97 Cdn) to 1.07 in 2012/13, 1.14 in 2016/17 and 1.15 by 2023/24.

6) Export Sales Contracts

   The term sheets negotiated for the 15 year 500 MW Wisconsin Public Service sale (commencing in 2018) and the 14 year 250 MW Minnesota Power sale (commencing in 2022) will be finalized into long-term contracts. The 10 year Northern States Power contract extension of 375MW to 500MW (commencing in 2015) will also be finalized.

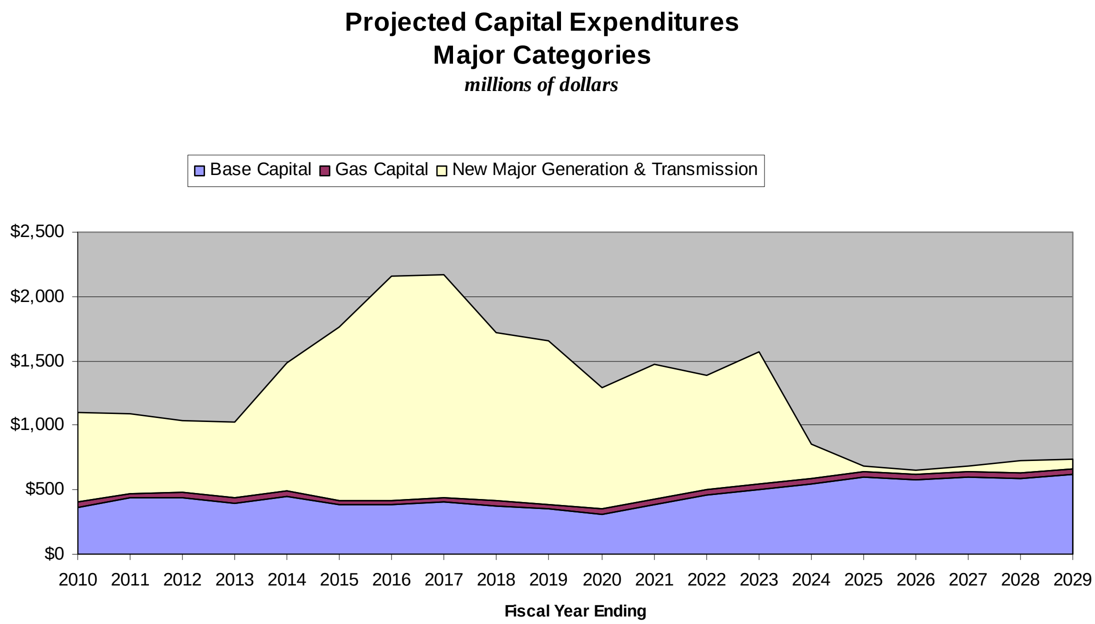
7) Carbon Pricing

   Electricity export prices reflect anticipated greenhouse gas legislation and regulation which will likely impose significant constraints on emissions and will result in upward pressures on future market prices for electricity.

8) Capital Expenditures

   Investments in new property, plant and equipment are projected to be significant during the first decade with major expenditures on Wuskwatim, Keeyask, Conawapa and Bipole 3 (total capital expenditures to 2019/20 projected to be $16.5 billion). The second decade will see the completion of Conawapa in 2022/23 plus the addition of new transmission to the US. No other new major generation and transmission projects are forecast in the second decade of the forecast. Figure 1 illustrates projected capital expenditures by major categories including new major generation & transmission, gas and other electric capital requirements including system refurbishment and upgrades necessitated by aging infrastructure.

Figure 1


Projected Capital Expenditures
Major Categories
millions of dollars
Base Capital
Gas Capital
New Major Generation & Transmission
$2,500
$2,000
$1,500
$1,000
$500
$0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
Fiscal Year Ending

NET INCOME AND FINANCIAL TARGETS

Projected consolidated net income, equity ratios, interest coverage ratios, and capital coverage ratios for the 20 Year Financial Outlook are depicted in Table 1 and Figures 2 to 5.

Table 1
20 YEAR FINANCIAL OUTLOOK

			RATIOS		
Year Ending March 31	**NET INCOME** *(Millions)*	**RETAINED EARNINGS** *(Millions)*	**Debt/Equity**	**Interest Coverage**	**Capital Coverage**
2009 (actual)	$ 298	$2 120	75:25	1.58	1.81
2010	129	2 227	74:26	1.24	1.39
2011	88	2 315	75:25	1.15	1.09
2012	98	2 396	76:24	1.15	1.14
2013	83	2 479	76:24	1.12	1.28
2014	137	2 616	78:22	1.19	1.25
2015	122	2 738	79:21	1.15	1.52
2016	260	2 997	80:20	1.30	1.86
2017	271	3 268	80:20	1.27	1.83
2018	246	3 515	80:20	1.23	1.91
2019	257	3 772	80:20	1.22	2.14
2020	287	4 059	79:21	1.22	2.56
2021	307	4 366	79:21	1.24	2.23
2022	450	4 816	78:22	1.36	2.19
2023	554	5 369	76:24	1.44	2.25
2024	744	6 113	73:27	1.58	2.53
2025	805	6 918	70:30	1.65	2.45
2026	922	7 840	66:34	1.77	2.74
2027	1 019	8 859	61:39	1.88	2.85
2028	1 127	9 986	56:44	2.02	3.07
2029	1 237	11 223	51:49	2.18	3.09

Note: Assumes projected rate increases of 2.9% April 1, 2010; 2.9% April 1, 2011; 3.5% from 2013 to 2020; and 2.0% from 2021 to 2029.

Figure 2

Projected Consolidated Net Income

millions of dollars

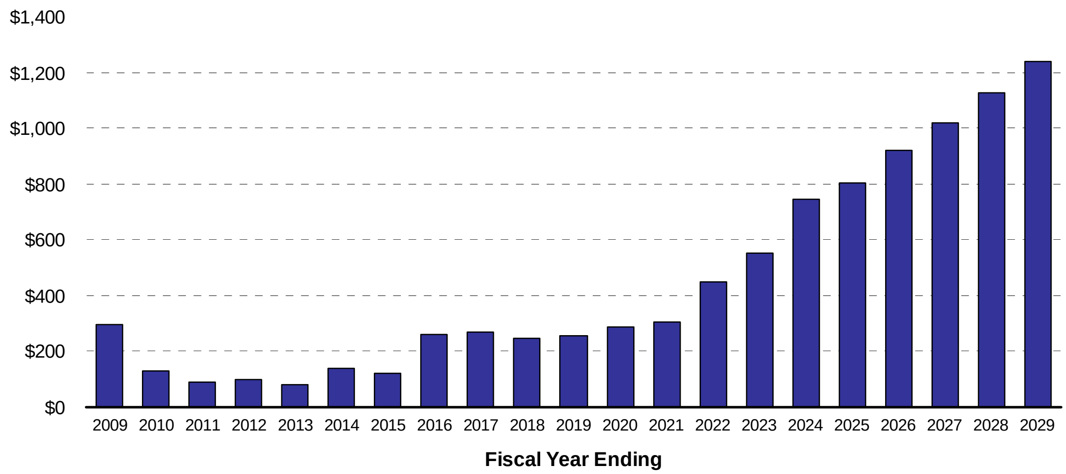


Figure 3

Projected Consolidated Equity Ratio

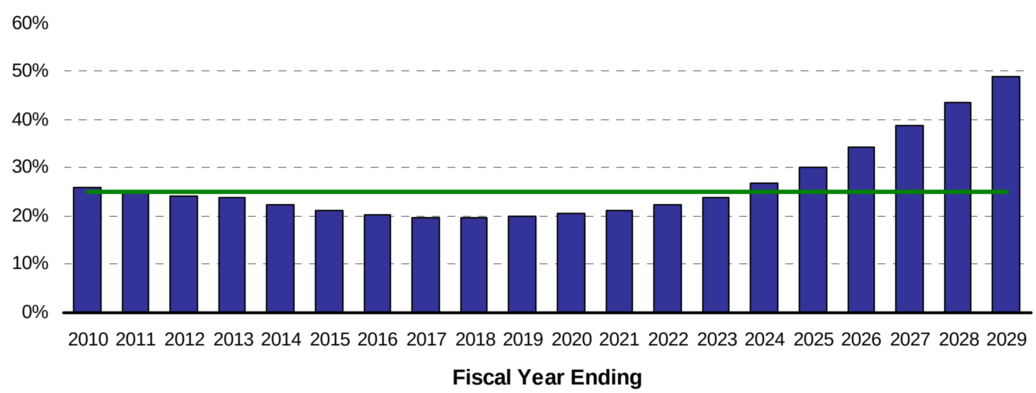


Figure 4

Projected Consolidated Interest Coverage Ratio

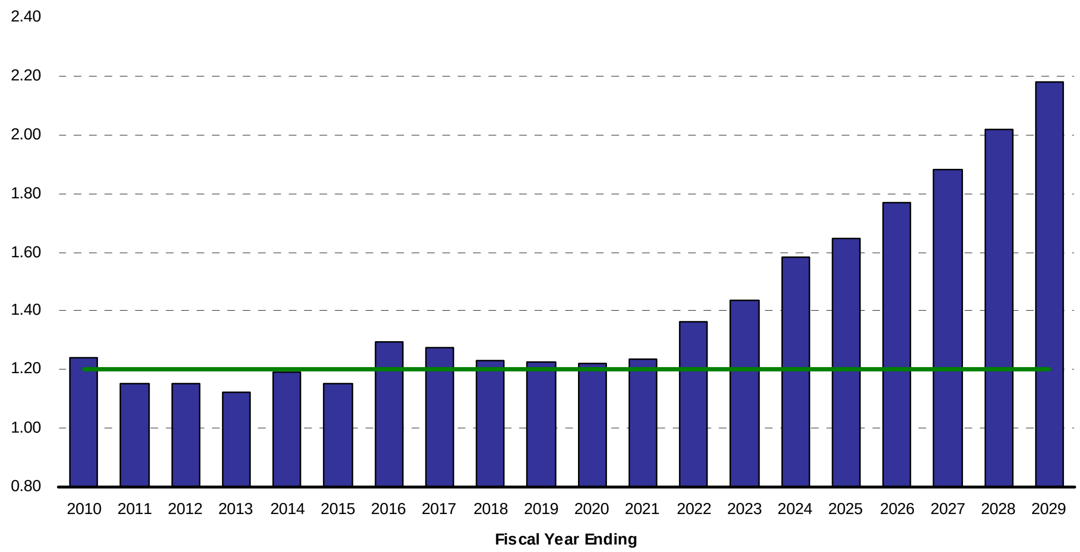
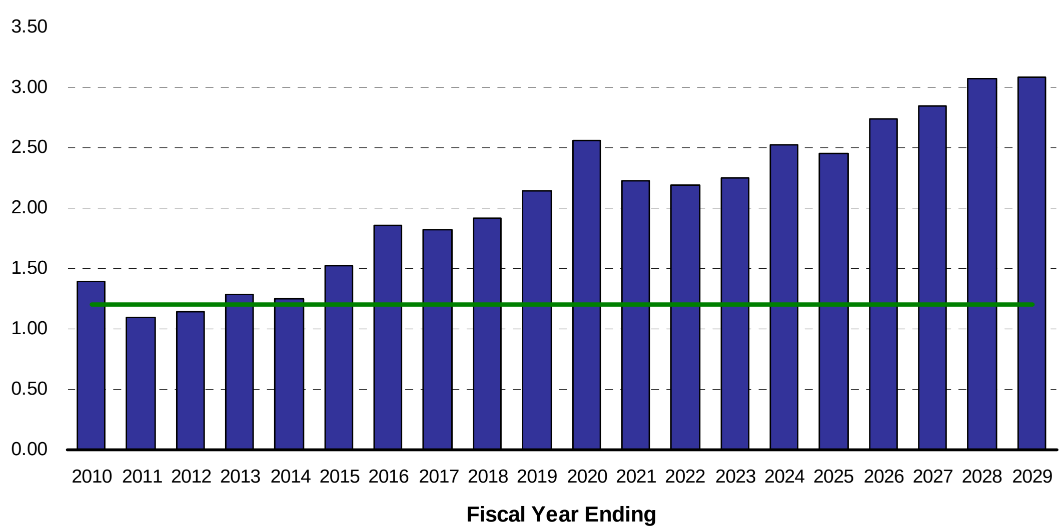


Figure 5

Projected Consolidated Capital Coverage Ratio



CONSOLIDATED PROJECTED OPERATING STATEMENT
(In Millions of Dollars)

For the year ended March 31	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
REVENUES											
General Consumers	1,652	1,670	1,739	1,808	1,869	1,953	2,028	2,101	2,178	2,256	2,336
Extraprovincial	414	383	554	583	615	590	701	729	742	894	1,093
	2,066	2,054	2,293	2,390	2,484	2,543	2,729	2,830	2,920	3,151	3,429
Cost of Gas Sold	351	332	340	346	342	349	350	351	352	353	352
	1,715	1,722	1,953	2,044	2,142	2,193	2,379	2,479	2,568	2,798	3,077
Other	28	29	31	32	32	33	34	34	35	36	36
	1,742	1,751	1,984	2,076	2,174	2,227	2,412	2,513	2,603	2,834	3,113
EXPENSES											
Operating and Administrative	446	456	482	492	501	512	522	532	555	568	589
Finance Expense	454	451	509	569	570	588	574	590	632	719	923
Depreciation and Amortization	394	415	438	469	481	502	513	519	540	573	607
Water Rentals and Assessments	120	110	111	113	114	114	115	115	115	115	124
Fuel and Power Purchased	103	131	248	249	259	268	296	341	362	440	418
Capital and Other Taxes	97	99	100	104	109	116	125	134	140	146	150
	1,613	1,663	1,888	1,995	2,035	2,100	2,144	2,231	2,344	2,562	2,812
Non-controlling Interest	-	-	1	1	(2)	(5)	(9)	(11)	(12)	(15)	(14)
Net Income	129	88	98	83	137	122	260	271	246	257	287
Additional General Consumers Revenue											
General electricity rate increases		2.90%	2.90%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
General gas rate increases		0.00%	1.50%	0.00%	1.00%	0.00%	1.00%	0.00%	1.00%	1.00%	0.00%
Financial Ratios											
Equity	26%	25%	24%	24%	22%	21%	20%	20%	20%	20%	21%
Interest Coverage	1.24	1.15	1.15	1.12	1.19	1.15	1.30	1.27	1.23	1.22	1.22
Capital Coverage	1.39	1.09	1.14	1.28	1.25	1.52	1.86	1.83	1.91	2.14	2.56

CONSOLIDATED PROJECTED OPERATING STATEMENT
(In Millions of Dollars)

For the year ended March 31	2021	2022	2023	2024	2025	2026	2027	2028	2029
REVENUES									
General Consumers	2,392	2,454	2,514	2,581	2,651	2,721	2,801	2,877	2,957
Extraprovincial	1,201	1,223	1,379	1,758	1,940	1,908	1,903	1,928	1,950
	3,593	3,677	3,892	4,338	4,591	4,630	4,704	4,805	4,907
Cost of Gas Sold	351	350	350	349	348	347	346	346	345
	3,242	3,327	3,543	3,990	4,243	4,283	4,358	4,459	4,562
Other	37	38	39	39	40	41	42	42	43
	3,279	3,364	3,581	4,029	4,283	4,324	4,399	4,502	4,605
EXPENSES									
Operating and Administrative	602	615	634	647	660	673	686	699	713
Finance Expense	1,004	897	937	1,118	1,214	1,174	1,142	1,086	1,029
Depreciation and Amortization	634	639	667	729	773	789	807	810	821
Water Rentals and Assessments	129	130	136	150	154	155	155	156	157
Fuel and Power Purchased	435	459	473	459	492	420	395	424	445
Capital and Other Taxes	143	147	153	154	155	156	157	158	159
	2,947	2,887	3,000	3,257	3,448	3,367	3,343	3,334	3,324
Non-controlling Interest	(25)	(27)	(28)	(29)	(30)	(34)	(38)	(41)	(43)
Net Income	307	450	554	744	805	922	1,019	1,127	1,237
Additional General Consumers Revenue									
General electricity rate increases	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
General gas rate increases	0.00%	1.00%	0.00%	1.00%	1.00%	0.00%	1.00%	0.00%	1.00%
Financial Ratios									
Equity	21%	22%	24%	27%	30%	34%	39%	44%	49%
Interest Coverage	1.24	1.36	1.44	1.58	1.65	1.77	1.88	2.02	2.18
Capital Coverage	2.23	2.19	2.25	2.53	2.45	2.74	2.85	3.07	3.09

CONSOLIDATED PROJECTED BALANCE SHEET
(In Millions of Dollars)

For the year ended March 31	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
ASSETS											
Plant in Service	13,097	13,626	15,691	16,213	16,654	17,387	17,844	18,579	21,071	22,401	25,835
Accumulated Depreciation	(4,800)	(5,171)	(5,562)	(5,985)	(6,414)	(6,864)	(7,320)	(7,787)	(8,275)	(8,799)	(9,357)
Net Plant in Service	8,297	8,455	10,129	10,228	10,240	10,523	10,524	10,792	12,796	13,602	16,478
Construction in Progress	1,949	2,460	1,343	1,820	2,840	3,856	5,534	6,950	6,161	6,448	4,170
Current and Other Assets	2,421	2,374	2,503	2,551	2,328	2,482	2,673	2,885	3,191	2,975	3,309
Goodwill	107	107	107	107	107	107	107	107	107	107	107
	12,775	13,397	14,082	14,705	15,516	16,968	18,838	20,734	22,256	23,133	24,065
LIABILITIES AND EQUITY											
Long-Term Debt	7,816	8,613	9,071	8,786	10,366	11,522	13,140	14,429	15,363	16,446	14,164
Current and Other Liabilities	2,246	2,000	2,187	2,983	2,165	2,365	2,391	2,750	3,104	2,645	5,573
Contributions in Aid of Construction	293	291	285	280	276	273	272	270	268	267	267
Retained Earnings	2,227	2,315	2,396	2,479	2,616	2,738	2,997	3,268	3,515	3,772	4,059
Accumulated Other Comprehensive Income	192	178	143	178	94	71	38	17	6	3	3
	12,775	13,397	14,082	14,705	15,516	16,968	18,838	20,734	22,256	23,133	24,065
Equity Ratio	26%	25%	24%	24%	22%	21%	20%	20%	20%	20%	21%

CONSOLIDATED PROJECTED BALANCE SHEET
(In Millions of Dollars)

For the year ended March 31	2021	2022	2023	2024	2025	2026	2027	2028	2029
ASSETS									
Plant in Service	26,935	27,406	31,328	34,430	35,739	36,567	37,186	37,941	38,573
Accumulated Depreciation	(9,943)	(10,538)	(11,165)	(11,855)	(12,595)	(13,354)	(14,132)	(14,916)	(15,711)
Net Plant in Service	16,991	16,868	20,164	22,575	23,144	23,213	23,054	23,025	22,861
Construction in Progress	4,525	5,456	3,114	879	273	121	210	207	340
Current and Other Assets	3,508	3,043	3,322	3,932	4,819	5,268	6,414	7,631	8,904
Goodwill	107	107	107	107	107	107	107	107	107
	25,132	25,474	26,706	27,493	28,343	28,710	29,784	30,971	32,213
LIABILITIES AND EQUITY									
Long-Term Debt	17,423	17,855	18,657	18,659	18,061	18,064	18,066	18,008	17,760
Current and Other Liabilities	3,075	2,536	2,413	2,453	3,095	2,537	2,587	2,702	2,951
Contributions in Aid of Construction	266	266	267	267	268	270	272	275	279
Retained Earnings	4,366	4,816	5,369	6,113	6,918	7,840	8,859	9,986	11,223
Accumulated Other Comprehensive Income	2	1	(0)	0	0	0	0	0	0
	25,132	25,474	26,706	27,493	28,343	28,710	29,784	30,971	32,213
Equity Ratio	21%	22%	24%	27%	30%	34%	39%	44%	49%

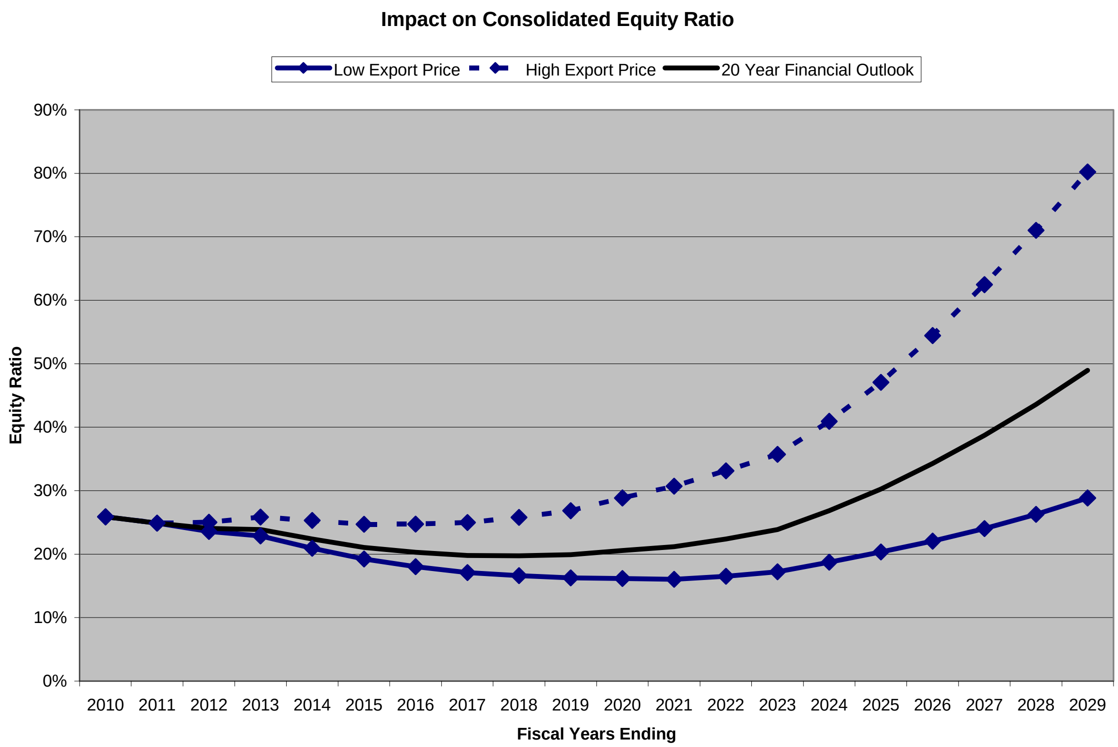
ALTERNATIVE SCENARIOS

IFF09 includes a section demonstrating the sensitivity of key assumptions in the base forecast. Scenarios with the greatest sensitivity, such as the Low and High Export Prices and Five Year Drought, have been developed under the 20 year timeframe to demonstrate the longer-term impacts. The drought scenario has been supplemented to include other flow related scenarios including median flows and periodic low flows. Additionally, an alternative development sequence required for Manitoba demand has been developed. These scenarios are further described below. Figures 6 to 9 show the impacts on the equity ratio for each scenario compared to the 20 Year Financial Outlook.

<u>Low and High Export Prices</u>

The 20 Year Financial Outlook assumes expected export prices. The Low Export Price scenario reflects the long-term impact on future energy prices due to a number of potential factors including low economic growth, aggressive energy conservation policies, low growth in energy demand, loss in momentum in the development of competitive electricity markets, lower natural gas and coal prices and lower premiums related to emissions costs. The High Export Price scenario is characterized by high economic and energy demand growth, higher capital costs, a move to fully competitive markets, higher natural gas and coal prices, stringent US environmental policies and higher environmental premiums relative to expected prices in the 20 Year Financial Outlook. Figure 6 below compares equity ratios under the Low and High Export Price scenarios and the 20 Year Financial Outlook.

Figure 6

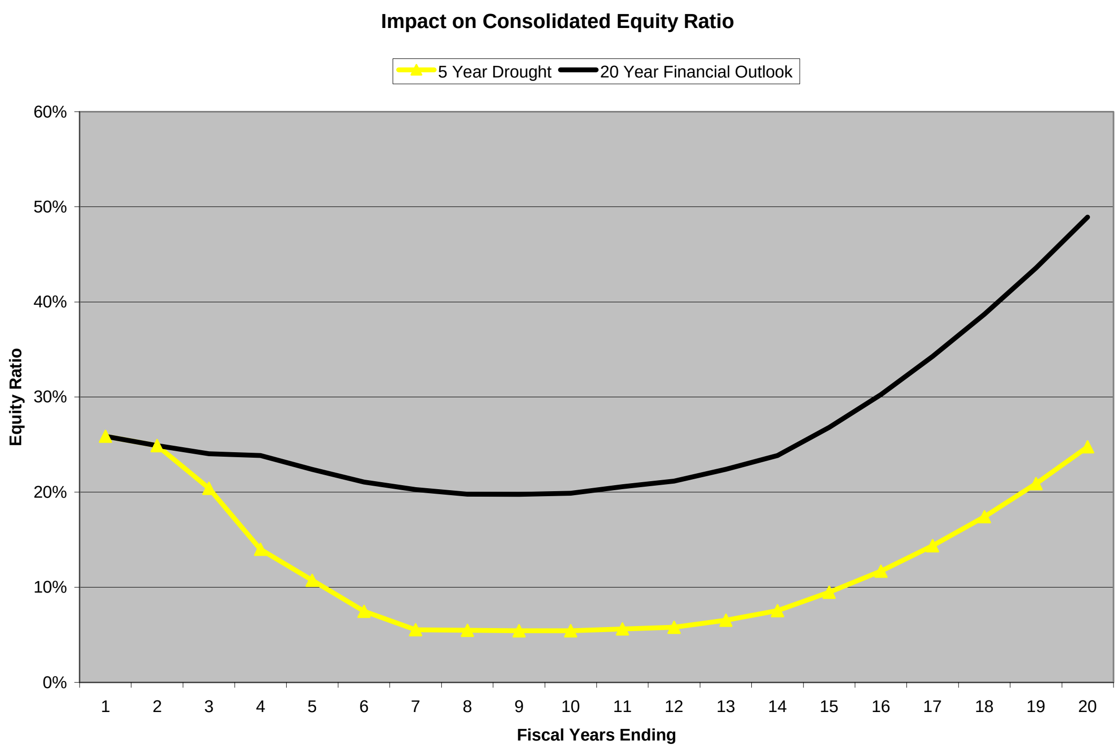


Impact on Consolidated Equity Ratio
Low Export Price
High Export Price
20 Year Financial Outlook
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Equity Ratio
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
Fiscal Years Ending

Five Year Drought

The five year drought scenario shown is identical to the scenario shown in IFF09-1 and assumes a recurrence of the worst five year drought on record commencing in 2011/12. Actual impacts could be smaller or return to normal sooner due to management actions that would mitigate the financial effects of extended low water flow conditions. Figure 7 below compares equity ratios under the 5 Year Drought scenario and the 20 Year Financial Outlook.

Figure 7



Median Flow Revenue Scenario

The base export revenue forecast assumed in IFF09-1 inherently incorporates the effects of drought and high water flows. The revenue forecast is developed by averaging the revenues corresponding to all 94 years of historic flow conditions on record in each year of the forecast. This method captures the asymmetric relationship between higher costs of low flows which are greater than the benefits of high flows. This produces a revenue forecast that is lower than would otherwise be calculated if the historic flows were simply averaged to then calculate revenue or was based on median flow conditions.

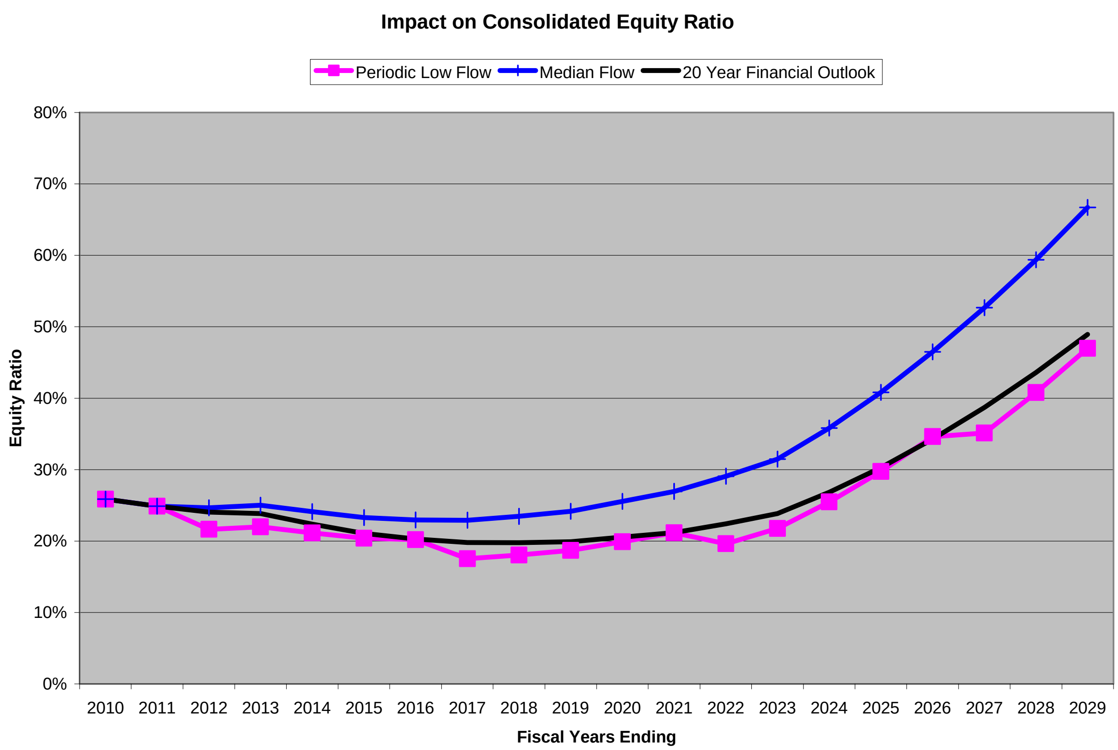
To remove the effects of low and high flows on the revenue forecast, a median flow scenario has been developed. An average of three median flow years (1921, 1926 and 1982) is used as the best representation of median flow conditions. Over the period to 2028/29, net export revenues, assuming median flows, are on average $145 million higher per year compared to the 20 Year Financial Outlook. However, it is more prudent planning to assume that low water flows (as well as high) are going to occur in the future and Manitoba Hydro employs a weighted average methodology for forecasting net export revenues as a result.

Periodic Low Water Flows

Low flow revenues are substituted one in every five years of the median flow forecast reflecting low flow conditions likely to occur in four out of twenty years. The median forecast is the base for the scenario (rather than the 20 Year Financial Outlook) in order to eliminate the duplication of low flows inherent in the 20 Year Financial Outlook. When compared to the IFF09, the Periodic Low Water Flow scenario shows no impact over the longer term compared to the 20 Year Financial Outlook demonstrating the effectiveness of the weighted average forecasting methodology for export revenues.

Figure 8 shows the equity ratios corresponding with the Median and Periodic Low Flow scenarios compared to the 20 Year Financial Outlook.

Figure 8



Alternative Development Sequence

The alternative power resource development plan for major infrastructure and resources to meet Manitoba requirements includes Conawapa in 2021/22 and a combined cycle gas turbine in 2033/34. This sequence excludes the sales related to the Wisconsin Public Service and Minnesota Power term sheets, the construction of Keeyask and the planned interconnection to the US. Although the equity ratio is slightly higher in the Alternative Development Sequence, the equity ratio under the 20 Year Financial Outlook crosses over by 2033/34 as the benefits of hydro development and additional tie-line capability are realized. Thereafter, the benefits are substantially positive for the entire life of the generation and transmission facilities. With respect to transmission, another benefit of the sale scenario is that counterparties in the US will be making large investments in new transmission which will enhance reliability and provide additional export sale opportunities. Figure 9 below compares the equity ratios under the Alternative Development Sequence and 20 Year Financial Outlook.

Figure 9